DAVID Y. IGE
GOVERNOR

FILE COPY
SEP 25 2017

FORD N. FUCHIGAMI
DIRECTOR
Deputy Directors
JADE T. BUTAY
ROSS M. HIGASHI
EDWIN H. SNIFFEN
DARRELL T. YOUNG

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

IN REPLY REFER TO:
HAR-EP
8963.18

September 8, 2017

TO: THE HONORABLE SCOTT GLENN, DIRECTOR
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
DEPARTMENT OF HEALTH

FROM: FORD N. FUCHIGAMI
DIRECTOR OF TRANSPORTATION

SUBJECT: HAWAII FUELING FACILITIES CORPORATION (HFFC) KAPALAMA TERMINAL JET FUEL PIPELINE, HONOLULU HARBOR, OAHU

The Department of Transportation, Harbors Division hereby transmits the draft environmental assessment and anticipated finding of no significant impact (DEA-AFONSI) for the *Kapalama Terminal Jet Fuel Pipeline*, situated at TMKs (1) 1-2-025:017, 020, 021, and within Sand Island Access Road, in the District of Honolulu, on the island of Oahu, for publication in the next available edition of *The Environmental Notice*.

Enclosed is a completed Office of Environmental Quality Control (OEQC) Publication Form, one hard copy of the DEA-AFONSI, three Adobe Acrobat PDF files of the same on CD, and a copy of the publication form in MS Word.

If there are any questions, please contact Ms. Celia Shen of our Harbors Engineering Planning Section at 587-2013.

Enclosures

RECEIVED
'17 SEP 13 P3:10
OFC. OF ENVIRONMENTAL QUALITY CONTROL

18-160

APPLICANT
PUBLICATION FORM

Project Name:	Kapalama Terminal Jet Fuel Pipeline
Project Short Name:	Kapalama Terminal Jet Fuel Pipeline
HRS §343-5 Trigger(s):	Use of state owned land
Island(s):	Oahu
Judicial District(s):	Honolulu
TMK(s):	TMK (1) 1-2-025:017 (por.) TMK (1) 1-2-025:020 (por.) TMK (1) 1-2-025:021 (por.) Sand Island Access Road (no TMK assigned)
Permit(s)/Approval(s):	State of Hawaii Department of Transportation Approvals/Permits • DOT-HWY: Use and Occupancy Agreement • DOT-HWY: Lane Use/Occupancy Permit • DOT-HWY: Landscaping within Highway ROW • DOT-HWY: Routine Construction/Excavation within a State Highway • DOT-HWY: Permit to Discharge into the State Highways Drainage System • DOT-HAR: Construction Right-of-Entry • DOT-HAR: Hot Works Permit • DOT-AIR: Permit to Perform Work on State Airport Property State Historic Preservation Department • Chapter 6e Historic Preservation Review Department of Health (HDOH) • HDOH Clean Water Branch: National Pollutant Discharge Elimination System (NPDES) Permit (likely Appendices C, F, and G) • Indoor and Radiological Health Branch: Noise Permit • Solid and Hazardous Waste Branch: Solid Waste Permit City & County of Honolulu Department of Planning and Permitting • General Building Permit • Electrical Branch Review • Zoning Branch Review Civil Engineering Branch • Trenching Permit • Stockpiling Permit • Grading Permit Honolulu Fire Department Review Hawaii Electric Company (HECO) Service Request
Approving Agency:	State of Hawaii Department of Transportation – Harbors Division
Contact Name, Email, Telephone, Address	Carter Luke, P.E., Harbors Division Carter.Luke@hawaii.gov 808-587-1862 Hale Awa Ku Moku Building 79 South Nimitz Highway Honolulu, Hawaii 96813
Applicant:	Hawaii Fueling Facilities Corporation
Contact Name, Email, Telephone, Address	Jason Maga jason.maga@signatureflight.com 808-833-3291 Honolulu International Airport 3201 Aolele Street Honolulu, Hawaii 96819

Consultant:	Myounghee Noh & Associates, L.L.C.
Contact Name, Email, Telephone, Address	Jessica Walsh jessica@noh-associates.com 808-283-4310 99-1046 Iwaena Street, Suite 201A Aiea, Hawaii 96701

Status (select one)	**Submittal Requirements**
__X__ DEA-AFNSI	Submit 1) the approving agency notice of determination/transmittal letter on agency letterhead, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the DEA, and 4) a searchable PDF of the DEA; a 30-day comment period follows from the date of publication in the Notice.
____ FEA-FONSI	Submit 1) the approving agency notice of determination/transmittal letter on agency letterhead, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the FEA, and 4) a searchable PDF of the FEA; no comment period follows from publication in the Notice.
____ FEA-EISPN	Submit 1) the approving agency notice of determination/transmittal letter on agency letterhead, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the FEA, and 4) a searchable PDF of the FEA; a 30-day comment period follows from the date of publication in the Notice.
____ Act 172-12 EISPN ("Direct to EIS")	Submit 1) the approving agency notice of determination letter on agency letterhead and 2) this completed OEQC publication form as a Word file; no EA is required and a 30-day comment period follows from the date of publication in the Notice.
____ DEIS	Submit 1) a transmittal letter to the OEQC and to the approving agency, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the DEIS, 4) a searchable PDF of the DEIS, and 5) a searchable PDF of the distribution list; a 45-day comment period follows from the date of publication in the Notice.
____ FEIS	Submit 1) a transmittal letter to the OEQC and to the approving agency, 2) this completed OEQC publication form as a Word file, 3) a hard copy of the FEIS, 4) a searchable PDF of the FEIS, and 5) a searchable PDF of the distribution list; no comment period follows from publication in the Notice.
__ FEIS Acceptance Determination	The approving agency simultaneously transmits to both the OEQC and the applicant a letter of its determination of acceptance or nonacceptance (pursuant to Section 11-200-23, HAR) of the FEIS; no comment period ensues upon publication in the Notice.
____ FEIS Statutory Acceptance	The approving agency simultaneously transmits to both the OEQC and the applicant a notice that it did not make a timely determination on the acceptance or nonacceptance of the applicant's FEIS under Section 343-5(c), HRS, and therefore the applicant's FEIS is deemed accepted as a matter of law.
____ Supplemental EIS Determination	The approving agency simultaneously transmits its notice to both the applicant and the OEQC that it has reviewed (pursuant to Section 11-200-27, HAR) the previously accepted FEIS and determines that a supplemental EIS is or is not required; no EA is required and no comment period ensues upon publication in the Notice.
____ Withdrawal	Identify the specific document(s) to withdraw and explain in the project summary section.
____ Other	Contact the OEQC if your action is not one of the above items.

Project Summary

Provide a description of the proposed action and purpose and need in 200 words or less.

The proposed action includes construction and operation of a jet fuel on-/off-loading terminal at Honolulu Harbor Pier 43 and an associated 1,800 linear foot fuel line connecting the on-/off-loading terminal to the Hawaii Fueling Facilities Corporation (HFFC) Sand Island Fuel Facility on Sand Island Access Road and eventual neighbor island jet fuel distribution.

The purpose of the Proposed Action is to increase jet fuel supply resilience, reliability, and redundancy to the Daniel K. Inouye International Airport and outer island airports. Currently a significant portion of the jet fuel supplied to HIA is off-loaded from HFFC's Pier 51A terminal in Honolulu Harbor and stored at the HFFC Sand Island Fuel Facility. The two on-island refineries are unable to meet the significant jet fuel demand at HIA, and must be supplemented by imports of jet fuel that are exclusively off-loaded at Pier 51A. This project would support future HIA increases in aircraft capacity. Increased jet fuel supply resilience is essential to ensure that adequate fuel supply for air transport is available to meet both current and future demands. Redundancy would protect the jet fuel supply in the event of an accident or natural disaster that would render the Pier 51A and existing fuel line inoperable.

DRAFT ENVIRONMENTAL ASSESSMENT

KAPALAMA TERMINAL JET FUEL PIPELINE

SAND ISLAND ACCESS ROAD
HONOLULU HARBOR
KAPALAMA, ISLAND OF OAHU

TMK (1) 1-2-025:017
TMK (1) 1-2-025:020
TMK (1) 1-2-025:021
Sand Island Access Road

SEPTEMBER 2017

Myounghee Noh & Associates

Environmental Studies and Consulting Services

200 Kohola Street, Hilo, Hawaii 96720 • 808.935.8727
99-1046 Iwaena Street, Suite 210A, Aiea, Hawaii 96701 • 808.484.9214

DRAFT ENVIRONMENTAL ASSESSMENT

KAPALAMA TERMINAL JET FUEL PIPELINE

SAND ISLAND ACCESS ROAD
HONOLULU HARBOR
KAPALAMA, ISLAND OF OAHU

TMK (1) 1-2-025:017
TMK (1) 1-2-025:020
TMK (1) 1-2-025:021
Sand Island Access Road

September 2017

APPLICANT:
Hawaii Fueling Facilities Corporation
3201 Aolele Street
Honolulu, Hawaii 96819

APPROVING AGENCY:
State of Hawaii
Department of Transportation – Harbors Division
Hale Awa Ku Moku Building
79 South Nimitz Highway
Honolulu, Hawaii 96813

CONSULTANT:
Myounghee Noh & Associates, L.L.C.
99-1046 Iwaena Street, Suite 210A
Aiea, Hawaii 96701

CLASS OF ACTION:
Use of State Lands

This document is prepared pursuant to:
Hawaii Revised Statutes (HRS) Chapter 343, The Hawaii Environmental Policy Act, and
Hawaii Department of Health Administrative Rules (HAR) Title 11, Chapter 200.

TABLE OF CONTENTS

ACRONYMS AND ABBREVIATIONS vi

SUMMARY SHEET viii

1.0 PURPOSE AND NEED 1

1.1 Introduction and Project Description 1
1.2 Background, Purpose, and Need 4
1.2.1 Background 4
1.2.2 Purpose and Need 5
1.2.3 Project Objectives 5
1.3 Environmental Assessment Process 5
1.4 Public Involvement and Agency Coordination 6
1.4.1 Introduction 6
1.4.2 Early Consultation 6
1.4.3 USACE Pre-Application Meeting 8

2.0 PROPOSED ACTION AND ALTERNATIVES 13

2.1 Introduction 13
2.2 Proposed Action 13
2.3 Alternative Actions 16
2.3.1 Background 16
2.3.2 Alternatives Considered 16
2.3.2.1 Fuel Line Route Alternatives 16
2.3.2.2 On-/Off-Loading Facility Location Alternatives 16
2.3.2.3 Tie-In Alternatives 17
2.3.2.4 No Action Alternative 17
2.3.3 Conclusion 17
2.4 Timeline 17
2.5 Required Permits and Approvals 17

3.0 EXISTING ENVIRONMENT, IMPACTS, AND MITIGATION MEASURES: PHYSICAL ENVIRONMENT 24

3.1 Climate Change and Air Quality 24
3.2 Noise 26
3.3 Geology and Topography 27
3.4 Soils 28
3.5 Hydrology and Hydrogeology 28
3.5.1 Surface and Coastal Waters 28
3.5.2 Groundwater 30
3.6 Natural Hazards 31
3.6.1 Flooding and Tsunami Hazard 31
3.6.2 Hurricane and Wind Hazard 32
3.6.3 Seismic Hazard 33
3.7 Flora and Fauna 33
3.8 Marine Resources 36
3.9 Cultural Resources 37
3.10 Historic and Archaeological Resources 39
3.11 Visual Resources 40
3.12 Socio-Economic Characteristics 40
3.13 Land Use 43
3.13.1 Existing Land Uses 43
3.13.1.1 Honolulu Harbor 43
3.13.2 Planned Land Uses 43
3.13.2.1 Kapalama Container Terminal Project 43

3.14 Public Services and Facilities 45
3.14.1 Traffic *45*
3.14.2 Police, Fire, and Medical Services *46*
3.15 Public Health and Safety 47
3.15.1 Hazardous Materials *47*
3.15.1.1 Existing Environmental Conditions of Concern 47
3.15.1.2 Spill Prevention 48
3.15.2 Navigable Air Space *50*
3.15.3 Explosion/Fire Risk *51*
3.16 Recreational Facilities 53
3.17 Infrastructure and Utilities 54

4.0 RELATIONSHIP TO PUBLIC POLICIES AND PROGRAMS 55

4.1 Introduction 55
4.2 Relationship to Federal Laws and Executive Orders 55
4.2.1 Conformity with USACE Concerns and Expectations *55*
4.2.2 Conformity with USFWS Concerns and Expectations *56*
4.3 Relationship to State Laws, Regulations, Policies, and Programs 56
4.3.1 Hawaii Revised Statutes Chapter 343 ..... *56*
4.3.2 Hawaii State Plan *56*
4.3.4 State Functional Plans *74*
4.3.4.1 State Agricultural Functional Plan (1991) 74
4.3.4.2 State Conservation Function Plan (1991) 75
4.3.4.3 State Tourism Functional Plan (1991) 75
4.3.4.4 State Transportation Functional Plan (1991) 76
4.3.4.5 Hawaii 2050 Sustainability Plan 76
4.3.5 State Land Use District – The Land Use Law *77*
4.3.6 Hawaii Coastal Zone Management (CZM) Program *77*
4.3.7 Hawaii Ocean Resources Management Plan *81*
4.3.8 HRS Chapter 6E, Historic Preservation *82*
4.3.9 Hawaii Water Pollution Law *82*
4.3.10 Plans for Development of the Honolulu Waterfront *82*
4.3.10.1 Honolulu Waterfront Master Plan 82
4.3.10.2 Oahu Commercial Harbors 2020 Master Plan 83
4.3.11 Summary of Required State Permits and Approvals *84*
4.4 Relationship to Local Plans and Ordinances 84
4.4.1 General Plan for Oahu (1992 Edition, amended in 2002) *85*
4.4.2 Primary Urban Center Development Plan (2004) *86*
4.4.3 City Land Use Ordinance *87*
4.4.4 Special Management Area *87*
4.4.4.1 SMA, Chapter 25, ROH 87
4.4.5 Shoreline Setback *90*

5.0 CUMULATIVE AND SECONDARY IMPACTS 92

5.1 Introduction 92
5.2 Actions and Projects Considered in the Cumulative Impact Analysis 92
5.3 Analysis of Cumulative Impacts 93
5.4 Secondary Impacts 96

6.0 DETERMINATION 96

7.0 FINDINGS AND REASONS 97

8.0 REFERENCES 100

TABLES

Table 1. Schedule of KCT Project Elements 17
Table 2. National Ambient Air Quality Standards 25
Table 3. Lower Kalihi Aquifer System Information 30
Table 4. Plant Species Identified on the Project Site 34
Table 5. Demographic Characteristics of the General Project area 42
Table 6. Hawaii State Plan – HRS Chapter 226, Part I 57
Table 7. Hawaii State Plan – HRS Chapter 226, Part III 67
Table 8. Coastal Zone Management – HRS Chapter 205A 78

FIGURES

Figure 1. Project Site Location Map 2
Figure 2. Existing Fuel Transfer System 3
Figure 3. TMK Map 9
Figure 4. Site Photographs (Existing Conditions) 10
Figure 5. Site Map – Preferred Alternative 19
Figure 6. Fuel Pipeline Route Alternatives Considered 20
Figure 7. On-/Off-Loading Facility Location Alternatives Considered 21
Figure 8. Tie-In Location Alternatives Considered 22
Figure 9. USACE Maintenance Zone 23
Figure 10. SMA Boundaries in the Project Area 91
Figure 11. Projects Included in the Cumulative Impact Analysis 94

APPENDICES

Appendix A Comments in Response to Early Consultation
Appendix B Phase I Environmental Site Assessment
Appendix C Biological Resources Survey Report
Appendix D Cultural Resources Inventory Survey

ACRONYMS AND ABBREVIATIONS

AGL	Above Ground Level
AHJ	Authority Having Jurisdiction
AST	Above-ground Storage Tank
bbls	barrels (of oil, equivalent to 42 gallons)
CAA	Clean Air Act
CFR	Code of Federal Regulations
CO	Carbon monoxide
CT	Census Tract
CWA	Clean Water Act
CZM	Coastal Zone Management
DBEDT	Department of Business, Economic Development, and Tourism
DEA	Draft Environmental Assessment
DPP	Department of Planning and Permitting
EA	Environmental Assessment
EIS	Environmental Impact Statement
EPA	Environmental Protection Agency
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
^{o}F	Degrees Fahrenheit
FAA	Federal Aviation Administration
FEA	Final Environmental Assessment
FEMA	Federal Emergency Management Agency
FIRM	Flood Insurance Rate Map
FONSI	Finding of No Significant Impact
FY	Fiscal Year
HAR	Hawaii Administrative Rules
HASP	Health and Safety Plan
HCDA	Hawaii Community Development Authority
HDOH	Hawaii Department of Health
HDOT	Hawaii Department of Transportation
HEPA	Hawaii Environmental Policy Act
HFFC	Hawaii Fueling Facilities Corporation
HIA	Honolulu International Airport
HRS	Hawaii Revised Statutes
HSTF	Hawaii Sustainability Task Force
HRTF	Hawaii Refinery Task Force
H_2S	Hydrogen sulfide
IBC	International Building Code
KCT	Kapalama Container Terminal
LOS	Level of Service
LUC	Land Use Commission
µg	microgram (10^{-6} gram)
µm	micron, micrometer (10^{-6} meter)

mg/L	milligrams per liter
MNA	Myounghee Noh & Associates, L.L.C.
MS4	Small Municipal Separate Storm Sewer System
MSL	Mean Sea Level
NAAQS	National Ambient Air Quality Standards
NAS	National Airspace System
NFPA	National Fire Protection Association
NHPA	National Historic Preservation Act
NPDES	National Pollutant Discharge Elimination System
NO_2	Nitrogen dioxide
OCCL	Office of Conservation and Coastal Lands
OEQC	Office of Environmental Quality Control
OP	State of Hawaii Office of Planning
ORMP	Ocean Resources Management Plan
O_3	Ozone
OSRO	Oil Spill Response Organization
Pb	Lead
ppm	parts per million
$PM_{2.5}$	Particulate Matter (smaller than 2.5 micrometers)
PM_{10}	Particulate Matter (smaller than 10 micrometers)
PPE	Personal Protective Equipment
PUC	Primary Urban Center
REC	Recognized Environmental Conditions
ROH	Revised Ordinances of Honolulu
SCADA	Supervisory Control and Data Acquisition
SHPD	State Historic Preservation Division (office)
SIHP	State Inventory of Historic Properties
SO_2	Sulfur dioxide
SMA	Special Management Area
SPCC	Spill Prevention, Control, and Countermeasure (Plan)
TIAR	Traffic Impact Analysis Report
TMK	Tax Map Key
UH	University of Hawaii
UIC	Underground Injection Control
USACE	U.S. Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey

SUMMARY SHEET

Project Name:	Kapalama Terminal Jet Fuel Line
Proposed Action:	Construction and operation of a jet fuel on-/off-loading terminal at Honolulu Harbor Pier 43 and an associated 1,800 linear foot fuel line connecting the on-/off-loading terminal to the Hawaii Fueling Facilities Corporation (HFFC) Sand Island Fuel Facility on Sand Island Access Road and eventual neighbor island jet fuel distribution.
Applicant:	Hawaii Fueling Facilities Corporation
Agent for the Applicant:	Myounghee Noh & Associates, L.L.C. 99-1046 Iwaena Street, Suite 210A Aiea, Hawaii 96701 Contact: Jessica Walsh Phone: 808-484-9214 Email: Jessica@noh-associates.com
Approving Agency:	State of Hawaii Department of Transportation – Harbors Division Hale Awa Ku Moku Building 79 South Nimitz Highway Honolulu, Hawaii 96813
Project Cost:	$3-5 million
Project Location:	TMK (1) 1-2-025:017 (por.) TMK (1) 1-2-025:020 (por.) TMK (1) 1-2-025:021 (por.) Sand Island Access Road (no TMK assigned)
Recorded Fee Owner:	017: State of Hawaii (HDOT-Harbors manages) 020: State of Hawaii (HDOT-Airports manages) 021: State of Hawaii (HDOT-Airports manages) Sand Island Access Road: State of Hawaii (HDOT-Highways manages)
Area:	Approx. 2.3 acres
State Land Use:	Urban (all TMKs)
Land Use Map Development Plan:	Harbor uses, Oahu Commercial Harbors 2020 Master Plan
Public Facilities Map County Zoning:	017: I-3 (Waterfront Industrial), P-1 (Restricted Preservation) 020: I-3 (Waterfront Industrial) 021: I-3 (Waterfront Industrial) Sand Island Access Road: n/a
Special Management Area:	Portion
Flood Insurance Rate Map:	Zones VE and AE, Map 15003C0353G
Existing Use:	Harbor/utility easement/roadway
Permits Required:	State of Hawaii Department of Transportation Approvals/Permits • DOT-HWY: Use and Occupancy Agreement

- DOT-HWY: Lane Use/Occupancy Permit
- DOT-HWY: Landscaping within Highway ROW
- DOT-HWY: Routine Construction/Excavation within a State Highway
- DOT-HWY: Permit to Discharge into the State Highways Drainage System
- DOT-HAR: Construction Right-of-Entry
- DOT-HAR: Hot Works Permit
- DOT-AIR: Permit to Perform Work on State Airport Property

State Historic Preservation Department

- Chapter 6e Historic Preservation Review

Department of Health (HDOH)

- HDOH Clean Water Branch: National Pollutant Discharge Elimination System (NPDES) Permit (likely Appendices C, F, and G)
- Indoor and Radiological Health Branch: Noise Permit
- Solid and Hazardous Waste Branch: Solid Waste Permit

City & County of Honolulu

Department of Planning and Permitting

- General Building Permit
- Electrical Branch Review
- Zoning Branch Review

Civil Engineering Branch

- Trenching Permit
- Stockpiling Permit
- Grading Permit

Honolulu Fire Department Review

Hawaii Electric Company (HECO) Service Request

Determination: Anticipated Finding of No Significant Impact

1.0 PURPOSE AND NEED

1.1 Introduction and Project Description

The Hawaii Fueling Facilities Corporation (HFFC), a consortium of 20 airlines and provider of storage and distribution services for all jet fuel delivered to the Honolulu International Airport (HIA), proposes to construct a jet fuel on-/off-loading terminal at the planned Pier 43 and an associated fuel line along the planned Pier 43 and Sand Island Access Road. The fuel line would connect the on-/off-loading terminal to the HFFC Sand Island Fuel Facility (HFFC Fuel Facility) on Sand Island Access Road north of the bridge. Additionally at the on-/off-loading facility, fuel would be transferred to barges for inter-island transport. Although the project would be constructed with private funds, it would use lands owned by the State of Hawaii, including an existing fuel pipeline easement along Sand Island Access Road.

This is a distinct and separate project from the actions previously proposed by the State of Hawaii, Department of Transportation, Harbors Division, under the *Kapalama Container Terminal and Tenant Relocations Final EIS*, dated August 2014 ("KCT FEIS") (State of Hawaii, Department of Transportation, Harbors Division [HDOT-Harbors], 2014). However, the Proposed Action would depend upon and utilize components of the *New Kapalama Container Terminal Design at Honolulu Harbor, Oahu, Job H.C. 10502*, as well as the *New Kapalama Container Terminal Wharf and Dredging at Honolulu Harbor, Oahu, Job H.C. 10498* projects (together referred to as the "Kapalama Container Terminal (or KCT) project," which are actions proposed by and covered under the KCT FEIS. The Proposed Action would be located on Pier 43, which would be re-constructed under the KCT project, including dredging of waters fronting the piers. These new piers, of a bulkhead design using sheet piles, would encompass Piers 42 and 43 and be approximately 1,860 feet long with crane rails, utilities, bollards, hatches, and associated equipment (Ibid., 2-12).

Figures 1-3 present the site location, existing conditions, and tax map keys (TMKs) of the Proposed Action and surrounding properties. This project is also distinct from the weigh station previously proposed by the State of Hawaii, Department of Transportation, Highways Division. The weigh station will be constructed along Sand Island Access Road across from the HFFC Fuel Facility (near the access gate to the completed Kapalama Container Yard). Figure 4 presents photographs of the existing conditions at the project site.

Legend and Notes

Proposed Project Area Boundary

N

Scale

250 feet

Myounghee Noh & Associates, L.L.C.

Figure 1. Site Location Map
Environmental Assessment
HFFC Kapalama Terminal Jet Fuel Line
TMK (1)-1-025:017, :020, :021
Kapalama, Island of Oahu

Legend and Notes

- Proposed Project Area Boundary
- Existing 18" Jet Fuel Line
- Existing Jet Fuel Transmission Lines to Honolulu International Airport
- Existing Off-Loading Facility Location
- Exposed/Hanging Portions of Pipeline

N

Scale

350 feet

Myounghee Noh & Associates, L.L.C.

Figure 2. Existing Fuel Transfer System
Environmental Assessment
HFFC Kapalama Terminal Jet Fuel Line
TMK (1)-1-025:017, :020, :021
Kapalama, Island of Oahu

1.2 Background, Purpose, and Need

The Proposed Action purpose and need are presented in the following sections.

1.2.1 Background

Currently a significant portion of the jet fuel supplied to HIA is off-loaded from HFFC's Pier 51 terminal in Honolulu Harbor, transferred via fuel pipeline along Pier 51 to where the pipeline goes underground and west to Sand Island Access Road, and further northwest to the tie in at the HFFC Fuel facility, where it is stored. Then it is transferred via a system of underground pipelines to the HFFC Aolele Street Facility, and finally delivered via a hydrant fueling system to the aircraft hardstands on both the North and South Ramps at the HIA. The need to import jet fuel is due to the fact that the two on-island refineries are unable to meet the significant jet fuel demand at HIA, which must be supplemented by imports of jet fuel that are exclusively off-loaded at Pier 51 on Sand Island. Currently, most fuels are supplied to neighbor islands through interisland fuel barge deliveries conducted by facilities other than the HFFC facilities. Hilo is the only city on any neighbor island that receives some supply from direct tankship deliveries. A tankship is an ocean vessel that is larger than the barges used for interisland deliveries.

This single-pipeline dependency for a significant portion of the jet fuel supplied to HIA represents a vulnerability to the State's jet fuel supply. Furthermore, the single off-loading facility dependency also represents a vulnerability as under Hawaii Administrative Rules (HAR) 19-42-89 *Priorities and Scheduling of Vessel Movements in Honolulu Harbor and Barbers Point Harbor*, unloading of container ships receives priority over fuel off-loading at the Pier 51 location on Sand Island, an additional obstacle to a reliable jet fuel supply.

Fuel ship docking at Pier 51 is scheduled ahead of time; however, due to the limited space availability at Pier 51 (in addition to the priority of cargo ships), these windows of availability are limited to approximately once a week / six times a month. Since the ships are coming from long distances, there are unpredictable variables that can affect their time of arrival, including weather, port loading conditions, etc. If they arrive early, they have to wait until their scheduled time arrives. If they are late, they have to wait for the next open docking window. Fuel ships anchor outside of Honolulu Harbor while waiting for their docking window.

No fuel is currently loaded or unloaded, nor is planned to be loaded/unloaded, by tanker trucks at the HFFC Fuel Facility. No fuel is currently on-loaded for interisland delivery at Pier 51. Jet fuel is currently stored on-site in 16 above-ground storage tanks (ASTs) with total gross capacity of 44,125,950 gallons, or 1,050,617 barrels (bbls) (38 million gallons is net or usable storage capacity), all of which would be able to receive fuel from the proposed fuel line and on-/off-loading facility.

Average throughput at the HFFC Fuel Facility is currently approximately 1.4 million gallons (33,333 bbls) of jet fuel per day. The HFFC's second facility, Aolele Street Facility, has a total storage capacity of 7,602,000 gallons (181,000 bbls.) in ASTs. A hydrant fueling system delivers fuel from the HFFC Aolele Street Facility to all the aircraft hardstands at the HIA.

1.2.2 Purpose and Need

The purpose of the Proposed Action is to increase jet fuel supply resilience, reliability, and redundancy to the HIA and outer island airports. Increased jet fuel supply resilience is essential to ensure that adequate fuel supply for air transport is available to meet both current and future demands. According to DBEDT, the state's jet fuel demand is expected to grow at an annual rate of 1.5% over the coming decades, based on the average growth rate of 1%-2% that has been seen in recent years. This anticipated increased jet fuel demand is projected to increase overall by more than 12% by 2020 (ICF International, 2014). Redundancy would also protect the jet fuel supply in the event of an accident or natural disaster that would render the Pier 51 off-loading facility and/or the existing fuel line inoperable.

Additionally, HIA plans to undergo expansion for additional aircraft, including wide-body aircraft, requiring greater jet fuel supply. Therefore, increased jet fuel supply robustness is crucial to ensuring that adequate fuel supply for air transport is available to meet both current and future demands.

Delay in jet fuel ship access to the existing off-loading facility creates a negative cost impact. Additionally, it is conceivable that it could create a supply delay significant enough to disrupt sufficient jet fuel supply. The redundant proposed on-/off-loading facility at the planned Pier 43 will help to alleviate the delay and associated cost and supply impacts.

A short portion of the pipeline that runs along the Pier 51 face is exposed and anchored beneath the pier. In a tsunami or hurricane event this leaves it more open to damage. The planned construction of the Pier 43 provides an opportunity to construct a redundant fuel line that would be buried in the pier face, and not exposed to tsunami or hurricane threats.

1.2.3 Project Objectives

The objectives of the Proposed Action are:

1. Utilize the unprecedented opportunity presented with the KCT Project's construction of the new Pier 43.
2. Reduce delay experienced by jet fuel ships in Honolulu Harbor due to cargo ships receiving priority and there being only one existing fuel off-loading facility associated with HFFC Fuel Facility.
3. Increase jet fuel supply potential to support the anticipated increase in demand of jet fuel.
4. Decrease risk associated with hurricane/tsunami damage to the jet fuel supply.
5. Improve jet fuel distribution capability to neighbor islands.

1.3 Environmental Assessment Process

This Environmental Assessment (EA) is being conducted in accordance with Chapter 343 of the Hawaii Revised Statutes (HRS), the Hawaii Environmental Policy Act (HEPA). This law, along

with its implementing regulations, Title 11, Chapter 200, of the Hawaii Administrative Rules (HAR), is the basis for the environmental impact process in the State of Hawaii. According to Chapter 343, an EA is prepared to determine impacts associated with an action, to develop mitigation measures for adverse impacts, and to determine whether any of the impacts are significant according to 13 specific criteria outlined in the law. Section 6 of this document states the anticipated finding that no significant impacts are expected to occur, and Section 7 lists each criterion and presents the anticipated findings for each determined by this impact analysis.

If, after considering comments to the Draft EA, the approving agency confirms that no significant impacts would be expected to occur, then the agency will issue a Finding of No Significant Impact (FONSI), and the action will be permitted to proceed to other appropriate approval and permit processes. If the agency concludes that significant impacts are expected to occur as a result of the Proposed Action, then an Environmental Impact Statement (EIS) would be prepared.

1.4 Public Involvement and Agency Coordination

1.4.1 Introduction

Early consultation is the most important part of the HEPA process. HAR 11-200-9 requires that an applicant consult with the respective county planning department(s) and other agencies or individuals that might have jurisdiction or expertise with respect to the Proposed Action. During this process, Federal, State, and County agencies and private stakeholders who may have concerns related to the Proposed Action were contacted.

1.4.2 Early Consultation

The following agencies and organizations were consulted by letter during development of the Environmental Assessment:

<u>Federal:</u>

U.S. Army Corps of Engineers
Department of Commerce, National Oceanic and Atmospheric Administration
Department of Commerce, National Marine Fisheries Service
Department of the Interior, Fish and Wildlife Service
Department of Homeland Security, United States Coast Guard

<u>State:</u>

Department of Health, Clean Water Branch
Department of Health, Clean Air Branch
Department of Health, Noise, Radiation, Indoor Noise Branch
Department of Health, Hazard Evaluation and Emergency Response Office
Department of Land and Natural Resources, Historic Preservation Division
Department of Land and Natural Resources, Division of Aquatic Resources
Department of Land and Natural Resources, Office of Conservation and Coastal Lands

Department of Land and Natural Resources, Division of Boating and Ocean Recreation
Department of Land and Natural Resources, Land Division
Department of Land and Natural Resources, Engineering Division
Department of Agriculture, Plant Quarantine Branch
Department of Agriculture, Plant Industry Division
Department of Transportation, Statewide Transportation Planning Office
Department of Transportation – Airports
Department of Transportation – Harbors
Department of Transportation – Highways
Office of Hawaiian Affairs
Department of Business, Economic Development, and Tourism, Office of Planning

City and County of Honolulu:

Department of Design and Construction
Department of Transportation Services
Fire Department
Police Department
Department of Facility Maintenance
Board of Water Supply
Department of Planning and Permitting
Department of Environmental Services

Private:

Sand Island Business Association
Kalihi/Palama Neighborhood Board
Hawaii Harbors User Group
Matson Navigation Company
Pacific Shipyards
Young Brothers Limited
Aloha Cargo Transport
Harbors Police
Iwilei District Participating Parties
Kalihi/Palama Community Council
Sause Brothers
Hawaii Tug and Barge
American Marine
Keehi Boat Club
Honolulu Freight Service
BHP Petrol Americas
Pasha Hawaii
Hawaii Stevedores, Inc.

Hawaiian Electric, Inc.
Par Hawaii Refining, LLC

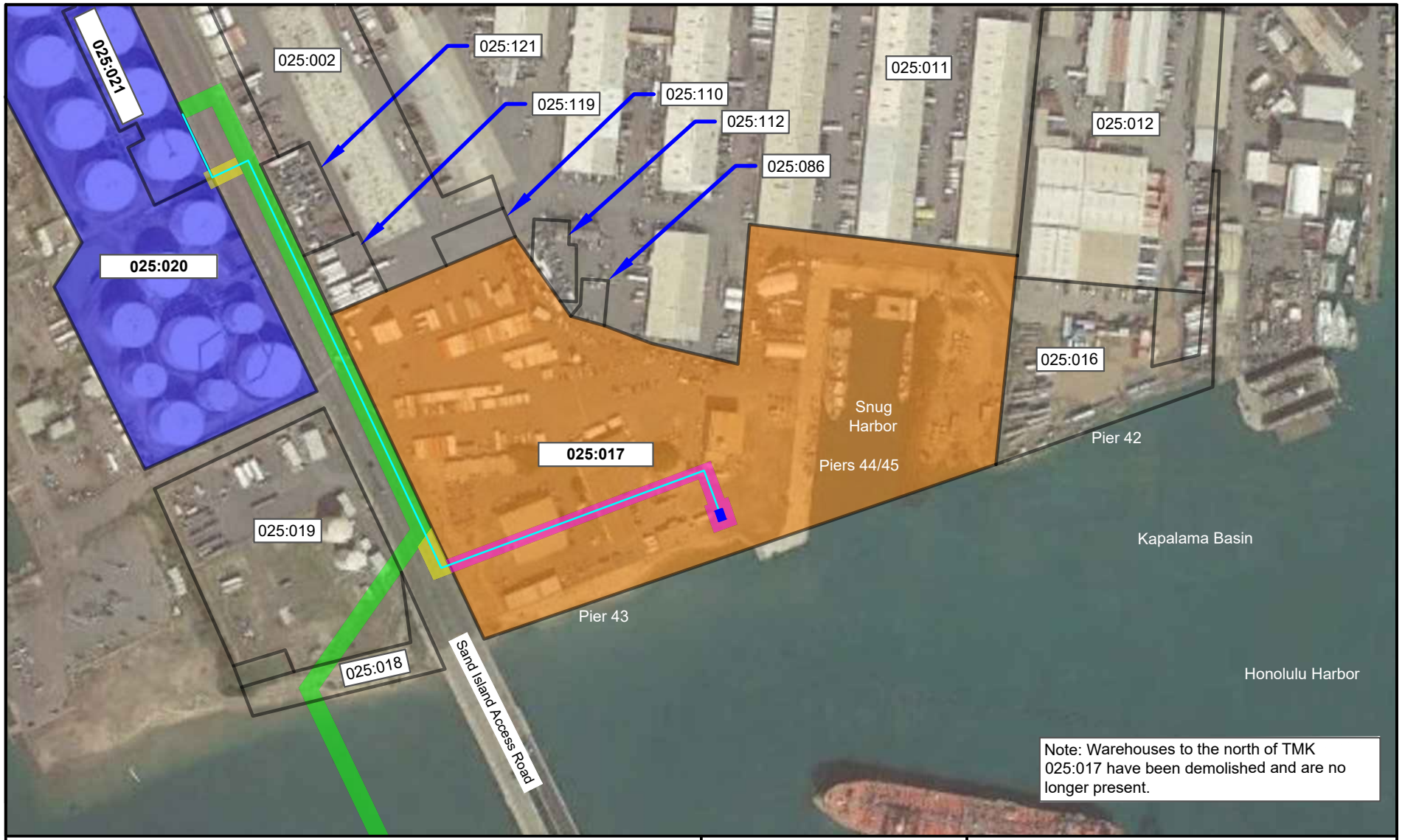
Comments received in response to requests during early consultation are presented in Appendix A.

1.4.3 USACE Pre-Application Meeting

On 21 July 2017, a meeting was conducted with the USACE Regulatory Branch and included the following agencies: Hawaii DOT-HAR, Burns & McDonnel, Moffat & Nichol, and Signature Flight Support. The purpose of the meeting was for USACE Pre-Application Meeting and covered the following topics:

- Project description
- Project purpose
- Project features
- Construction means and methods
- Product (fuel) transfer procedures

The Pre-Application Meeting resulted in USACE Regulatory Branch issuing a letter, dated 24 July 2017 indicating that that based on the information provided about the project, a Department of the Army permit would not be required.



Legend and Notes

- Parcel Boundaries
- Preferred 18" Pipeline Routing Alternative
- New Easement State of Hawaii (HDOT-Highways manages)
- New Easement State of Hawaii (HDOT-Harbors manages)
- Existing Easement (F-6/EAS 101A)
- Sand Island Access Road: State of Hawaii (HDOT-Highways manages)
- 020: State of Hawaii (HDOT-Airports manages)
- 021: State of Hawaii (HDOT-Airports manages)
- 017: State of Hawaii (HDOT-Harbors manages)

N

Scale

150 feet

Myounghee Noh & Associates, L.L.C.

Figure 3. TMK Map
Environmental Assessment
HFFC Kapalama Terminal Jet Fuel Line
TMK (1)-1-025:017, :020, :021
Kapalama, Island of Oahu

Figure 4. Site Photographs (Existing Conditions)

Photograph 4-1. A view to the east from near the proposed on-/off-loading terminal location on the planned Pier 43 (December 6, 2016).

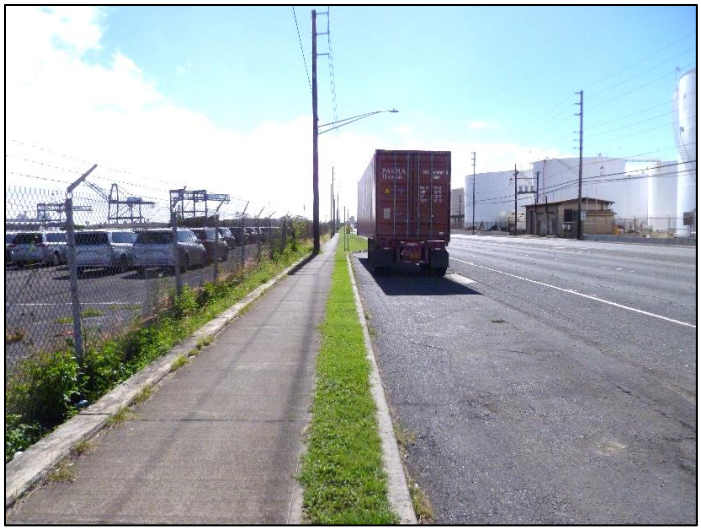
Photograph 4-2. A view to the east from the side of the Sand Island Access Road embankment. The fence demarcates the approximate location of the edge of the planned Piers 42 and 43. The proposed jet fuel line would exit the Pier area, making a right angle to the north (i.e. left) (December 6, 2016).

Photograph 4-3. Looking north along the east side of Sand Island Access Road. The proposed fuel line would exit the Pier area, approaching from the right and make a right angle to the north along Sand Island Access Road within the existing fuel line easement near the center of this image. The HFFC Fuel Facility is visible in the distance to the left. The closer tanks are on the PAR Hawaii Refining property (December 6, 2016).

Photograph 4-4. Looking north along the east side of Sand Island Access Road just to the north of the access gate. The existing fuel line easement is within the grassy shoulder. The former Kapalama Military Reservation property is to the right, and the HFFC Fuel Facility is to the left. The proposed fuel line corridor would pass (approximately) down the center of this image (December 6, 2016).

Photograph 4-5. Looking south toward the planned Pier 43 along the east side of Sand Island Access Road, which inclines upwards to the south approaching the bridge. The existing fuel line easement is in this grassy shoulder area. The sign reads, "DANGER: PETROLEUM PIPELINE." The proposed fuel line corridor would pass down the center (approximately) of this image (December 6, 2016).

Photograph 4-6. Looking south toward the planned Pier 43 along the east side of Sand Island Access Road, several hundred feet farther north than Photo. 4-5. The proposed fuel line corridor would pass down the center of this image (approximately). The driveway going left (i.e. east) is parallel with the southern boundary of the HFFC Fuel Facility, and is anticipated to be the location of the Kapalama Container Yard access gate. The tanks to the right are located on the PAR Hawaii Refinery Property (December 6, 2016).



Photograph 4-7. Looking to the south along the east side of Sand Island Access Road. The fuel line would cross Sand Island Access Road near the far (i.e. southern) end of the HFFC Fuel Facility on the right. The former Kapalama Military Reservation property is to the left, which will be part of the Kapalama Container Yard. The HFFC Fuel Facility is visible to the right, across Sand Island Access Road. The planned HDOT-HWY weigh station will be constructed on this shoulder of Sand Island Access Road (December 6, 2016).

Photograph 4-8. The proposed fuel line corridor, looking north along Sand Island Access Road at the location where the proposed fuel line would turn 90 degrees to the west and pass under Sand Island Access Road, then surface and tie into the existing HFFC Fuel Facility system. HDOT may construct a weigh station in this area. (December 6, 2016).

Photograph 4-9. The east side of Sand Island Access Road looking west into the HFFC Fuel Facility (December 6, 2016).

2.0 PROPOSED ACTION AND ALTERNATIVES

2.1 Introduction

During early project planning stages, a variety of ways to meet the purpose and need were considered. Given the project objective to utilize the KCT Project's construction of new piers at Kapalama Harbor, alternatives were limited to the following three categories: (1) alternative fuel line routes; (2) alternative on-/off-loading locations; and (3) alternative tie-in locations. This process resulted in the selection of a preferred alternative, discussed in Section 2.2. Alternatives are described in Section 2.3.

2.2 Proposed Action

General Description

The project consists of the following elements: (1) a fuel on-/off-loading site with valve pit at the planned Pier 43, (2) approximately 1,800 linear feet of 18-inch, below-grade fuel line at Pier 43 and along the east side of Sand Island Access Road, transiting under Sand Island Access Road to the HFFC Fuel Facility to the west of the roadway, and (3) a new tie-in at the HFFC Fuel Facility (Figure 5). The on-/off-loading site would be located at Pier 43, which is planned for reconstruction as described in the *Kapalama Container Terminal and Tenant Relocations Final Environmental Impact Statement* (Belt Collins Hawaii, LLC, 2014). Of the total 1,800-foot fuel line, approximately 650 feet would be within the KCT Project boundary. The fuel line would extend from the on-/off-loading terminal on Pier 43 to the east side of Sand Island Access Road, where it would make a right-angle to the north, extending along Sand Island Access Road within an existing fuel line easement for approximately 900 feet, at which point it would make another right-angle to the west, passing under Sand Island Access Road to a tie-in located within the existing HFFC Fuel Facility.

In the area where the piping would be aboveground, it would be 18" steel pipe routed between 6" and 3' above grade, with a mixture of welded and flanged connections, supported by pipe stands. All pipe, valves, connections, and supports would be painted white, and therefore cohesive in appearance with the rest of the HFFC Fuel Facility. Fuel from the fuel tankers would be unloaded at the new on-/off-loading facility, transferred through the new fuel pipe, stored at the HFFC Fuel Facility, transferred by existing fuel line to the HFFC Aolele Street Facility near HIA, or loaded on a fuel barge for delivery to neighbor island airports.

The Proposed Action would be coordinated with the planned harbor improvements, as well as weigh station construction, scheduled for construction during FY 17-21. The fuel line would occupy State of Hawaii-owned property along Pier 43 (managed by HDOT-HAR per executive order). A new easement will be created, within lands under DOT Harbors' and DOT Highways' jurisdiction, to encumber the new fuel line. The easement will be leased or granted to the appropriate entity after conclusion of discussions, and agreement, pertaining to terms and conditions of easement occupancy. The fuel pipeline would be within the utility easement along Sand Island Access Road (managed by HDOT-Airports per executive order). Through project

coordination, it will be determined if this will be a modification to the existing easement or creation of a new easement. The proposed fuel line would occupy portions of the following property tax map keys (TMK), in addition to the existing easement located within the Sand Island Access Road (no TMK number assigned) right-of-way:

- TMK (1) 2-025:017 (HDOT-HAR)
- TMK (1) 2-025:020 (HDOT-Airports)
- TMK (1) 2-025:021 (HDOT-Airports)

Construction

The new jet fuel pipeline would be installed underground with a minimum depth of burial of 3 feet in unpaved areas and 4 feet of depth in paved areas, and would be located above ground within the HFFC Fuel Facility property. The horizontal and vertical alignment would be coordinated with new and existing utilities. The new fuel pipeline would be buried in a sand bedding material and all buried piping would be steel, factory-coated with fusion-bonded epoxy, and cathodically-protected.

The portion of the fuel line corridor that crosses Sand Island Access Road would require staging of lane closures. The Proposed Action would involve no new construction at the HFFC Fuel Facility apart from that portion of the proposed fuel line that enters the site, and traverses to the tie-in linking the proposed fuel line to the HFFC Fuel Facility's system. The Proposed Action would not involve any in-water work, nor would it discharge water to Honolulu Harbor or other surface waters.

The jet fuel on-/off-loading terminal valve pit would be located on the planned Pier 43, approximately 500 feet east of Sand Island Access Road. The concrete valve pit would be of approximate dimensions 16 ft x 6 ft x 9 ft deep, and would be slightly crowned with respect to the finished grade of the pier. The design team is coordinating with PASHA and other anticipated users of the planned pier to ensure the design of the valve pit does not interfere with other planned uses and operations.

Electrical equipment would be installed near the perimeter of the pier area to allow for emergency shutdown of fueling operations when product is being transferred between the HFFC Fuel Facility and a fuel vessel at the on-/off-loading facility.

Operation and Maintenance

The new jet fuel pipeline would deliver jet fuel between the HFFC Fuel Facility and the proposed on-/off-loading facility at Pier 43. This would require similar maintenance operations as those of Pier 51 now including, for instance, regular cleaning of the valve pit.

HFFC Fuel Facility has an electronic leak detection system that will detect a leak as small as 0.05 gallons per hour. The new pipeline would tie into and be protected by the existing leak protection/detection system. In addition, integrity and leak testing of buried piping would be performed, and all existing underground lines are pressure tested. Annual cathodic protection system inspections would be required to be performed. The site operations related to product leak/release is governed by a site-specific Spill Prevention, Control, and Countermeasure (SPCC)

Plan (Section 3.15.1.2). The SPCC Plan includes provisions for spill containment best management practices (BMP), including the staging of spill response kits at the pier, and others that support any inadvertent spill being cleaned up while on the pier and before migration to harbor waters or storm drains.

Operation of the on-/off-loading facility will require close coordination with other commercial piers within Honolulu Harbor, and those planned as part of the KCT Project. The design team is coordinating with anticipated users at the planned piers to ensure that the locations of the cranes and the on-/off-loading facility are aligned to support efficient sea vessel movements within the harbor. As an operational policy at Pier 51, HFFC never conducts fuel off-loading operations when there are container ship operations going on nearby. This policy would be extended to Pier 43, and during on-loading operations, should they occur. Through coordination with project stakeholders during design for this project, HFFC proposed to dock a fuel vessel at the planned Pier 43 only when a container ship was not docked, as the congestion is too great when container ships are present. Single fuel ship berth is planned at Pier 43 to minimize cost and coordination amongst projects/operations.

Jet fuel vessels on- and off-loading at the proposed facility on the planned Pier 43 would be required to follow all safety procedures associated with safety or clear zones required while a fuel ship is operating at berth, as outlined in the HFFC Dock Operations Manual.

The following information describes the off-loading protocols that take place at the HHFC Fuel Facility off-loading facility at Pier 51. Protocols at the new proposed Pier 43 facility would be similar. Off-loading of fuel from the ocean-going vessel takes place using two 100-foot long 8-inch diameter reinforced flexible hoses. The hoses are coupled together with one end connected to the dispensing manifold of the ocean-going vessel and the other end connected to the risers in the pit. The main valve inside the pit is opened manually, and an initial fuel load of 2,000 barrels is dispensed through the system to test for leakage and ensure pipeline fullness. The unloading operation resumes after the HFFC Fuel Facility confirms that it has received all 2,000 barrels, with no significant variance in quantities from the ocean-going vessel. All fuel transfers are continuously monitored by HFFC personnel.

Upon completion of the unloading operation, the discharge valve at the ocean-going vessel's manifold is shut off, and the remaining petroleum product inside the 8-inch hoses is drained through a drain port of the riser pit using a portable vacuum truck. The extracted fuel is then transported and unloaded at the HFFC Fuel Facility for recycling. Finally, the hoses are disconnected from the tanker ship and the riser pit, and laid out along the western edge of Pier 51 for storage. Hoses used at the on-/off-loading facility at the planned Pier 43 would be laid in a designated location on/adjacent to the Pier 43. The process for on-loading fuel from the HFFC Fuel Facility to an ocean-going barge for inter-island distribution would the same, and the same safety and spill prevention measures would be in place.

2.3 Alternative Actions

2.3.1 Background

HRS 343 and HAR 11-200 both require that alternatives be developed, evaluated, and described in the environmental impact assessment document. Alternatives development and evaluation is a practical part of the project design process. With respect to the Proposed Action, alternatives development and evaluation was performed by HFFC and Burns & McDonnell, who conferred with the design teams for the different components of the KCT Project, including HDOT-HAR, HDOT-Highways, Moffatt & Nichol (for Pier 42 and 43 considerations), and R.M. Towill (for KCT Project Container Yard and Weigh Station considerations), and other design team participants.

2.3.2 Alternatives Considered

During project planning, several alternative designs were considered, involving both different fuel line routes to the HFFC Tank Farm and different on-/off-loading site locations, as well as the alternatives associated with tying in to the existing 18-inch fuel line (Figure 6).

2.3.2.1 Fuel Line Route Alternatives

Various fuel line route alternatives were considered during design. The alternatives (Figure 6) were compared in terms of both cost and coordination with existing utilities and planned facilities along the utility corridor adjacent to Sand Island Access Road. While the most direct route (current preferred alternative) is the most cost effective option, areas of the existing utility corridor adjacent to the existing utility line may be too crowded to accommodate an additional fuel line. If that were the case, the pipe route would be adjusted to include additional aboveground piping.

2.3.2.2 On-/Off-Loading Facility Location Alternatives

Varying the location of the proposed off-loading facility's location along both planned Piers 42 and 43 was also considered. Several factors constrained this consideration: minimizing fuel line length while allowing an adequate distance between a docked fueling vessel and the Sand Island Access Road Bridge, which requires 100 feet of distance from the bow/stern of the vessel. An alternative on-/off-loading site has been considered, located approximately 500 feet to the east of the preferred location, on Pier 42. The use of this alternative terminal location was considered as a contingency should the preferred terminal location be precluded by unforeseen engineering considerations.

During the design process, through coordination with the KCT Project design team, it was recognized that proposed dredge depths near the Sand Island Access Road Bridge would not be of adequate depth to dock a large cargo ship, or ships carrying jet fuel. This is because the area near the Sand Island Access Road Bridge is designated as the U.S. Army Corps of Engineers (USACE) maintenance zone, and a dredge depth of 23 feet is required to be maintained in this area (US Army Corps of Engineers Honolulu District, 2015). This area extends approximately 550 feet to the east of the bridge (Figure 10), and therefore places a constraint on how near the Sand Island Access Road bridge a large ship can be docked. Areas to the east of this USACE maintenance zone within Honolulu Harbor will be maintained at 40 feet of dredge depth. Through project design

coordination, it has been determined that the dredging restraint would be resolved in order for full operational use at the planned Pier 43.

2.3.2.3 Tie-In Alternatives

Various alternatives for where to connect the new fuel line to the existing fuel system were considered (Figure 8). Connecting to the existing fuel line in different locations was considered, both makai (i.e. near the shoreline in this case) and mauka (i.e. towards the mountains) of the Sand Island Access Road Bridge. These alternatives would have reduced project costs and the overall complexity of the project. With only a limited length of dedicated secondary fuel line, neither would have achieved the project purpose of adding redundancy and resiliency to the system, to the degree of the preferred alternative.

2.3.2.4 No Action Alternative

Under this alternative, neither the Proposed Action nor any alternative action would occur. As the No Action Alternative would not accomplish project objectives, it is considered unacceptable by the applicant. Although the No Action Alternative is not considered feasible, it is discussed within this document as a comparison of the Proposed Action's environmental impact to baseline conditions, were construction of the Proposed Action not to occur. Within this document, the No Action Alternative is discussed only in cases for which it presents a significant contrast relative to the Proposed Action's environmental impacts.

2.3.3 Conclusion

The preferred alternative was the only alternative that met the project purpose and need of a new jet fuel line routed directly from a new on-/off-loading facility to the HFFC Fuel Facility, which would allow true redundancy via two 18" fuel lines. Additionally, the new on-/off-loading facility, to operate congruently with the existing on-/off-loading facility at Pier 51, would minimize disturbance associated with the regulated docking priority received by cargo ships.

2.4 Timeline

The Proposed Action's construction schedule is dependent upon portions of the KCT Project schedule. Principally, these are construction of the new Kapalama Container Yard with an estimated start of autumn 2017, construction of Kapalama Wharf, with an estimated start of autumn 2018, and the Kapalama Weigh Station with an estimated start of spring 2019 (Table 1).

Table 1. Schedule of KCT Project Elements

	Estimated Construction Start	Estimated Construction Duration
Kapalama Container Yard	Fall 2017	3 years
Kapalama Wharf	Fall 2018	3 years
Kapalama Weigh Station	Spring 2019	1 year

2.5 Required Permits and Approvals

The Proposed Action would likely require the following permits and approvals. Coordination is underway with relevant agencies to ensure all required permits and approvals are obtained.

State of Hawaii

- Department of Transportation Approvals/Permits
  - DOT-HWY: Use and Occupancy Agreement
  - DOT-HWY: Lane Use/Occupancy Permit
  - DOT-HWY: Landscaping within Highway ROW
  - DOT-HWY: Routine Construction/Excavation within a State Highway
  - DOT-HWY: Permit to Discharge into the State Highways Drainage System
  - DOT-HAR: Construction Right-of-Entry
  - DOT-HAR: Hot Works Permit
  - DOT-AIR: Permit to Perform Work on State Airport Property
- Chapter 6e Historic Preservation Review
- Department of Health (HDOH)
  - HDOH Clean Water Branch: National Pollutant Discharge Elimination System (NPDES) Permit (likely Appendices C, F, and G)
  - Indoor and Radiological Health Branch: Noise Permit
  - Solid and Hazardous Waste Branch: Solid Waste Permit

City & County of Honolulu

- Department of Planning and Permitting
  - General Building Permit
  - Electrical Branch Review
  - Zoning Branch Review
  - Civil Engineering Branch
    - Trenching Permit
    - Stockpiling Permit
    - Grading Permit
- Honolulu Fire Department Review

Hawaii Electric Company (HECO)

- Service Request

Legend and Notes

- Proposed Project Area Boundary
- Preferred Tie-In Location
- Preferred 18" Pipeline Routing Alternative
- Preferred On/Off-Loading Facility Location
- Kapalama Container Terminal Reconstruction Area - Covered by Kapalama Final EIS
- Parcel Boundary
- Approximate Location of Existing 18" Pipeline

Warehouses to the north have been demolished and are no longer present.

N

Scale

150 feet

Myounghee Noh & Associates, L.L.C.

Figure 5. Site Map - Preferred Alternative
Environmental Assessment
HFFC Kapalama Terminal Jet Fuel Line
TMK (1)-1-025:017, :020, :021
Kapalama, Island of Oahu

Legend and Notes

- Proposed Project Area Boundary
- Preferred 18" Pipeline Routing Alternative
- Kapalama Container Terminal Reconstruction Area - Covered by Kapalama Final EIS
- Parcel Boundary
- Approximate Location of Existing 18" Pipeline
- Alternative Route A
- Alternative Route B
- Alternative Route C

N

Scale

150 feet

Myounghee Noh &
Associates, L.L.C.

Figure 6. Fuel Pipeline Route Alternatives Considered
Environmental Assessment
HFFC Kapalama Terminal Jet Fuel Line
TMK (1)-1-025:017, :020, :021
Kapalama, Island of Oahu

Legend and Notes

- Proposed Project Area Boundary
- Preferred On/Off-Loading Facility Location
- Kapalama Container Terminal Reconstruction Area - Covered by Kapalama Final EIS
- Parcel Boundary
- Approximate Location of Existing 18" Pipeline
- Alternative On-Off-Loading Facility Location A
- Alternative On-Off-Loading Facility Location B

N

Scale

150 feet

Myounghee Noh &
Associates, L.L.C.

Figure 7. On/Off-Loading Facility Location
Alternatives Considered
Environmental Assessment
HFFC Kapalama Terminal Jet Fuel Line
TMK (1)-1-025:017, :020, :021
Kapalama, Island of Oahu

Legend and Notes

- Proposed Project Area Boundary
- Kapalama Container Terminal Reconstruction Area - Covered by Kapalama Final EIS
- Parcel Boundary
- Approximate Location of Existing 18" Pipeline
- Preferred Tie-In Location
- Alternative Tie-In Location A/Mauka
- Alternative Tie-In Location B/Makai

N

Scale

150 feet

Myounghee Noh &
Associates, L.L.C.

Figure 8. Tie-In Location Alternatives Considered
Environmental Assessment
HFFC Kapalama Terminal Jet Fuel Line
TMK (1)-1-025:017, :020, :021
Kapalama, Island of Oahu

Legend and Notes

- Proposed Project Area Boundary
- Parcel Boundary
- USACE Maintenance Zone

N

Scale

150 feet

Myounghee Noh & Associates, L.L.C.

Figure 9. USACE Maintenance Zone
HFFC Kapalama Terminal Jet Fuel Line
TMK (1)-1-025:017, :020, :021
Kapalama, Island of Oahu

3.0 EXISTING ENVIRONMENT, IMPACTS, AND MITIGATION MEASURES: PHYSICAL ENVIRONMENT

3.1 Climate Change and Air Quality

Environmental Setting

The climate of Oahu has a moderate, semi-tropical climate with two seasons. The generally warm and dry summer is from May through September, with predominantly northeast trade winds. The winter season runs from October through April and is associated with slightly lower temperatures, higher rainfall, and more irregular winds.

The project site is located in the makai (i.e. toward the ocean) portion of Honolulu which has a climate typical of the leeward coastal lowlands of Oahu. The mean temperature measured at HIA ranges from 70 degrees Fahrenheit (^{o}F) in the winter to 84°F in the summer. Average annual precipitation is measured at approximately 26 inches (Giambelluca, T.W., et al., 2013), with a marked decrease in summer months.

During the 20th century, the average temperature of the Earth's surface and shallow ocean have increased (Fletcher, 2010). These changes are principally attributed to the combustion of carbon-based fuels, mostly fossil fuels, and the subsequent release of carbon dioxide, among other gases, which are opaque to, and therefore absorb, thermal infrared radiation emitted by the warm ground surface and oceans. In addition to carbon dioxide, other greenhouse gases include methane, nitrous oxide and water vapor. In descending order the largest sectors of the U.S. economy that produce greenhouse gases are electricity generation (30%), transportation (26%), industry (21%), commercial and residential activities (12%), and agriculture (9%) (EPA, 2017).

Global warming was addressed by the State's Ocean Resources Management Plan (ORMP) Working Group in 2013. In its report to the State Legislature, the Working Group stated: "…Some key vulnerabilities for U.S. islands due to climate change include: availability of freshwater, exposure to coastal hazards including sea level inundation, and negative impacts of climate change to coastal and marine ecosystems" (Hawaii Office of Planning, 2013).

For ports and harbors management, the ORMP Working Group identified risks associated with climate change. One identified risk, "Submersion of harbor infrastructure due to sea level rise and flooding" is relevant to the Proposed Action.

As required by the Clean Air Act (CAA), the Environmental Protection Agency (EPA) has established the National Ambient Air Quality Standards (NAAQS) for the following pollutants: carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), particulate matter less than 10 microns (PM_{10}) (a micron is a micrometer or 10^{-6} meter), particulate matter up to 2.5 microns in diameter ($PM_{2.5}$), ozone (O_3), and lead (Pb). The CAA also established primary and secondary standards. Primary standards set limits to protect public health, and secondary standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings. Most of the secondary standards are the same as the primary standards, with the addition of the 3-hour SO_2 concentration. There is currently no primary

NAAQS for 3-hour SO_2. Hawaii has an ambient air standard for hydrogen sulfide (H_2S), in addition to the pollutants identified above. Table 2 lists the Federal and State standards.

The State of Hawaii is in attainment of the NAAQS, and also meets the State AAQS. Exceptions to this include exceedances of the NAAQS for SO_2 because of volcanic emissions, and New Year's Eve fireworks. As the entire state is in attainment of the NAAQS, emissions from the Proposed Action are not subject to the General Conformity Regulations, 40 CFR Parts 51 and 93, pursuant to section 176(c) of the CAA (Code of Federal Regulations, 1993 Rev. 2010b).

Table 2. National Ambient Air Quality Standards

		Standards		
Air Pollutant	**Averaging Time**	**Hawaii State Standard**	**Federal Primary Standard***	**Federal Secondary Standard****
Carbon Monoxide (CO)	1-hour 8-hour	9 ppm 4.4 ppm	35 ppm 9 ppm	--
Lead (Pb)***	Calendar Quarter	1.5 µg/m^3	1.5 µg/m^3	0.15 µg/m^3
Nitrogen Dioxide (NO_2)	1-hour Annual	-- 0.04 ppm	100 ppb 53 ppb	-- 53 ppb
Ozone (O_3)	8-hour	0.08 ppm	0.075 ppm	0.075 ppm
$PM_{2.5}$	24-hour Annual	--	35 µg/m^3 15 µg/m^3	35 µg/m^3 15 µg/m^3
PM_{10}^	24-hour Annual	150 µg/m^3 50 µg/m^3	150 µg/m^3 --	150 µg/m^3 --
Sulfur Dioxide (SO_2)	1-hour 3-hour 24-hour Annual	-- 0.5 ppm 0.14 ppm 0.03 ppm	75 ppb -- 0.14 ppm 0.03 ppm	0.5 ppm
Hydrogen Sulfide (HS)	1-hour	0.025 ppm	--	--

-- None
* Primary Standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children and the elderly.
** Secondary Standards set limits to protect public welfare, including protection against decreased visibility, damage to animals, crops, vegetation, and buildings.
*** Due to almost non-detectable levels, ambient air monitoring for lead was discontinued in October 1997 with EPA approval. However, since 2003 lead continues to be measured as part of the Air Toxics monitoring program.
^ Due to lack of evidence linking health problems to long-term exposure to coarse particle pollution, EPA revoked the annual PM10 standard effective December 17, 2006. However, the State still has an annual standard.
ppm = parts per million by volume
µg/m^3 = micrograms per cubic meter of air
Source: Department of Health, State of Hawaii. September 2011. *State of Hawaii Annual Summary 2010 Air Quality Data.* State standards HAR §11-59; Federal standards 40 CFR Part 50.

Environmental Impacts and Mitigation Measures

Construction (Short Term/Temporary)

Construction of the Proposed Action has the potential to impact air quality in the vicinity of the project site through equipment exhaust and fugitive dust emissions during vehicle movement over disturbed soil, and during earthwork. The State of Hawaii Air Pollution Control Regulations (Chapter 11-60, HAR) prohibit visible emissions of fugitive dust from construction activities beyond the property line. The project design notes will direct the contractor to minimize the potential for fugitive dust emissions through routine wetting and to conduct all work in conformance with Chapter HAR 11-60.1, "Fugitive Dust." The contractor will be required to prepare and implement an Air Quality Mitigation Plan that details these practices.

Operational (Long Term)

No significant long-term impacts on climate or air quality as a result of the Proposed Action are anticipated. Although the Proposed Action would serve to supply fossil fuels for aircraft transportation, it would not be responsible for the increase in demand for fossil fuels, and would aim to increase the reliability, robustness, and resiliency of the supply to meet that demand. The rate of consumption of jet fuel is driven by economic activity, and not by the rate of supply. The Proposed Action could reduce the emission of green house gas generated by fuel ships waiting in queue for unloading priority at a pier (once cargo ships are finished). The redundant on-/off-loading facility will help to alleviate that conflict between cargo and fuel ships.

The risk associated with sea level rise along the fuel line route at Pier 43 is mitigated by the design of Pier 43, which includes utility line protection from exposure and flooding. No pipelines will be exposed at Pier 43, leaving them protected from risk of damage associated with sea level rise.

3.2 Noise

Environmental Setting

The project site generally has a moderate and occasionally high degree of noise from aircraft arriving and departing from HIA as well as from vehicle traffic on Sand Island Access Road.

Environmental Impacts and Mitigation Measures

Construction (Short Term/Temporary)

During construction, there would be minor, temporary increase to noise. These activities, which include excavation, heavy machinery operation, and traffic delays due to lane closure, can generate noise at times exceeding 95 decibels, although there are no sensitive noise receptors near the project site. State law requires that when construction projects have noise that is expected to exceed the HDOH "maximum permissible" property-line noise levels, contractors are required to consult with HDOH as per HAR 11-46 "Community Noise Control" prior to construction. HDOH then reviews the proposed activity, location, equipment, project purpose, and timetable in order to decide whether a permit is necessary and what conditions, project purpose, and mitigation measures, such as restrictions on the type of equipment, work hours, and portable noise barriers, would be necessary. Noise mitigation, therefore, would be the responsibility of the contractor,

should construction equipment and methods be anticipated to produce noise in excess of the maximum permissible property-line noise levels, in which case HDOH consultation would be conducted. Project specification would require that the contractor follow all applicable regulations related to construction noise.

Operational (Long Term)

There would be no long-term contribution to noise from the project. All noise associated with fuel on-/off-loading would be accomplished with existing pumps at the fuel farm. No new pumps would be provided as part of this project. Therefore, there will be no increase in noise associated with the operation of this new fuel line.

3.3 Geology and Topography

Environmental Setting

Oahu began as a small, vigorously active volcanic islet that first rose above sea level nearly four million years ago. During the next million years, the young island grew rapidly as lava flows built the huge shield volcano. The eroded remnants of this volcano are the Waianae Range. The overwhelming bulk of the Waianae Volcano is composed of thin flows of pahoehoe lava. Koolau Volcano is younger and larger than Waianae, and accounts for two-thirds of the island. It rose above sea level 2.7 million years ago, when Waianae Volcano's activity was waning. Pahoehoe basalts characterize the first stage of a shield volcano's life cycle (Hazlett & Hyndman, 1996). Koolau and Waianae may have grown as separate islands. The broad saddle of the Leilehua Plateau that connects them consists mainly of alluvial deposits shed from Waianae and lava flows from Koolau Volcano, which shed more alluvium onto the saddle as volcanic activity waned about 1.8 million years ago (Stearns, 1985).

The decay of Koolau was interrupted by a vigorous episode of rejuvenated volcanism about one million to 850,000 years ago producing the puu (cinder cones) known locally as Punchbowl, Sugarloaf, Tantalus Peak, Roundtop, and Diamond Head (MacDonald & Abott, 1996). The coastal plain, an area between Honolulu and Pearl Harbor contains eruption sites of volcanic vents including Salt Lake Crater, Makalapa, and Aliamanu (Hazlett & Hyndman, 1996).

The 1927 USGS Honolulu topographic quadrangle map shows the project site as being located near the Ananoho Fishpond, with the Kalihi Channel to the west, and the shoreline near present-day Auiki Street approximately 2,200 feet north. Sand Island was much smaller in the 1927 map than the present-day and is labeled "Quarantine Island," due to its use as a quarantine center to screen immigrants for illness in the early 1900s (Burton, F. & Farrell, M., 2007). The area fronting the fishpond, near the project site, is mapped as tidal flats.

Environmental Impacts and Mitigation Measures

The project is within an existing harbor and roadway setting. No changes the topography or geology in the project area would result from the construction or operation of the Proposed Action. In both the short- and long-term, no significant impacts relating to geology or topography are anticipated as a result of the Proposed Action.

3.4 Soils

Environmental Setting

The surface and substrata soils of the project site and vicinity consist mostly of fill material from dredging operations, placed on soft, pre-existing lagoon deposits. The fill material is characterized by unconsolidated silty sand and coral gravel, which has high porosity and permeability.

The Natural Resources Conservation Service classifies the soils of the project site as Fill Land, with slopes of 0% to 3%, well-drained soils with a low to moderately low (0.00 to 0.06 inches/hour) capacity to transmit water (United States Department of Agriculture, 2017). The USGS geologic map of Oahu shows the geology underlying the project site as being Quaternary fill material.

Environmental Impacts and Mitigation Measures

Construction (Short Term/Temporary)

Potential impacts during construction would be avoided or minimized by compliance with applicable regulations and building codes, including the NPDES permit program for erosion and sediment control and dust control measures required by the Clean Air Act and described in HAR 11-60.1. BMPs would be incorporated as part of the Proposed Action. Construction impacts would also be avoided or minimized through compliance with appropriate siting, planning, and design standards, including the International Building Code (IBC). Geotechnical engineering studies would be conducted to identify appropriate design requirements.

Construction would involve trenching for utilities, equipment installation, and vault construction. Construction activities would be completed in compliance with geotechnical engineering recommendations, which would be specific to the project design. Soil settlement, erosion, or expansion is not anticipated with the implementation of applicable geotechnical engineering practices during design and construction. The fuel line along Pier 43 would be constructed during pier construction as part of the KCT Project, which will follow all design and construction requirements related to erosion control.

Operation (Long Term)

Once construction is completed, operation of the on-/off-loading facility and associated fuel line would have no impact on the soils of the site.

3.5 Hydrology and Hydrogeology

3.5.1 Surface and Coastal Waters

Environmental Setting

There are no fresh surface water resources located on or in the immediate vicinity of the project site. The nearest streams are Kalihi Stream and the Kapalama Drainage Canal, located 0.9 miles north and 0.5 mile east of the project site, respectively. Both streams are perennial, flowing to the ocean year-round (Commission on Water Resource Management, 1990). The 2014 State of Hawaii Water Quality Monitoring and Assessment Report detailed the attainment or non-attainment of Hawaiian waters with Clean Water Act (CWA) water pollution criteria (HDOH,

2014). Kalihi Stream was listed as not attaining pollution criteria for total nitrogen, nitrate + nitrite, and turbidity, and both streams had trash noted as other pollutants. According to the National Wetlands Inventory, Kalihi Stream is identified as a Riverine Upper Perennial Unconsolidated Bottom Permanently Flooded wetland (R3UBH) and Palustrine Emergent Persistent Seasonally Flooded wetland (PEM1C). The Keehi Lagoon, near the former seaplane runway, are classified as Estuarine Sub-tidal Unconsolidated Bottom Subtidal wetland (E1UBL). Kapalama Drainage Canal empties into Kapalama Basin, which is classified as Marine Subtidal Unconsolidated Bottom Sub-tidal Excavated wetland (M1UBLx) (U.S. Fish and Wildlife Service, 2017).

The nearest coastal water is directly adjacent to the project site, where Pier 43 would be constructed. The channel connects Keehi Lagoon and Kapalama Basin, which is part of Honolulu Harbor. Pursuant to HAR Title 11, Chapter 54 Water Quality Standards, the coastal waters in the vicinity of the project site are classified as Class A Marine Waters. Class A Marine Waters are recognized as waters providing "recreational purposes and aesthetic enjoyment to be protected. These waters shall not act as receiving waters for any discharge which has not received the best degree of treatment or control compatible with the criteria established for this class."

Environmental Impacts and Mitigation Measures

Construction (Short Term/Temporary)

Honolulu Harbor has a Small Municipal Separate Storm Sewer System (MS4) permit issued under HAR 11-55. The permit includes construction and post-construction requirements that are addressed in the Honolulu Harbor Storm Water Management Plan and apply to all projects within Honolulu Harbor.

Construction of the proposed fuel line will require excavation, stockpiling of soil, backfilling, and paving. Therefore, the construction phase will disturb soil, and the potential for the release of polluted storm water runoff exists in these areas. The Proposed Action has a total area of greater than one acre, and the project would therefore require an NPDES General Permit for Construction. Additionally, the Kapalama Container Terminal project will require compliance with an NPDES construction permit, and therefore Best Management Practices (BMPs) will be in place in this portion of the proposed fuel line corridor to prevent the discharge of polluted storm water runoff. The portion of the Proposed Action along Sand Island Access Road would implement BMPs, including silt fences around areas of disturbed soil (i.e. trenches), and drain inlet socks, in order to minimize the potential for the release of polluted storm water runoff. Additionally, existing drain inlets on Sand Island are under jurisdiction of HDOT-HWY and will require the use of BMPs around the existing inlets. Disturbed soil within the Sand Island Access Road utility easement would be treated with grass seed and re-vegetated as quickly as possible. Emplacement of the valve pit and fuel line on Pier 43 will require compliance with requirements of the NPDES General Construction Permit for Pier 43 construction.The No Action Alternative would avoid the short-term, construction phase impacts related to the potential release of polluted storm water.

Operation (Long Term)

As HFFC stores petroleum hydrocarbons in quantities greater than 1,320 gallons at the HFFC Fuel Facility near navigable Waters of the U.S., HFFC has a Spill Prevention Control and

Countermeasure (SPCC) Plan in place to mitigate risks of a release and to effectively control releases, as per 40 CFR 112.7 (ERM-WEST, Inc., 2016). SPCC plans are reviewed and updated every five years, and/or when a facility makes significant changes.

Operation of the proposed fuel line in proximity to the ocean represents a potential increase in risk of a release of petroleum hydrocarbons to marine waters, which would be mitigated through revision of HFFC's SPCC Plan. The SPCC Plan details both practices that prevent releases of petroleum hydrocarbons during on-/off-loading and operations at the HFFC Fuel Facility, as well as response protocols in the event of a release. Currently, a contractor is retained by HFFC to serve as the oil spill response organization (OSRO). During on-/off-loading activities, the OSRO surrounds the ocean-going vessel with an oil-absorbent boom to contain spills that might occur during transfer operations. Other protocols ensure that no fuel is lost during transfer. The HFFC Fuel Facility's bulk storage tanks are all located within engineered secondary containment. The HFFC Fuel Facility has a combination concrete containment wall, gravel berm, and an underground slurry wall to prevent infiltration of spilled fuel to groundwater. In addition, an 8-foot deep 600-foot long interceptor trench was installed between the HFFC Fuel Facility and Keehi Lagoon (to the west) to prevent potential migration of fuel in groundwater during a spill.

As the proposed fuel line construction represents a significant change to the HFFC Fuel Facility's infrastructure, the SPCC Plan would be revised and updated to accommodate this change and ensure that appropriate protocols are in place to prevent, control, and respond to a fuel release. Additional details of the SPCC Plan are discussed in Section 3.15.1 Hazardous Materials.

The No Action Alternative would also avoid an increase in the risk of release of petroleum hydrocarbons to marine waters.

3.5.2 Groundwater

Environmental Setting

HDOH has established an Underground Injection Control (UIC) line to serve as a boundary between drinking and non-drinking water portions of underlying aquifers. Areas above (mauka side of) the UIC line are within drinking-water portions of the aquifer, while areas below (makai side of) the UIC are within non-drinking water portions of the underlying aquifer (Mink and Lau, 1987). The project site is below the UIC line and therefore lies in a non-drinking-water area.

According to the Mink & Lau Technical Report #179, published by the University of Hawaii Water Resources Research Center, the subject site is located above the Lower Kalihi Aquifer System of the Honolulu Aquifer Sector (Table 3).

Table 3. Lower Kalihi Aquifer System Information

Aquifer Code	**30103116**
Island Code	3 – Oahu
Aquifer Sector	01 – Honolulu
Aquifer System	03 – Kalihi
Aquifer Type, hydrogeology	1 – Basal
Aquifer Condition	1 – Unconfined
Aquifer Type, geology	6 – Sedimentary

Status Code	**13321**
Development Stage	1 – Currently used
Utility	3 – None
Salinity (in mg/L Cl^-)	3 – Moderate (1000-5000)
Uniqueness	2 – Replaceable
Vulnerability to Contamination	1 – High

As the project site's aquifer is basal, it is likely to be found at a depth corresponding to the project site's elevation above sea level. That is, about 10 feet below ground surface. Moreover, due to the proximity to the ocean, groundwater under the project site is likely to be saline, and therefore not useful as potable water, or for irrigation.

Environmental Impacts and Mitigation Measures

Construction (Short Term/Temporary)

As the existing fuel lines in the project site vicinity have not encountered groundwater, it is not expected that the Proposed Action would encounter groundwater during construction. Project design provisions and compliance with NPDES permit requirements would control storm water runoff impacts during construction. Implementation of these BMPs to control, treat, or reduce runoff (before entering nearby surface waters via drain inlets or sheet flow) would occur before construction begins and remain until permanent BMPs are in place. With proper installation of these BMPs, no substantial impacts on surface water quality is expected. Therefore, no impacts to groundwater are anticipated.

Operation (Long Term)

The potential for spills with the potential to impact groundwater exists, but is mitigated by implementation of the SPCC Plan, which will be revised to accommodate the Proposed Action, and by constant (24/7) monitoring of the system, and by the rapid response system. Additionally, the required Facility Response Plan would protect groundwater from being impacted. The proposed fuel line would undergo quarterly leak testing, as well as leak testing before initial use, with above-ground components located within the HFFC Fuel Facility undergoing daily visual inspections. Therefore, no impacts to groundwater are anticipated.

3.6 Natural Hazards

3.6.1 Flooding and Tsunami Hazard

Environmental Setting

Areas affected by surface flooding are identified on the Federal Insurance Rate Maps (FIRM) prepared by the Federal Emergency Management Agency (FEMA). The FIRM are based on flood studies and identify flood hazard areas and flood elevations. The flood map for the project site is Map 15003C0353G, dated 19 January 2011 (Federal Emergency Management Agency, 2017). The majority of the project site is located within zone AE, areas defined as being within the 1% annual chance of flood with base flood elevations of 9 and 10 feet above mean sea level (MSL).

The project site is located within the Tsunami Inundation Zone (Department of Emergency Management, 2017).

Environmental Impacts and Mitigation Measures

Construction (Short Term/Temporary)

The construction will comply with applicable regulatory requirements, including flood plain management criteria and flood-prone area management criteria in accordance with 44 CFR 60 Subpart A, Subpart B, and Subpart C, respectively. In addition, construction activities conducted in accordance with the National Flood Insurance Program regulations "Emergency Management and Assistance" as well as Chapter 21A ROH "Flood Hazard Areas" would thereby minimize the impact on the construction site and its environment from threats associated with flooding and tsunami. The new vaults and pits will be designed to provide a minimum factor of safety of 1.10 against buoyancy during construction.

Operation (Long Term)

The proposed fuel pipeline and water-tight vault and pit would be buried, minimum 3 ft. in non-paved areas and 4 ft. in paved areas, except for portions that are located within the HFFC Fuel Facility, including piping and the tie-in. Buried portions of the pipeline, and the vault and pit, would not be susceptible to flooding or tsunami inundation, and the remaining above-ground portions would be constructed of materials, and of such a design, that they would minimize the damage by flood waters or tsunami. The final installation will provide a minimum factor of safety of 1.50 against buoyancy under a full submerged condition (with water at grade level).

3.6.2 Hurricane and Wind Hazard

Environmental Setting

Hurricanes deliver coastal flooding and strong winds with wind speeds greater than 74 miles per hour, and can damage on-shore buildings and structures and vessels within harbors. The USGS identifies the storm hazard in the vicinity of Honolulu as 4 on a scale of 1 to 4, with 4 being "high." The IBC includes design criteria to allow buildings to withstand prescribed minimum wind loads.

Environmental Impacts and Mitigation Measures

Construction (Short Term/Temporary)

The most significant impact from hurricane with high wind would be the seawater inundation and runoff from the construction site. Therefore, it is critical to monitor weather, cease construction activities in advance, and secure the premises. Construction equipment and supplies would be relocated to a safe staging area, pre-approved by the DOT Harbors.

Operation (Long Term)

As described in the previous Section, 3.6.1, the majority of the proposed fuel line and water-tight vaults and pits will be constructed underground, and the remaining above-ground components will be reinforced or braced to minimize damage by storm water inundation and high winds. The existing HFFC Fuel Facility is designed and constructed to be compliant with the IBC.

3.6.3 Seismic Hazard

Environmental Setting

Oahu is subject to damage by earthquakes, although most earthquakes in Hawaii are related to volcanism and are located beneath the Island of Hawaii. However, some earthquakes are related to isostatic settling of the Island, and this type of earthquake occurs throughout the State. The IBC enforces seismic design standards and depends on location, building occupancy, and soil type.

Environmental Impacts and Mitigation Measures

Construction (Short Term/Temporary)

Oahu experienced one to two reported earthquake events a year between 1959 and 1986 according to Doak Cox' 1986 catalog "Earthquakes felt on Oahu, Hawaii, and their intensities." Generally damage from shocks and shakes are on buildings and bridge structures; however, equipment and supplies on the construction site will be secured and site workers protected during construction from any seismic hazards by means of safety planning/briefings and construction monitoring.

Operation (Long Term)

As described in previous sections, the proposed fuel pipe and on-/off-loading facility will be constructed mostly underground. Above-ground pipe support design will utilize pipe stress analysis which considers flow, pressure, temperature, wind, earthquake, fluid, and support conditions, among other factors. Adjustable and spring supports will be used where required by stress analysis, typically near tanks and pumps. Pipe support racks will be designed with provisions for expansion. In addition, metal-to-metal contacts (between pipes and steel supports) will be prevented by use of Teflon®, polytetrafluoroethylene, or ultra-high molecular weight polyethylene pads to reduce potential for corrosion and degradation. The Proposed Action is under seismic design category D, corresponds to buildings and structures in poor soils areas expected to experience severe and destructive ground shaking but not located close to a major fault; the fuel transport system will be constructed in a manner compliant with the IBC 2006 and American Society of Civil Engineers 705, and would therefore have little or no impact to seismic hazards.

3.7 Flora and Fauna

In order to evaluate the biological resource present on the Proposed Action site, a flora and fauna survey was performed and potential impacts to biological resources were evaluated (SWCA Environmental Consultants, 2017), Appendix C.

Environmental Setting - Flora

The vegetation of the project site was described as Ruderal Vegetation (i.e. growing on waste ground or refuse) characterized by various non-native grasses, shrubs, and herbaceous understory. In non-paved areas, grasses including swollen finger grass (*Chloris barbata*) and tree tobacco (*Ncotiana glauca*) were present. Vegetation near the water was dominated with non-native grasses, including sourbush (*Pluchea carolinensis*) and Christmas Berry (*Schinus terribinthifolius*). Along Sand Island Access Road vegetation consisted primarily of introduced sod grasses. Table 4 presents the plant species observed on the project site. Two indigenous

species were observed on the project site, *Heliotropium curassavicum* or Kipukai (Hawaiian), and *Waltheria indica,* or ʻuhaloa (Hawaiian). No endemic plant species were identified, and the remaining 28 plant species identified were non-native.

Table 4. Plant Species Identified on the Project Site

Family	Scientific Name	Common/Hawaiian Name(s)	Status
Monocots			
Poaceae	*Axonopus compressus*	Blanket grass	X
Poaceae	*Bothriochloa pertusa*	Pitted beard grass	X
Poaceae	*Cenchrus ciliaris*	buffle grass	X
Poaceae	*Cenchrus echinatus*	Common sandbur, ʻume'alu, mau'ukuku	X
Poaceae	*Chloris barbata*	Swollen fingergrass, ma'u lei	X
Poaceae	*Eragrostis amabilis*	lovergrass	X
Poaceae	*Melinis repens*	Natal redtop	X
Poaceae	*Sacciolepis indica*	Glenwood grass	X
Dicots			
Amaranthaceae	*Amaranthus viridis*	slender amaranth, pakai, ʻāheahea, pākaikai, pakapakai (Niʻihau)	X
Anacardiaceae	*Schinus terebinthifolius*	Christmas berry, wilelaiki, nani o Hilo (Molokaʻi)	X
Asteraceae	*Emilia fosbergii*	pualele (Niʻihau)	X
Asteraceae	*Pluchea carolinensis*	sourbush, marsh fleabane	X
Asteraceae	*Tridax procumbens*	coat buttons	X
Boraginaceae	*Heliotropium curassavicum*	kipūkai, nena, seaside heliotrope, lau poʻopoʻohina (Niʻihau)	**I**
Convolvulaceae	*Ipomoea obscura*	morning glory	X
Euphorbiaceae	*Euphorbia hirta*	hairy spurge, garden spurge, koko kahiki	X
Fabaceae	*Alysicarpus vaginalis*	alyce clover	X
Fabaceae	*Crotalaria pallida*	smooth rattlepod, pikakani, kolomona (Niʻihau)	X
Fabaceae	*Desmanthus pernambucanus*	slender mimosa, virgate mimosa	X
Fabaceae	*Desmodium tortuosum*	Florida beggarweed	X
Fabaceae	*Indigofera spicata*	creeping indigo	X
Fabaceae	*Leucaena leucocephala*	koa haole, ēkoa, lilikoa	X
Fabaceae	*Macroptilium atropurpureum*	Purple bush bean	X
Malvaceae	*Sida ciliaris*	Bracted Fan Petals, Fringe Fan Petals	X
Malvaceae	*Sida linifolia*	Flaxleaf fanpetals	X
Nyctaginaceae	*Boerhavia coccinea*	scarlet spiderling, red boerhavia	X
Passifloraceae	*Passiflora foetida.*	love-in-a-mist, running pop, wild water lemon, lani wai (Niʻihau), pohāpohā	X
Portulacaceae	*Portulaca oleracea*	pigweed, ʻākulikuli kula, ʻākulikuli lau liʻi, ʻihi	X
Solanaceae	*Nicotiana glauca*	tree tobacco, mustard tree, mākāhala, paka	X
Sterculiaceae	*Waltheria indica*	ʻuhaloa, ʻalaʻala pū loa, hala ʻuhaloa, hiʻaloa, kanakaloa	**I**

Abbreviations: E = endemic (native only to the Hawaiian Islands)
I = Indigenous (relative to the Hawaiian Islands and elsewhere)
P = Polynesian (introduced by Polynesians)
X = Introduced/alien (plants brought to the Hawaiian Islands by humans, intentionally or accidentally, after western contact (i.e. Cook's arrival in 1778).

Environmental Impacts and Mitigation Measures - Flora

Construction (Short Term/Temporary)

During construction, to avoid unintentional introduction of invasive species to Oahu, all construction equipment and vehicles arriving from outside of the island of Oahu would be washed and inspected prior to entering the project area. Inspection and cleaning activities should be conducted at a designated location.

Final construction of the Pier 43, which will include the on-/off-loading facility and fuel line within it, will be finalized as a finished pier face. Vegetation will not be present. Once installation of the fuel line along Sand Island Access Road is complete, the areas of ground disturbance will be revegetated using hydroseed or similar with a certified weed-free seed, to avoid colonization of invasive species, noxious weeds, or diseased plants.

Operation (Long Term)

As the project site supports mostly non-native species, as well as several common native plant species, the Proposed Action would have no adverse impacts to flora. Also, the Proposed Action does not overlap critical habitat for any listed flora species.

Environmental Setting - Fauna

The bird species observed during the survey were species typically found in disturbed lowland areas in the Hawaiian Islands. In all, only three bird species were documented, including the cattle egret (*Bulbulcus ibis*), the spotted dove (*Streptopelia chinensis*), and the zebra dove (*Geopelia striata*). These three species were introduced to the Hawaiian Islands, and the cattle egret is federally protected by the Migratory Bird Treaty Act.

The endangered Hawaiian Hoary Bat is the only native terrestrial mammal species that is still present within the Hawaiian Island (USFWS, 1998). As the Hawaiian Hoary Bat typically roosts in dense canopy foliage, or in the subcanopy when canopy is sparse with open access for launching into flight (U.S.D.A, 2009), the project site lacks the presence of suitable bat roosting habitat. Although no mammals were observed during the survey, the small Indian mongoose (*Herpestes javanicus*), feral cat (*Felis catus*), house mouse (*Mus musculus*), and rats (*Rattus* spp.) may likely be present in the project area.

Environmental Impacts and Mitigation Measures - Fauna

Construction (Short Term/Temporary)

Outdoor lighting, such as those used to illuminate night-time construction work, can adversely impact listed and migratory seabird species, which may be found in the vicinity of the Proposed Action. Specifically, two endangered migratory seabird species, the Hawaiian petrel and the wedge-tailed shearwater, could be in the area. If night-time work is necessary for construction of the Proposed Action, potential impacts to seabirds can be minimized by shielding outdoor lights to the maximum extent possible, and providing construction staff with information about seabird fallout.

Operation (Long Term)

As the project site supports non-native and introduced species, and impacts no critical habitat for listed species, the Proposed Action would have no adverse impacts on fauna.

3.8 Marine Resources

Environmental Setting

A marine resource survey was conducted as part of the 2014 KCT FEIS by Belt Collins, LLC. According to the KCT FEIS, the area of the project site was created by dredged land, piers, and pilings. Water quality in Honolulu Harbor is categorized as "impaired," meaning either that the water quality does not meet established water quality standards or the designated use outlined in HAR Chapter 11.54 is not being achieved (Belt Collins Hawaii, LLC, 2014).

Several species of marine fishes, invertebrates, and coral exist in the marine area surrounding the project site. Eleven species of coral were identified in a survey in the area surrounding the project site. Skeletal remains of large colonies were also observed during the survey and may exemplify the stress that the industrial use of Honolulu Harbor puts on coral colonies (Belt Collins Hawaii, LLC, 2014).

The study area had a high density of sponges, tunicates, bivalves, and bryozoans. Forty-four species of non-coral macro-invertebrates were identified, with sponges having the highest diversity and abundance. Frondose algae were scarce (Belt Collins Hawaii, LLC, 2014).

The survey identified 33 fish species in the area and a high number of individuals. The ring-tailed surgeonfish was the most common (*Acanthurus blochii*). Other frequently observed fish species included the convict surgeon fish (*Acanthurus triostegus*), yellow tang (*Zebrasoma flavescens*), Hawaiian white-spotted toby (*Canthigaster jactator*), damselfish (*Dasyllus ablisella*), threadfin butterfly fish (*Chaetodan auriga*), and raccoon butterfly fish (*Chaetodon lunula*) (Belt Collins Hawaii, LLC, 2014).

State of Hawaii "Regulated" marine fish and invertebrates including aholehole (*Kuhlia xenura*), parrotfish (*Scarus psittacus*), octopus (*Octopus cyanea*), and sea urchins (*Echinothrix diadema*) are present in the area. Threatened and endangered species established as part of the Endangered Species Act 1973, including the green sea turtle (*Chelonia mydas*), hawksbill turtle (*Eretmochelys imbricate*), humpback whale (*Megaptera novaengliae*), and Hawaiian monk seal (*Monachus schauinslandi*) may be in vicinity of the project area, although none were observed during the marine survey of the area (Belt Collins Hawaii, LLC, 2014).

Thirteen introduced species of macro-invertebrates were identified, with four of these species classified under Management Class 4 in the State Aquatic Invasive Species Management Plan (Belt Collins Hawaii, LLC, 2014).

Environmental Impacts and Mitigation Measures

Construction (Short Term/Temporary)

BMPs will be implemented during the construction of the proposed pipeline and valve pit for erosion and sediment control. The construction of the project will not include any in-water construction activities, therefore in-water construction activities, such as dredging, do not have the

potential to adversely affect marine resources. On-land construction activities have the potential to impact marine resources and BMPs will be implemented to reduce and/or eliminate these impacts. Storm water runoff will be collected and contained onsite to prevent and/or reduce the discharge of pollutants to Honolulu Harbor. There is a low potential for on-land construction noise to adversely affect the marine resources, but the project site is already industrial in nature so it is unlikely that a noticeable difference in the sound levels would occur. Spills during construction also have the potential to adversely affect marine resources in the Harbor. Implemented spill prevention control procedures would minimize the likelihood of spills and releases and a site-specific Spill Control Plan would be implemented in the event of a spill at the construction site.

Operation (Long Term)

Operations at the proposed on-/off-loading project site have little potential to adversely impact marine resources because the site already is industrial in-use. The site is currently a pier, therefore barges or ships already frequent the area. As a result, there would be little change in the use of the area so noise impacts to marine life and the risk of spreading invasive species would likely remain unchanged.

The operation proposed pipeline has little potential to impact marine resources because the pipeline will be buried beneath the ground surface and will not be in contact with ocean waters. The project has the potential to impact Honolulu Harbor waters if a spill or release of jet fuel occurs. All operations will be conducted under strict protocols and will follow all applicable rules and regulations. Inadvertent jet fuel release is mitigated by the implementation of the site specific SPCC Plan in place at the HFFC Fuel Facility that will be revised to include this planned on-/off-loading facility and fuel line.

3.9 Cultural Resources

Environmental Setting

In order to evaluate the cultural setting and determine potential cultural impacts as a result of the Proposed Action, SWCA was retained for a cultural resource inventory report (Appendix D). This section discusses the cultural setting of the Proposed Action site and vicinity, using the SWCA's report as reference.

The pre-contact Hawaiian socio-economic system was centered around the ahupuaa land management system. Each ahupuaa, or land division, was ideally a pie-shaped slice of land from mauka (mountain) to makai (ocean), and integrated agricultural productivity from all of the varying habitats within, connected by foot paths both mauka/makai and along the shoreline. Each ahupuaa had a designated konohiki, or caretaker, with other important resource management roles defined, including fishermen (lawaii), farmers (mahiai), bird catchers (kia manu), and priests (kahuna). The project site is located within the ahupuaa of Kapalama.

This portion of Oahu figures prominently in Hawaiian lore, and Kalihi, the Mokauea Fishery, and Kapalama Stream were the first earthly residence of the Hawaiian mythic creators Wakea and his wife Papa, in her human form of Haumea, and it is this area where they marry, produce offspring, and the Hawaiian People. In pre-contact times, people in the Kapalama area depended on freshwater irrigated resources and marine resources. Archaeological evidence demonstrates permanent pre-contact (circa A.D. 300) human habitation in the Kapalama area. Environments such as existed in the project area were likely used for shoreline line fishing, spear fishing for reef

fish and octopi, and gathering of shoreline, shallow-water, and reef resources including shellfish and cultivating limu (seaweed), as well as aqua-cultural fishponds, including the notable Mokauea Fishpond. The Proposed Action is located within portions of the traditional Mokauea and Kapalama Fisheries.

There is archaeological evidence that Hawaiian voyagers settled in Kapalama more than 1,000 years ago. By the 14th century, extensive agricultural systems were in use (Stark, R., et al. , 2015). Occupations within this portion of the Kapalama ahupuaa included raising fish in fishponds, reef fishing, and turtle catching. The 14th century showed a progression as populations grew along with agricultural productivity, and powerful chiefdoms developed, including the legendary Oahu chief, Olomana. At the time of European contact in A.D. 1178, the project area was populated with farmers and fisher-foragers, with fishponds and loi (irrigated and cultivated fields) making use of fresh water resources by way of sophisticated hydraulic engineering in the form of auwai, or irrigation ditches. This successful and refined ahupuaa agricultural system was disrupted by the introduction of cattle and sheep after the time of European contact in A.D. 1778.

The Mokauea Fishery, especially Kahakaaulana Island, located in Keehi Lagoon, was known for the teaching of kilo hoku (observational astronomy). Techniques taught included the making and use of navigational gourds, also known as a calabash compass of ipuhookelewaa.

From 1845 to 1848 the Kingdom of Hawaii implemented a review of land claims throughout the Islands, formally introducing the western concept of land tenure for the first time. Known as the Mahele, commoners, or maka ainana, were allowed to register land claims for subsistence farming. These claims, known as kuleana claims, were generally of about one acre in size, and only about 1% of commoners managed to register claims. Royalty, or alii, were awarded larger claims, and the reef area and islets surrounding Mokauea (the project site vicinity) were awarded to Pahene.

The first half of the 19th century marked dramatic and catastrophic changes in Hawaiian society, as introduced diseases decimated Native Hawaiian populations. As immigration from diverse sources severely modified the demographic makeup of Hawaii, Kapalama transitioned from a diversified, ahupuaa based agricultural system to rice production. This change is evidenced archaeologically, as fence lines were constructed, the stones composing heiau (temples) were reused as livestock corrals, and auwai were repurposed for rice production or abandoned.

World War II marked another sharp cultural transition for the project area, as Keehi Lagoon was dredged for the first time to create landing zones for seaplanes. This displaced many of the long-term residents, as islets that could formerly be walked to at low tide became disconnected (Mana, 2017). At this time the area became predominantly industrial with development of the Kapalama Military Reservation.

Environmental Impacts and Mitigation Measures

As the project site is industrial in character and does not appear to support flora that would be desirable for gathering, nor does the project site appear to contain sites of cultural significance, it is not anticipated that the project site supports traditional cultural uses and practices.

Sand Island Recreation Area and Keehi Lagoon are actively used for fishing. Outrigger canoe paddling, the official State sport, has found a home at the Keehi Lagoon Beach Park, used by canoe

clubs as a launch site for practices, races, and regattas. Clubs also store canoes and launch them near the boat ramp on the Sand Island side of the bridge.

A study in 2008 compiled testimony of extensive fishing from the Keehi side of Sand Island but no fishing in the harbor (DOT-H November 2008).

As an active port, Honolulu Harbor is subject to federal security regulations enforced by the U.S. Coast Guard's Captain of the Port. No swimming or diving in the harbor is permitted. Areas actively used for cargo operations are fenced, and admission is controlled.

In summary, fishing and related cultural practices have been important in the area surrounding the project site for many years. Fishing continues to be important to Honolulu residents to this day, but Honolulu Harbor waters are no longer used for this activity.

Hence, the Proposed Action would not have adverse impacts to cultural resources during construction or operational phases.

3.10 Historic and Archaeological Resources

Environmental Setting

As discussed above, the project site is located in the ahupuaa of Kapalama and was constructed from material dredged from the Keehi Lagoon during World War II for construction of the Kapalama Military Reservation.

Professional archaeologists conducted an assessment of the project site (Appendix D) to determine the potential of encountering undocumented cultural material during the Proposed Action's construction. This assessment reviewed previously conducted archaeological investigations and previously recorded archeological and historical sites. One previously recorded historic property, Ananoho Fishpond (State Inventory of Historic Properties [SIHP] #50-80-14-00073) is located in the Proposed Action site vicinity; however, this historic property has been in-filled and at least partially destroyed. Also, three previously recorded historic properties, Auiki Fishpond (SIHP #50-80-14-00073), Pahouiki, and Pahounui Fishponds (SIHP #50-80-14-0007), and a human burial site (SIHP #50-80-14-05581) are also located in the vicinity of the project site. The Cultural Resources Inventory recommended an evaluation of no adverse effect of the Proposed Action on all four of the above historic properties. However, due to the proximity of the Proposed Action site, the Cultural Resources Inventory concluded that a slight possibility to encounter in-situ, subsurface cultural features associated with known traditional Hawaiian uses exists.

The purpose of the cultural resources inventory is to be presented as consultation with the Hawaii State Historic Preservation Division (SHPD). The report has been prepared to further fulfill the requirements of Hawaii Administrative Rule 13-13-276 and Hawaii State Register of Historic Places eligibility recommendations for any cultural resources or historic properties, and it is intended for review and acceptance by the SHPD. Submittal of the report serves as the request to SHPD for concurrence. If there is no response from SHPD within a 30-day window after submission of the report, then an implied concurrence has been expressed, as articulated by Hawaiian Archaeological Rules.

Environmental Impacts and Mitigation Measures

Construction (Short Term/Temporary)

Due to the possibility to encounter in-situ, subsurface cultural features, archaeological monitoring, by a single archaeological monitor, for all ground-disturbing activities is recommended during construction. The archaeological monitor would document any encountered artifacts, and would require that excavation stop and DLNR-SHPD contacted pursuant to HAR 13 Chapter 13-280-3.

Operation (Long Term)

No operational impacts to cultural resources are expected, as the proposed fuel pipe and on-/off-loading facility is mostly underground and stationary.

3.11 Visual Resources

Environmental Setting

The Proposed Action is located in an industrial harbor area with views from project area roadways dominated by fuel tanks, industrial buildings, vehicles, containers, cranes, and other harbor facilities. The project site is not visible from the Sand Island Recreation Area, or from Keehi Lagoon, sometimes used for recreational activities.

Environmental Impacts and Mitigation Measures

Construction (Short Term/Temporary)

The only visual impacts of the Proposed Action would be from equipment during construction. However, as construction equipment is consistent with the overall industrial appearance of the project area, this would be a negligible impact.

Operation (Long Term)

Most of the Proposed Action would be buried, therefore there would be no long-term visual impacts. The part of the fuel line within the HFFC Sand Island Facility will be not more than 3 feet above ground, and will therefore have no impacts on the viewshed. The on-/off-loading facility would be flush with the finished grade of the pier and would therefore not impact visual resources.

3.12 Socio-Economic Characteristics

Environmental Setting

The vicinity of the project site is known for its industrial facilities, including Honolulu Harbor, Keehi Basin Small Boat Harbor, the Sand Island Wastewater Treatment Plant, U.S. Coast Guard Base Honolulu, and the various industrial and commercial areas of the makai areas of Kapalama, Iwilei, and Kalihi. Various users of Honolulu Harbor are also in the area, including Matson Navigation, Young Brothers, and Pasha Lines, among others. As the area is predominantly industrial, there are few residents of the area, with the nearest residential area located north of Dillingham Boulevard about 0.75 mile to the northeast of the project site. There are no permanent residents located closer than Auiki Street about 0.3-mile north of the project site, although there

may be boat residents at Keehi Small Boat Harbor. Thus while Census Tract 59 includes the project site, the demographic information for this area is not representative of the project area, and most of these residences are probably located between Nimitz Highway and Auiki Street.

The project site is located within the Mokauea Street Census Tract (CT 59). Census data for this, and adjacent census tracts, are presented in Table 5, which shows demographic and other information from the 2010 U.S. Census (U.S. Census Bureau, 2017).

Environmental Impacts and Mitigation Measures

Construction (Short Term/Temporary)

As this project is a minor undertaking, a small number of people would be employed for the construction of the proposed pipeline and on-/off-loading facility. Beyond this, there would be no socio-economic impacts associated with the construction for this project.

Operation (Long Term)

The Proposed Action is minor, and does not appear to be of the type that would produce socio-economic impacts such as relocations or the influx of workers from the mainland or outside of the United States. Additionally, because the project site would not be near any residences, none would be affected. Therefore, there would be no adverse socio-economic impacts as a result of the Proposed Action. Related to the additional service of inter-island barging, there could be a small increase in the number of jobs associated with the HFFC system and services.

However, there would be a potentially large positive socio-economic impact relative to the No Action Alternative. In the event of a natural or manmade disaster (i.e. terrorism), infrastructural redundancy may prevent the disruption of the human economy, communities, and social structures that protect human life. The proposed fuel line would be buried within the planned Pier 43. The existing fuel line from Pier 51 is exposed and therefore more vulnerable to threats such as these than the proposed fuel line. The Proposed Action may prevent the disruption of airline flights to and from State airports, and would therefore enhance the State's resilience to economic disruption, natural and manmade disasters, etc. The No Action Alternative, by comparison, would leave this vulnerability in place.

Table 5. Demographic Characteristics of the General Project area

	Palama CT55	Kapalama CT 56	Iwilei-Anuenue/ Sand Island CT 57	Waiakamilo Road CT 58	Mokauea Street CT 59	Umi Street CT 60	Kalihi Waena CT 61	City and County of Honolulu
Population	2,139	6,083	2,059	3,573	3,353	5,627	4,061	953,207
Income								
Median Household Income[1]	$50,694	$46,008	$35,294	$32,051	$47,284	$71,725	$90,517	$72,292
Persons Below Poverty Level	5.80%	12.40%	39.20%	28.80%	50.6%	10.40%	2.50%	9.60%
Race								
White	2.50%	2.70%	14.10%	2.10%	11.5%	1.40%	1.40%	22.40%
Black	0.30%	0.40%	2.60%	0.40%	2.6%	0.20%	0.30%	2.80%
American Indian	0.00%	0.10%	0.40%	0.20%	0.1%	0.00%	0.00%	0.00%
Asian	73.40%	78.40%	47.00%	65.00%	43.6%	82.10%	81.30%	43.40%
Native Hawaiian	13.00%	7.10%	18.50%	13.20%	31.3%	8.00%	5.80%	9.60%
Two or More Races	10.30%	10.80%	16.70%	18.30%	9.1%	8.10%	10.80%	22.70%
Socio-Economic Characteristics								
Population with High School Degree or Higher	63.30%	73.30%	73.80%	64.40%	82.7%	72.20%	76.10%	90.40%
Population with Bachelor's Degree or Higher	13.70%	17.20%	13.90%	12.90%	14.0%	8.40%	11.50%	31.50%
Foreign Born Population	43.60%	49.20%	29.70%	57.60%	25.8%	57.30%	54.10%	19.70%
Non-English Speaking Population	56.10%	63.00%	39.20%	73.10%	31.1%	68.80%	62.50%	28.10%
Owner-Occupied Housing Units[2]	32.00%	38.20%	17.60%	39.90%	90.8%	31.70%	45.80%	56.40%
Median Value of Owner-Occupied Units	$395,200	$448,800	$412,700	$259,700	$764,700	$387,600	$613,400	$557,810
Average Household Size[3]	3.54	3.61	1.99	3.37	3.10	4.22	4.93	2.98

Notes:
1: 2008-2012
2: Home ownership rate, 2008-2012
3: Persons per household

Sources: U.S. Census Bureau, American Fact Finder, Profile of General Population and Housing Characteristics: 2010. U.S. Census Bureau, American Community Survey; 2015.

3.13 Land Use

3.13.1 Existing Land Uses

3.13.1.1 Honolulu Harbor

Environmental Setting

Honolulu Harbor is and has been the principal seaport in the State of Hawaii. Existing facilities in and around the harbor support services and uses associated with waterborne commerce, including passenger cruise and various cargo for dry and liquid bulk, automobile, fuel, etc.

Environmental Impacts and Mitigation Measures

Construction (Short Term/Temporary)

The Proposed Action is located adjacent to the Harbor and is being closely coordinated with the KCT Project. This close coordination will continue through design and into construction. Therefore, construction of the proposed facility and fuel line will not impact Honolulu Harbor.

Operation (Long Term)

By providing an additional fuel on-/off-loading capability, the Proposed Action would increase the harbor's overall throughput by reducing the fuel ships queue for Pier 51 fuel on-/off-loading site due to other priority container ships docked at Pier 51. Therefore, the Proposed Action would increase Honolulu Harbor's overall versatility and flexibility, enhancing the Harbor's ability to fulfill its purpose to service nearly all imports and exports and, with equal importance, to efficiently supply jet fuel to all airports within the State of Hawaii.

There is potential that the development of the proposed fuel pipeline and valve pit will increase vessel traffic within Honolulu Harbor. Although the development of Pier 43 has the potential to increase vessel traffic within Honolulu Harbor, this increase in harbor usage is necessary in the development and efficiency of Harbor usage. The use of the Pier 43 for on-/off-loading will fall within the industrial use of the area. In addition, Honolulu Harbor improvements and developments falls within the 2010 Harbor Master Plan.

3.13.2 Planned Land Uses

3.13.2.1 Kapalama Container Terminal Project

Environmental Setting

The KCT Project encompasses the construction and operation of a new container terminal and reconstruction of piers at the Kapalama portion of Honolulu Harbor, as well as improvements at Piers 24 through 28. This project is described in the *Kapalama Container Terminal and Tenant Relocations Environmental Impact Statement* (Belt Collins Hawaii, LLC, 2014). The KCT Project will use 94 acres of the former Kapalama Military Reservation, including one parcel that would contain the Proposed Action, the 16-acre TMK (1) 2-025:017, that would contain the planned Pier 43.

Environmental Impacts and Mitigation Measures

Construction (Short Term/Temporary)

The Proposed Action would be dependent on several portions of the KCT Project. First, the Proposed Action would utilize the newly constructed Pier 43 for an approximately 500-foot section of the fuel line and a valve pit at its makai (i.e. ocean-side) terminus, and hence construction of the fuel line in this area would require substantial completion of KCT Project activities involving construction of the structural elements of the new wharf, including dredging and construction of sheet piles, before emplacement of the fuel line. Secondly, the access gate to the planned Kapalama Container Yard will be located on Sand Island Access Road along the proposed fuel line corridor and is proposed to be across from the existing road located on the south side of the HFFC Fuel Facility. The proposed fuel line construction must be performed in coordination with the planned Kapalama Container Yard access gate. Finally, an HDOT-Highways weigh station will be constructed along Sand Island Access Road across from the HFFC Fuel Facility (near the access gate to the completed Kapalama Container Yard), according to the KCT Project EIS; the proposed fuel line may require coordination with this weigh station, if encountered, which is unknown at this time as weigh station design is in progress, and the final pipe routing has not been fully established.

Design of the Proposed Action is being thoroughly and continuously coordinated with the other three projects. Multiple project coordination meetings between DOT-HAR, the KCT Project design team, and the Proposed Action design team have occurred and will continue throughout the design process. A USACE Pre-Application Meeting was conducted on 21 July 2017 and is discussed in Section 1.4.3. Additionally, coordination of overall project schedules and contracting mechanisms are ongoing at this writing, and it has been agreed that the proposed jet fuel line located within the KCT Project area may be constructed by the same general contractor that is awarded the KCT construction contract, or a sub-contractor to that general contractor, or under a separate contract. Therefore, there is no impact anticipated to this planned land use.

It is important to note that the Proposed Action would not involve in-water work, dredging, or discharge to surface waters, but would make use of the KCT Project's construction of Pier 43. As part of the design process and coordination with the KCT Project design team, coordination with USACE has occurred and will continue to ensure that emplacement of the jet fuel line along Pier 43 will be incorporated into the permit required for pier construction. On 21 July 2017 a Pre-Application Meeting was conducted with the project team, including USACE. The meeting resulted in USACE issuing a letter, dated 24 July 2017, indicating that based on the information provided about the Proposed Action, a Department of the Army permit would not be required.

Operation (Long Term)

The increased and diversified operations anticipated as a result of the KCT Project will require close coordination to ensure that all ocean-vessels are serviced, as needed at the new and improved piers. Per HAR 19-42-89 preference in the use of piers in Honolulu Harbor shall be given to vessels loading or unloading shipping containers. In anticipation of increased demand for jet fuel due to closing refineries, through a 2013 Executive Order, the Hawaii Refinery Task Force (HRTF)

was established to assess the impacts of changes in Hawaii's refinery capacity. The HRTF recommended that a prioritization process is developed and implemented to support the increase in jet fuel delivery and additional uses planned for the KCT Project area (ICF International, 2014). Until the prioritization process is developed, the Proposed Action will have a positive impact to operations of cargo and fuel ships in the harbor by providing a second on-/off-loading facility. Harbor regulations associated with ship movements, the co-mingling of cargo and fuel ships, and safety and clear zones required when ships are operating at berth would be followed at the proposed on-/off-loading facility, as they currently are at Pier 51.

3.14 Public Services and Facilities

3.14.1 Traffic

Environmental Setting

The proposed fuel line will cross Sand Island Access Road, a four-lane State highway (State Route 61) with a left-turn lane near Road No. 2 and a middle turn lane in front of the HFFC Fuel Facility. The fuel line route along Sand Island Access Road will cross a driveway accessing the planned Kapalama Container Yard, and will pass in front of the planned weigh station. Sand Island Access Road is a north-south arterial roadway that has its northern terminus at Nimitz Highway (State Route 91). Sand Island Access Road is the only access to Sand Island. The speed limit in the vicinity of the project site is 35 mph.

The Traffic Impact Analysis Report (TIAR) performed for the KCT Project EIS presents traffic counts at the intersection of Sand Island Access Road/Road No. 2 located at the north end of the HFFC Fuel Facility and at the Sand Island Access Road/UH Snug Harbor Access Road intersection. According to the TIAR the level-of-service (LOS) at the Sand Island Access Road /Road No. 2 intersection is C at both the a.m. and p.m. hours. LOS at the Sand Island Access Road /Snug Harbor Access Road are E or better at the a.m. peak hour and C or better at the p.m. peak hour. LOS E is defined as between 35 and 50 seconds average delay time at unsignalized intersections and between 55 and 80 seconds average delay time at signalized intersections and is considered as the minimum acceptable LOS. The KCT Project TIAR also distinguished between car and truck traffic and found the percentage of truck traffic to be 65% and 61% in the a.m. peak hour and p.m. peak hour, respectively (Belt Collins Hawaii LLC, 2013).

Environmental Impacts and Mitigation Measures

Construction (Short Term/Temporary)

Short term adverse impacts to traffic would be limited to the construction phase, and would be required as the fuel line will cross Sand Island Access Road. Lane closure will require a special permit from HDOT-Highways, and a traffic management plan will be prepared. If feasible, a traveling lane for both directions of traffic would be maintained by using the middle turn lane as a traveling lane, when any of the main four lanes are occupied by construction activities. With both north and south traveling lanes remaining open during construction and Police Department officers present to direct traffic, traffic flow may be maintained, and impacts to the LOS due to proposed fuel line construction minimal.

Prior to construction, a traffic management plan (TMP) will be prepared and submitted to the City for review and approval. During construction, the approved TMP will be implemented. Construction-related traffic would be short-term and is not expected to create a significant adverse impact. The number of construction vehicles traveling to and from the site would generate less vehicular traffic than the surrounding uses. Also, in comparison to the average daily volume of traffic along Sand Island Access Road, the number of construction vehicles is not expected to exceed daily traffic by more than five percent.

Operation (Long Term)

With most of the project subgrade and the small portion of the project that is above grade being within an existing fuel facility, the project would impart no change to the existing traffic patterns. Off-loading at the new planned facility at Pier 43 will be conducted by the same personnel at the same frequencies that are already in place at Pier 51; therefore, there will not be a net gain in traffic flow. If on-loading barges for inter-island fuel delivery becomes a service that HFFC provides, additional personnel may be required. There may be a small increase in traffic due to the increased personnel. This is not quantified at this time, but it is anticipated to be negligible compared to the overall traffic flow in and out of Sand Island.

3.14.2 Police, Fire, and Medical Services

Environmental Setting

The project area is served by Honolulu Fire Department, which would serve as the Authority Having Jurisdiction (AHJ) for the Proposed Action, for emergency medical as well as fire services, and by the Honolulu Police Department and Harbor Police.

Environmental Impacts and Mitigation Measures

Construction (Short Term/Temporary)

Due to lane closure requirements along Sand Island Access Road where the fuel line will cross Sand Island Access Road, public services including police, fire, and medical services will be notified of project timing. Police officers onsite will have constant radio communication with the Honolulu Police Department, and the contractor will be required to accommodate response vehicles, should emergency response teams require access. Therefore, no impacts are anticipated.

Operation (Long Term)

Adverse impacts to police, fire, and medical services are not anticipated as a result of the project. The HFFC Fuel Facility site contains a Fire Foam Building, which houses a fire suppression system.

Portable fire extinguishers are required to be spaced in accordance with NFPA 10, within 75 feet of travel along the pier. Fuel dispensing locations will be provided with additional extinguishers. Hydrants and water supply will be provided for fire protection. The number and location of hydrants and hose connections shall be determined by the AHJ but shall not be spaced farther apart than 300 feet. Access to boats shall be such that the hose-lay distance from the fire apparatus to any portion of the boat will not exceed 150 feet.

The National Fire Protection Association National Fire Code Section 30, Chapter 29 specifies proper equipment, design, and protocols for transport and storage of bulk liquids on wharves, including, for example, the distance between bridges and fuel transfer facilities. NFPA 30 defines the AHJ as the following:

> The phrase "authority having jurisdiction," or its acronym AHJ, is used in NFPA documents in a broad manner, since jurisdictions and approval agencies vary, as do their responsibilities. Where public safety is primary, the authority having jurisdiction may be a federal, state, local, or other regional department or individual such as a fire chief; fire marshal; chief of a fire prevention bureau, labor department, or health department; building official; electrical inspector; or others having statutory authority. For insurance purposes, an insurance inspection department, rating bureau, or other insurance company representative may be the authority having jurisdiction. In many circumstances, the property owner or his or her designated agent assumes the role of the authority having jurisdiction; at government installations, the commanding officer or departmental official may be the authority having jurisdiction.

For the purpose of the HFFC Fuel Facility SPCC Plan, the Honolulu Fire Department serves as the AHJ for releases. As the SPCC includes fuel transfer activities, HFD also serves as the AHJ for pier activities.

Furthermore, during preliminary code review, the following section was noted as a critical item to receive approval from the AHJ. From Section 29.3.3: "Wharves at which liquid cargoes are to be transferred in bulk to or from tank vessels shall be at least 100 ft (30 m) from any bridge over a navigable waterway or from entrance to any superstructure or a vehicular or railroad tunnel under a waterway." Additionally, the NFPA Handbook notes on this section state the following, "This provision recognizes the possibility that a spill or other accident while loading or unloading liquid cargoes would represent a potentially severe threat to a bridge or the entrance to or superstructure of a tunnel. The exposure to fire of the structure of a tunnel beneath the waterway, although addressed, would be greatly reduced." Although the wharf is within 100 ft of the Sand Island Access Road bridge, the transfer point of loading/unloading liquid cargoes will be a minimum of 500 ft away from the Sand Island Access Road Bridge, which significantly reduces potential threat to the bridge.

3.15 Public Health and Safety

3.15.1 Hazardous Materials

3.15.1.1 Existing Environmental Conditions of Concern

<u>Environmental Setting</u>

In an effort to understand the existing soil and groundwater conditions at the project site, a Phase I Environmental Site Assessment (Phase I) was conducted (Appendix B). The purpose of a Phase I is to identify *Recognized Environmental Conditions*, which indicate the potential for a release of hazardous materials, or material threat of a release.

Two *Recognized Environmental Conditions* were identified in connection with the project site. Based on the historical use of landfill materials as fill, former land use for industrial activities, and reported material releases, the proposed fuel pipeline corridor from HFFC Fuel Facility to Pier 43 may encounter soil and/or groundwater contaminated with petroleum, heavy metals, or other industrial hazardous materials.

Environmental Data Resources identified 19 State Hazardous Waste Sites, 18 Leaking UST sites, and three sites listed on the State Institutional Control/Engineering Control registries within ½ mile and upgradient from the project site. Due to the short distance and hydrologic proximity of these sites to the parcels 017, 020, and 021, the present and former impact at these sites likely contribute to the area-wide contamination.

Environmental Impacts and Mitigation Measures

Construction (Short Term/Temporary)

The existing conditions on the project site identified by the Phase I ESA suggests that contamination of soil and groundwater is likely. This places particular constraints on the construction phase. As excavated soil may be contaminated with petroleum hydrocarbons, heavy metal, or other industrial hazardous substances, the potential for worker and environmental exposure exists. A Work Plan and Health and Safety Plan (HASP) will be prepared and implemented that articulates appropriate hazard controls and personnel and environmental protections to minimize the potential for exposure. The HASP should also include air monitoring to ensure worker respiratory protection. Excavated soil shall be evaluated for contaminants, and if the levels exceed regulatory levels, appropriate hazard control and soil management must take place. Excavated soil stockpiled temporarily must be stored in bermed, covered stockpiles to prevent the release of contaminated soil through air or storm water runoff. With the hazard control requirements and appropriate construction management, there will be little or no impact to the public health and safety.

It is expected that the Proposed Action would encounter groundwater during construction, and therefore an NPDES Appendix G permit will be obtained.

Operation (Long Term)

The proposed fuel deliver system will be largely underground, and no impact to the public health and safety is expected, unless the system fails. In an unlikely event of a fuel release or fire, emergency response plan will be activated which will limit the public access to the project area.

3.15.1.2 Spill Prevention

Environmental Setting

In Hawaii, there are several OSRO partners locally to provide spill response services. Three response vessels are located in Honolulu Harbor. The U.S. Coast Guard Captain of the Port requires deployment of a spill containment boom around vessels during transfer of heavy oil, in addition to other safety and preventative requirements. All fuel transfer operations observe protocols contained in the International Safety Guide for Oil Tankers and Terminals (International Chamber of Shipping, 2015), among the other practices described herein.

As noted in Section 3.15.1, HFFC stores petroleum hydrocarbons in quantities greater than 1,320 gallons, near navigable Waters of the U.S., and therefore has an SPCC Plan in place to mitigate risks of a release and to effectively control releases, as per 40 CFR 112. The SPCC Plan describes both structural controls in place as well as countermeasure/response procedures.

The HFFC Fuel Facility has a secondary containment system, including steel reinforced concrete walls, slurry-covered earthen berms, and a below-ground slurry wall along the perimeter of the containment area. All pumps and associated filter vessels are located within the secondary containment area. The secondary containment was engineered with a volume to contain the contents of the largest AST at the facility. An impervious secondary containment slurry wall was installed 6- to 8-feet below ground surface around the perimeter of the facility to help prevent migration off-property in an unlikely event of a spill. The facility maintains portable spill kits and a supply of absorbent materials for small spills.

Upon completion of the fuel unloading operation, the discharge valve at the ocean-going vessel's manifold is shut off, and the remaining petroleum product inside the 8-inch hoses is drained through a drain port of the riser pit using a portable vacuum truck. The extracted fuel is then transported and unloaded at the HFFC Fuel Facility for recycling. Finally, the hoses are disconnected from the tanker ship and the riser pit, and laid out in a designated area for storage.

The ASTs at the HFFC Fuel Facility are monitored at all times. The HFFC Fuel Facility is staffed 24-hours per day, 7-days per week with trained control room operators who are charged with monitoring and controlling all operational activities including fuel transfers, alarms, Supervisory Control and Data Acquisition (SCADA) Systems, recognizing and responding to abnormal operating conditions, and controlling all other activities. All ASTs and associated piping are visually inspected daily. All associated seams, gaskets, pumps, valves, rivets, and bolts are visually inspected on a monthly basis. Routine, periodic, non-destructive integrity testing is performed on all ASTs as per American Petroleum Institute Standard 653. Leak detection on buried pipes is performed quarterly.

Standard Honolulu Harbor operations ensure that ships maneuver safely and the risk of collisions is minimized. Honolulu Harbor requires a minimum of 100 ft between ships at all times. The on-/off-loading operations vessels delivering to HFFC observe other safety protocols. For instance, fuel transfer operations are never conducted while cargo operations are ongoing at an adjacent location, nor are fuel vessels docked when cargo operations are ongoing. Additionally, the transfer of fuel is always initiated only by the captain of the ship. During offload, flow of fuel is controlled by pumps located on the ship. To stop flow of fuel in an emergency situation, operators of the ship shut down pumps and close valves located on the ship. Communications between the ship and pier are achieved using wireless handheld radios. These safety protocols will be observed at the proposed on-/off-loading fuel facility.

The transfer of fuel initiated by the captain of the ship will be confirmed at the HFFC Fuel Facility. The Pier 43 fueling system control rack will communicate wirelessly utilizing a Motorola MOSCAD Remote Terminal Unit in order to provide real time status information back to the HFFC Fuel Facility Control System. Operators at Pier 43 will have the ability to stop the transfer of fuel in an emergency situation by activating an Emergency Fuel Shutoff (EFSO) pushbutton.

Activation of the EFSO pushbutton shall send a signal to the HFFC Fuel Facility to stop the transfer of fuel and a signal to the electrically actuated motor operated valve, located in the Pier 43 valve pit, to close.

Under 33 CFR Part 154, Coast Guard, Department of Homeland Security, the USCG regulates vessel operations, waterfront facilities, pollution, ports and waterways safety, and more. For new development, the USCG typically conducts a post construction inspection to ensure regulations were met and operations follow requirements. As part of the design of the proposed jet fuel pipeline and on-/off-loading facility, the design team is proactively coordinating with USCG and has requested their review and input on progressive design submittals (Code of Federal Regulations, 2010a).

Environmental Impacts and Mitigation Measures

Construction (Short Term/Temporary)

The potential for spill prevention during construction associated with the existing HFFC Fuel Facility would be where the new pipeline ties into the existing facility. The hydrotest water will be disposed of under the conditions of the NPDES Appendix F permit. The requirements of the SPCC Plan will be implemented to both lessen the potential for spill and to mitigate a spill, should one occur. During construction, all relevant BMPs will be implemented to ensure spills or leaks from machine operation are cleaned up, should they occur. Fueling during construction will be planned appropriately and monitored, and any spill or leak will be properly and completely cleaned up, if one does occur. Any epoxy or other coating applied to the pipe will be applied per manufacturers guidelines under the conditions of the SPCC Plan. Due to the controls in place during construction, no adverse impact to public health and safety is anticipated.

Operation (Long Term)

The potential for spills to occur exists if the system fails; however, implementation of the SPCC Plan, control and monitoring systems of the delivery ship and the HFFC's receiving end, continuous (24/7) monitoring of the system, and rapid response system will be in place to mitigate the situation. The proposed fuel line would undergo quarterly leak testing, as well as leak testing before initial use, with above-ground components located within the HFFC Fuel Facility undergoing daily visual inspections. With the demonstrated fail-safe operating procedures in place coupled with the new design to install a robust fuel delivery system, no adverse impact to public health and safety is anticipated.

3.15.2 Navigable Air Space

Environmental Setting

HIA, the largest airport in the State serving military, commercial, and private aircraft, is located approximately 1.25 miles to the west, across the Keehi Basin. The Federal Aviation Administration (FAA) is the agency responsible for management of airspace by means of the National Airspace System (NAS). The NAS deals with both navigable airspace and surface structures relative to defined imaginary surfaces that extend from airport runways. These imaginary surfaces define different rules for the height and type of structures within them. The

project site is within the Horizontal Surface of HIA, defined as a horizontal plane 150 ft above the established airport elevation extending 10,000 ft from the perimeter of the airport runway surfaces.

Under 14 CFR Part 77, the FAA is also responsible for evaluating potential navigable airspace hazards. These regulations define notification requirements, procedures, and standards for the evaluation, allowing identification of potential hazards in advance of construction and consequent prevention of impacts to safe aviation.

Construction or alteration situations that would require FAA notification as in 14 CFR Part 77.9, are summarized as follows:

- Any construction or alteration that would exceed an imaginary 100:1 slope within 20,000 of the nearest runway
- An object that is 200 ft above ground level (AGL)
- Any object that penetrates into a runway imaginary surface

As the HIA has an elevation of 13 ft above sea level, the bottom of the horizontal surface has an elevation of 163 ft above mean sea level. The imaginary 100:1 slope would have an elevation of approximately 82 ft at the project site.

Environmental Impacts and Mitigation Measures

Construction (Short Term/Temporary)

Proposed Action construction would utilize construction equipment that would not reach this height. Although cranes may be used to place pipe, they would not be greater than 82 ft in height. No impact to the navigable air space is anticipated.

Operation (Long Term)

The proposed fuel line project would be largely buried, with the exception of the tie-in and portion of fuel line that enters into the HFFC Fuel Facility, which would not exceed 3 ft above ground and would therefore not affect navigable airspace. If final design indicates a route where infrastructure is above ground, it would be within the existing HFFC Fuel Facility, and would be at lower grade than to exceed 82 ft. No impact to the navigable air space is anticipated.

3.15.3 Explosion/Fire Risk

Environmental Setting

The proposed fuel pipeline corridor from the HFFC Fuel Facility to Pier 43 has historically been industrial in use, and the area has reported material releases. As a result, there may be contaminated soil and/or groundwater that could be identified as posing an explosion or fire risk during construction. Additionally, the fuel pipeline corridor will carry fuel from the proposed on-/off-loading facility at Pier 43 to the HFFC Fuel Facility. The presence of jet fuel, which is flammable, and activities associated with the unloading of the fuel increase the threat of explosion and fire risk during operation.

Environmental Impacts and Mitigation Measures

Construction (Short Term/Temporary)

It is possible that soil contaminated with hazardous substances and/or petroleum products will be encountered during the construction phase of the proposed fuel pipeline corridor and Pier 43 improvements. Jet fuel is a flammable liquid that poses an explosion or fire risk if uncontrolled, and there may be abandoned utility lines within the project area.

Areas that will be disturbed during the construction phase will be properly toned, and all existing underground utilities and pipelines will be mapped and marked prior to any earthwork. This will greatly reduce the potential for existing utilities to be disturbed during construction activities that may contribute to an increased explosion or fire hazard risk.

A Work Plan and Health and Safety Plan will be prepared and implemented during construction activities and will include hazard identifications and anticipation, engineering controls, and protection of worker health and safety, and proper equipment use onsite to monitor personnel and air quality as a precaution to detect any volatiles in the air that may pose an explosion or fire hazard risk.

Contractor will be required to have proper fire control measures onsite as well, such as fire extinguishers, and to provide training to the site personnel. Additionally, the Proposed Action site is serviced by the Honolulu Fire Department, and fire hydrants located along Sand Island Access Road will be utilized to combat, in an unlikely event of fire during the construction phase.

Operation (Long Term)

The use of the proposed fuel pipeline corridor and on-/off-loading facility at Pier 43 poses an explosion and fire safety risk due to the presence of flammable substances. The fuel line will be installed underground at a minimum depth of 3 ft in the appropriate sand bedding material and will be steel-factory coated with fusion-bonded epoxy, and cathodic-protected, reducing the risk fuel releases from the pipeline. It is unlikely that aboveground activities will have the potential to pose an explosion or fire risk due to the demonstrated fail-safe design of the fuel delivery system and operating procedures.

According to Hawaii Administrative Rules, loading and unloading of flammable liquids shall be in strict accordance with applicable federal laws and regulations (Hawaii Administrative Rules, 1982). The valve pit at Pier 43 will be constructed of reinforced concrete, which is required for structural integrity. Electrical equipment will be installed to allow for emergency shut down of fueling operations. In addition, the HFFC Fuel Facility has an electronic leak detection system which the new pipeline would tie in to. Integrity and leak testing of buried piping would be performed, and all existing underground lines are pressure tested.

Annual cathodic protection system inspections would be required to be performed. The site operations related to product leak/release are in accordance with a site-specific SPCC Plan. The plans implemented at the new pipeline and valve pit would allow staff to quickly detect small quantity spills and leaks in the event of a jet fuel release.

Additionally, an access route will be provided as required by HFD, and fire hydrants will be available for firefighting. Site construction and operation will be in accordance with the Hawaii State Fire Code described in HAR Chapter 12-45.3 (Hawaii Administrative Rules, 2014) and with 33 CFR 126.15 for designated waterfront facilities (Code of Federal Regulations, 2001). This includes fire extinguishing equipment and appliances, warning signs, and security measures.

Proper construction and design of the proposed pipeline and on-/off-loading facility, spill and leak detection technology, safe fuel handling procedures, and access to the site in the case of a release or fire hazard minimizes the risk of explosion and fire hazards at the proposed fuel line and valve pit at Pier 43. Although there is an increased potential for these hazards due to the presence and handling of jet fuel, these risks will be mitigated and minimized through design and safe handling and response procedures.

3.16 Recreational Facilities

Environmental Setting

The nearest public recreational facilities are the Keehi State Harbor, located just several hundred feet west of the project site, Sand Island State Recreational Area, located more than one mile to the southeast, and the Keehi Lagoon Beach Park, located about 0.9-mile to the north. However, the project site itself and immediate vicinity are industrial in character, and not used for recreation. Additionally, all waters of Honolulu Harbor and Honolulu Entrance Channel are in a permanently established Security Zone set by the USCG and the Department of Homeland Security, as described in 33 CFR 165.1407. Public entry into Security Zones are prohibited unless authorized by the Coast Guard Captain of the Port or a designated representative. Additionally, penalties of up to $25,000 per violation and imprisonment of up to 10 year may be imposed for entering the Security Zone without authorization.

Environmental Impacts and Mitigation Measures

Construction (Short Term/Temporary)

Recreational activity is not permitted at the project site or in the larger area of Honolulu Harbor. The construction site will be secured, and public recreational activities will not take place on or near the project site. Hence, the construction activity is not expected to impact the public recreational facilities, except for the limited traffic in and out of Sand Island during installation of new fuel line, crossing Sand Island Access Road. An approved Traffic Control Plan will be implemented by a Police Officer onsite to minimize traffic delays.

Operation (Long Term)

Recreational activity is not permitted at the project site or in the larger area of Honolulu Harbor. Additionally, Honolulu Harbor is already industrial in nature and use of the project site is not expected to contribute adverse impacts on the surrounding recreational facilities, unless there is an unlikely emergency situation that completely blocks access to the bridge and Sand Island. Fail-safe fuel delivery system design and operating procedures will prevent occurrence of emergency situations across Sand Island Access Road leading to the bridge.

3.17 Infrastructure and Utilities

Environmental Setting

The project site contains a number of utilities. The Proposed Action will utilize an existing 10-ft wide fuel line easement along Sand Island Access Road. There is currently an 18-inch fuel line and a 10-inch fuel line within this easement. The Proposed Action will intersect the following utilities:

1. Underground storm drain lines, located on both sides of Sand Island Access Road and within the planned Pier 43. The minimum clearances from drain lines are 1-ft minimum vertical and 2-ft minimum horizontal, as noted in the HDOT-Highways State Drainage Criteria.
2. Major water transmission mains are located in the project area, and will be crossed by the Proposed Action, including a 16-inch ductile iron water main and a 12-inch cast iron water main. A water line will also be located within the planned Pier 43. The Board of Water Supply (BWS) requires that the fuel line be installed below the water mains and laterals, and that it be encased in a reinforced concrete jacket at locations which cross under the water mains, with a minimum 5-ft clearance on either side.
3. A sewer line runs along the west side of Sand Island Access Road and would be crossed by the Proposed Action.
4. An electrical/communication line located along Sand Island Access Road and would be crossed by the Proposed Action.
5. A Signal Corps line, a military communication line managed by the Hawaii Electric Company (HECO) is located along Sand Island Access Road, and would be crossed by the Proposed Action.

Environmental Impacts and Mitigation Measures

Construction (Short Term/Temporary)

Construction of the fuel line will require consideration of several other buried utilities that will be constructed also during the new KCT Project construction. This includes coordination with storm drains on Pier 43, coordination with a waterline planned for Pier 43, and coordination with electrical utility routing. All utilities will be located during the design portion of the project and all entities will be contacted and coordinated with prior to project construction to ensure that regulations are met.

Operation (Long Term)

As the Proposed Action would be coordinated with existing utilities in the corridor, its location amidst them would not pose any operational concerns. The Proposed Action would positively impact the state's jet fuel supply system, which is the only utility system that it is related to. A second on-/off-loading facility would allow for more expedient movement of jet fuel from fuel vessels to the landside storage and distribution facility. A redundant fuel line could support robustness of the fuel supply during a natural or manmade disaster.

The design will follow standard industry practices, and the possibility of stray current interference effects will be minimized. In the extremely remote chance that unforeseen stray currents are encountered, mitigation techniques (bonds, resistance bonds, use of galvanic anodes, etc.) specific to the site will be utilized. During project design, the City and County of Honolulu BWS Quality Infrastructure Conservation Initiative program representatives will be conferred with regarding the cathodic protection of the fuel line.

4.0 RELATIONSHIP TO PUBLIC POLICIES AND PROGRAMS

The following sections describe the relationship between the Proposed Action and various federal, state, and local regulations and planning documents.

4.1 Introduction

The section describes the Proposed Action as it relates to compliance with relevant federal, state, and local policies, plans, and programs. There is no federal nexus for this project, and therefore no federal consultations are required. Included as relevant are as follows:

- Relationship to federal regulations and policies
- State regulations and planning documents associated with:
    - Environmental planning documents, including environmental assessments.
    - Special Management Area development.
    - Harbor development.
- City and County of Honolulu planning documents including applicable land use plans.

4.2 Relationship to Federal Laws and Executive Orders

Based on the location, land ownership, and details of the Proposed Action scope of work, no formal federal approvals are required. There is no federal nexus, so there are no requirements for federal consultation, such as Section 7 of the Endangered Species Act or Section 106 of the National Historic Preservation Act (NHPA). However, compliance with federal laws or guidances, some necessitating consultation, may be required. The following sections describe the compliance of the Proposed Action with various federal laws, executive orders, and opinions/concerns of those federal agencies with jurisdiction.

4.2.1 Conformity with USACE Concerns and Expectations

A Department of the Army (DA) permit is necessary for projects that will discharge and or/place dredged material or fill into U.S. waters, or projects that require the installation of structures or work conducted in, over, under, and affecting navigable waters of the U.S. The project is not anticipated to involve or disturb jurisdictional Waters of the U.S. Dredging and construction of Pier 43 would be performed as part of the KCT Project, which would be covered under a Clean Water Act Section 404 permit. A pre-consultation letter was sent to the USACE; however, no response was received. As part of the ongoing coordination between this project and the KCT Project, the design team anticipates close coordination with USACE as part of the CWA Section 404 permit for the planned Pier 43, and associated dredging. On 21 July 2017 a Pre-Application Meeting was conducted with the project team, including USACE. The meeting resulted in USACE

issuing a letter, dated 24 July 2017, indicating that based on the information provided about the Proposed Action, a Department of the Army permit would not be required.

4.2.2 Conformity with USFWS Concerns and Expectations

The project is not located within critical habitat or anticipated to have any impact on threatened or endangered species. The USFWS provided pre-consultation comments (Appendix A), stating that the Hawaiian Hoary bat (*Lasiurus cinereus semotus*), endangered Hawaiian petrel or ʻuaʻu (*Pterodroma sandwichensis*), and the wedge-tailed shearwater or ʻuaʻu kani (*Puffinus pacificus*) may be found in the vicinity of the project site. Concerns expressed by the USFWS relating to impacts to these species included recommendations for lighting and nighttime work, in addition to recommendations concerning sediment-laden storm water runoff. These concerns have been addressed in Section 3 of this environmental assessment.

4.3 Relationship to State Laws, Regulations, Policies, and Programs

The following sections describe the compliance of the Proposed Action with various state laws, regulations, policies, and programs.

4.3.1 Hawaii Revised Statutes Chapter 343

This EA is prepared in accordance with the state law governing environmental assessments HRS Chapter 343 and the implementation regulations associated with that law (HAR Section 11-200). This fuel line project triggers this law by the proposed use of state-owned land.

4.3.2 Hawaii State Plan

The Hawaii State Plan was adopted in 1978. It was revised in 1986 and again in 1991 (HRS, Chapter 226, as amended). The Hawaii State Plan establishes a set of goals, objectives, and policies that are meant to guide the state's long-term growth and development activities. Twelve Functional Plans cover agriculture, transportation, conservation lands, housing, tourism, historic preservation, energy, recreation, education, health, human services and employment. The Functional Plans contain objectives, policies, and implementing actions necessary to accomplish the goals of each plan. The three themes that express the basic purpose of the Hawaii State Plan are individual and family self-sufficiency, social and economic mobility, and community or social well-being.

The Planning Act is divided into three sections: Part I - Overall Theme, Goals, Objectives and Policies; Part II - Planning Coordination and Implementation; and Part II - Priority Guidelines. Part I consists of three overall themes: (1) individual and family self-sufficiency; (2) social and economic mobility; and (3) community or social well-being. These themes are considered "basic functions of society" and goals toward which government must strive (HRS §226-3).

Part II primarily addresses internal government policies to help streamline, coordinate, and implement various plans and processes between governmental agencies. It seeks to eliminate or consolidate burdensome or duplicative governmental requirements imposed on business, where public health, safety, and welfare would not be adversely affected.

Part III establishes overall priority guidelines to address areas of statewide concern (HRS §226-101). The overall direction and focus are on improving the quality of life for Hawaii's present and future population through the pursuit of desirable courses of action (HRS §226-102).

Tables 6 and 7 present Parts I and III of the Planning Act, and evaluate the Proposed Action's conformance to the State's goals and objectives. Part II is not presented, as that section primarily pertains to internal government affairs. Certain sections within Parts I and III that do not pertain to the Proposed Action have been omitted. The following tables illustrate the Proposed Action as it relates to the goals, objectives, policies, and priority guidelines outlined in HRS Chapter 226.

Table 6. Hawaii State Plan – HRS Chapter 226, Part I

SECTION	CHAPTER 226 - PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES	RATING
A = ACTIVELY SUPPORTS **C**= CONFORMS **F** = FAILS TO MEET PLAN GOAL **NA** = GOAL IS NOT APPLICABLE		
226-1	Findings and purpose.	
226-2	Definitions.	
226-3	Overall Theme.	
226-4	State Goals. In order to guarantee, for present and future generations, those elements of choice and mobility that insure that individuals and groups may approach their desired levels of self-reliance and self-determination, it shall be the goal of the State to achieve:	
(1)	A strong, viable economy, characterized by stability, diversity, and growth, that enables the fulfillment of the needs and expectations of Hawaii's present and future generations.	A
(2)	A desired physical environment, characterized by beauty, cleanliness, quiet, stable natural systems, and uniqueness, that enhances the mental and physical wellbeing of the people.	C
(3)	Physical, social, and economic wellbeing, for individuals and families in Hawaii, that nourishes a sense of community responsibility, of caring, and of participation in community life.	C
CONFORMANCE DETERMINATION: The Proposed Action appears to fully support HRS Section 226-4 since development of fuel pipeline and on-/off-loading facility will enable and encourage economic activity and growth.		
226-5	OBJECTIVE AND POLICIES FOR POPULATION	
(a)	It shall be the objective in planning for the State's population to guide population growth to be consistent with the achievement of physical, economic, and social objectives contained in this chapter.	
(b)	To achieve the population objective, it shall be the policy of this State to:	
(1)	Manage population growth statewide in a manner that provides increased opportunities for Hawaii's people to pursue their physical, social, and economic aspirations while recognizing the unique needs of each county.	C
(2)	Encourage an increase in economic activities and employment opportunities on the neighbor islands consistent with community needs and desires.	A
(3)	Promote increased opportunities for Hawaii's people to pursue their socio-economic aspirations throughout the islands.	C

SECTION	CHAPTER 226 - PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES	RATING
A = ACTIVELY SUPPORTS **C**= CONFORMS **F** = FAILS TO MEET PLAN GOAL **NA** = GOAL IS NOT APPLICABLE		
(4)	Encourage research activities and public awareness programs to foster an understanding of Hawaii's limited capacity to accommodate population needs and to address concerns resulting from an increase in Hawaii's population.	NA
(5)	Encourage federal actions and coordination among major governmental agencies to promote a more balanced distribution of immigrants among the states, provided that such actions do not prevent the reunion of immediate family members.	NA
(6)	Pursue an increase in federal assistance for states with a greater proportion of foreign immigrants relative to their state's population.	NA
(7)	Plan the development and availability of land and water resources in a coordinated manner so as to provide for the desired levels of growth in each geographic area.	NA
CONFORMANCE DETERMINATION: Development of additional fuel pipeline and on-/off-loading facility in Honolulu Harbor will encourage economic growth and will support economic growth via outer island fuel distribution.		
226-6	OBJECTIVES AND POLICIES FOR THE ECONOMY - IN GENERAL.	
(a)	Planning for the State's economy in general shall be directed toward achievement of the following objectives:	
(1)	Increased and diversified employment opportunities to achieve full employment, increased income and job choice, and improved living standards for Hawaii's people.	C
(2)	A steadily growing and diversified economic base that is not overly dependent on a few industries, and includes the development and expansion of industries on the neighbor islands.	A
(b)	To achieve the general economic objectives, it shall be the policy of this State to:	
(1)	Expand Hawaii's national and international marketing, communication, and organizational ties, to increase the State's capacity to adjust to and capitalize upon economic changes and opportunities occurring outside the State.	NA
(2)	Promote Hawaii as an attractive market for environmentally and socially sound investment activities that benefit Hawaii's people.	C
(3)	Seek broader outlets for new or expanded Hawaii business investments.	C
(4)	Expand existing markets and penetrate new markets for Hawaii's products and services.	A
(5)	Assure that the basic economic needs of Hawaii's people are maintained in the event of disruptions in overseas transportation.	A
(6)	Strive to achieve a level of construction activity responsive to, and consistent with, state growth objectives.	C
(7)	Encourage the formation of cooperatives and other favorable marketing arrangements at the local or regional level to assist Hawaii's small-scale producers, manufacturers, and distributors.	C
(8)	Encourage labor-intensive activities that are economically satisfying and which offer opportunities for upward mobility.	C

SECTION	CHAPTER 226 - PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES	RATING
A = ACTIVELY SUPPORTS **C**= CONFORMS **F** = FAILS TO MEET PLAN GOAL **NA** = GOAL IS NOT APPLICABLE		
(9)	Foster greater cooperation and coordination between the government and private sectors in developing Hawaii's employment and economic growth opportunities.	A
(10)	Stimulate the development and expansion of economic activities which will benefit areas with substantial or expected employment problems.	C
(11)	Maintain acceptable working conditions and standards for Hawaii's workers.	C
(12)	Provide equal employment opportunities for all segments of Hawaii's population through affirmative action and nondiscrimination measures.	C
(13)	Encourage businesses that have favorable financial multiplier effects within Hawaii's economy.	C
(14)	Promote and protect intangible resources in Hawaii, such as scenic beauty and the aloha spirit, which are vital to a healthy economy.	C
(15)	Increase effective communication between the educational community and the private sector to develop relevant curricula and training programs to meet future employment needs in general, and requirements of new, potential growth industries in particular.	C
(16)	Foster a business climate in Hawaii - including attitudes, tax and regulatory policies, and financial and technical assistance programs - that is conducive to the expansion of existing enterprises and the creation and attraction of new business and industry.	C
CONFORMANCE DETERMINATION: The Proposed Action supports orderly development of Hawaii's industries.		
226-7	OBJECTIVES AND POLICIES FOR THE ECONOMY – AGRICULTURE- omitted	
226-8	OBJECTIVE AND POLICIES FOR THE ECONOMY - VISITOR INDUSTRY.	
(a)	Planning for the State's economy with regard to the visitor industry shall be directed towards the achievement of the objective of a visitor industry that constitutes a major component of steady growth for Hawaii's economy.	
(b)	To achieve the visitor industry objective, it shall be the policy of this State to:	
(1)	Support and assist in the promotion of Hawaii's visitor attractions and facilities.	A
(2)	Insure that visitor industry activities are in keeping with the social, economic, and physical needs and aspirations of Hawaii's people.	C
(3)	Improve the quality of existing visitor destination areas.	NA
(4)	Encourage cooperation and coordination between the government and private sectors in developing and maintaining well-designed, adequately serviced visitor industry and related developments which are sensitive to neighboring communities and activities.	C
(5)	Develop the industry in a manner that will continue to provide new job opportunities and steady employment for Hawaii's people.	NA
(6)	Provide opportunities for Hawaii's people to obtain job training and education that will allow for upward mobility within the visitor industry.	NA

SECTION	CHAPTER 226 - PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES	RATING
A = ACTIVELY SUPPORTS **C**= CONFORMS **F** = FAILS TO MEET PLAN GOAL **NA** = GOAL IS NOT APPLICABLE		
(7)	Foster a recognition of the contribution of the visitor industry to Hawaii's economy and the need to perpetuate the aloha spirit.	C
(8)	Foster an understanding by visitors of the aloha spirit and of the unique and sensitive character of Hawaii's cultures and values.	NA
CONFORMANCE DETERMINATION: The Proposed Action appears to support the goals of HRS Section 226-8 by encouraging the orderly development of the state's jet fuel system serving Oahu and supporting inter-island fuel shipments.		
226-9	OBJECTIVE AND POLICIES FOR THE ECONOMY – FEDERAL EXPENDITURES.	
(a)	Planning for the State's economy with regard to federal expenditures shall be directed towards achievement of the objective of a stable federal investment base as an integral component of Hawaii's economy;	
(b)	To achieve the federal expenditures objective, it shall be the policy of this State to:	
(1)	Encourage the sustained flow of federal expenditures in Hawaii that generates long-term government civilian employment.	NA
(2)	Promote Hawaii's supportive role in national defense.	C
(3)	Promote the development of federally supported activities in Hawaii that respect state-wide economic concerns, are sensitive to community needs, and minimize adverse impacts on Hawaii's environment.	C
(4)	Increase opportunities for entry and advancement of Hawaii's people into federal government service.	NA
(5)	Promote federal use of local commodities, services, and facilities available in Hawaii.	C
(6)	Strengthen federal-state-county communication and coordination in all federal activities that affect Hawaii.	NA
(7)	Pursue the return of federally controlled lands in Hawaii that are not required for either the defense of the nation or for other purposes of national importance, and promote the mutually beneficial exchanges of land between federal agencies, the State, and the counties.	NA
CONFORMANCE DETERMINATION: Federal agencies, including the military branches, depend on the jet fuel provided by HFFC for air travel. Development of a redundant on-/off-loading facility and jet fuel pipeline helps to facilitate smooth operation of fuel and cargo ship movements within Honolulu Harbor.		
226-10	OBJECTIVE AND POLICIES FOR THE ECONOMY – POTENTIAL GROWTH ACTIVITIES.	
(a)	Planning for the State's economy with regard to potential growth activities shall be directed towards achievement of the objective of development and expansion of potential growth activities that serve to increase and diversify Hawaii's economic base.	
(b)	To achieve the potential growth activity objective, it shall be the policy of this State to:	
(1)	Facilitate investment and employment in economic activities that have the potential for growth such as diversified agriculture, aquaculture, apparel and textile manufacturing, film and television production, and energy and marine-related industries.	A

SECTION	CHAPTER 226 - PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES	RATING
A = ACTIVELY SUPPORTS **C**= CONFORMS **F** = FAILS TO MEET PLAN GOAL **NA** = GOAL IS NOT APPLICABLE		
(2)	Expand Hawaii's capacity to attract and service international programs and activities that generate employment for Hawaii's people.	NA
(3)	Enhance and promote Hawaii's role as a center for international relations, trade, finance, services, technology, education, culture, and the arts.	NA
(4)	Accelerate research and development of new energy- related industries based on wind, solar, ocean, and underground resources and solid waste.	NA
(5)	Promote Hawaii's geographic, environmental, social, and technological advantages to attract new economic activities into the State.	NA
(6)	Provide public incentives and encourage private initiative to attract new industries that best support Hawaii's social, economic, physical, and environmental objectives.	NA
(7)	Increase research and the development of ocean-related economic activities such as mining, food production, and scientific research.	NA
(8)	Develop, promote, and support research and educational and training programs that will enhance Hawaii's ability to attract and develop economic activities of benefit to Hawaii.	NA
(9)	Foster a broader public recognition and understanding of the potential benefits of new, growth-oriented industry in Hawaii.	NA
(10)	Encourage the development and implementation of joint federal and state initiatives to attract federal programs and projects that will support Hawaii's social, economic, physical, and environmental objectives.	NA
(11)	Increase research and development of businesses and services in the telecommunications and information industries.	NA
CONFORMANCE DETERMINATION: Development of a redundant on-/off-loading facility and jet fuel pipeline helps to facilitate smooth operation of fuel and cargo ship movements within Honolulu Harbor. Distribution of jet fuel to outer islands supports economic growth.		
226-10.5	OBJECTIVES AND POLICIES FOR THE ECONOMY – INFORMATION INDUSTRY.	Omitted
226-11	OBJECTIVES AND POLICIES FOR THE PHYSICAL ENVIRONMENT – LANDBASED, SHORELINE, AND MARINE RESOURCES.	
(a)	Planning for the State's physical environment with regard to land-based, shoreline, and marine resources shall be directed towards achievement of the following objectives:	
(1)	Prudent use of Hawaii's land-based, shoreline, and marine resources.	A
(2)	Effective protection of Hawaii's unique and fragile environmental resources.	C
(b)	To achieve the land-based, shoreline, and marine resources objectives, it shall be the policy of this State to:	
(1)	Exercise an overall conservation ethic in the use of Hawaii's natural resources.	C
(2)	Ensure compatibility between land-based and water-based activities and natural resources and ecological systems.	C
(3)	Take into account the physical attributes of areas when planning and designing activities and facilities.	C

SECTION	CHAPTER 226 - PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES	RATING
A = ACTIVELY SUPPORTS **C**= CONFORMS **F** = FAILS TO MEET PLAN GOAL **NA** = GOAL IS NOT APPLICABLE		
(4)	Manage natural resources and environs to encourage their beneficial and multiple use without generating costly or irreparable environmental damage.	C
(5)	Consider multiple uses in watershed areas, provided such uses do not detrimentally affect water quality and recharge functions.	NA
(6)	Encourage the protection of rare or endangered plant and animal species and habitats native to Hawaii.	C
(7)	Provide public incentives that encourage private actions to protect significant natural resources from degradation or unnecessary depletion.	NA
(8)	Pursue compatible relationships among activities, facilities, and natural resources.	C
(9)	Promote increased accessibility and prudent use of inland and shoreline areas for public recreational, educational, and scientific purposes.	NA
CONFORMANCE DETERMINATION: Development of additional jet fuel on-/off-loading facility in Honolulu Harbor is a prudent development of shoreline space, as the area is already industrialized. The Proposed Action will not change the use or character of the area. The Proposed Action will be built and operated following current best practices for environmental protection and environmental impact management.		
226-12	OBJECTIVE AND POLICIES FOR THE PHYSICAL ENVIRONMENT – SCENIC, NATURAL BEAUTY, AND HISTORIC RESOURCES.	
(a)	Planning for the State's physical environment shall be directed towards achievement of the objective of enhancement of Hawaii's scenic assets, natural beauty, and multi-cultural/historical resources.	
(b)	To achieve the scenic, natural beauty, and historic resources objective, it shall be the policy of this State to:	
(1)	Promote the preservation and restoration of significant natural and historic resources.	C
(2)	Provide incentives to maintain and enhance historic, cultural, and scenic amenities.	NA
(3)	Promote the preservation of views and vistas to enhance the visual and aesthetic enjoyment of mountains, ocean, scenic landscapes, and other natural features.	C
(4)	Protect those special areas, structures, and elements that are an integral and functional part of Hawaii's ethnic and cultural heritage.	C
(5)	Encourage the design of developments and activities that complement the natural beauty of the islands.	C
CONFORMANCE DETERMINATION: Construction of additional jet fuel on-/off-loading facility and associated pipeline will be in conformance will all laws related to the protection of cultural resources. A monitor will be required for ground disturbing activities. Much of the Proposed Action will be built subsurface, and the parts that will be aboveground will be within an existing fuel facility.		
226-13	OBJECTIVES AND POLICIES FOR THE PHYSICAL ENVIRONMENT – LAND, AIR, AND WATER QUALITY.	

SECTION	CHAPTER 226 - PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES	RATING
A = ACTIVELY SUPPORTS **C**= CONFORMS **F** = FAILS TO MEET PLAN GOAL **NA** = GOAL IS NOT APPLICABLE		
(a)	Planning for the State's physical environment with regard to land, air, and water quality shall be directed towards achievement of the following objectives:	
(1)	Maintenance and pursuit of improved quality in Hawaii's land, air, and water resources.	A
(2)	Greater public awareness and appreciation of Hawaii's environmental resources.	NA
(b)	To achieve the land, air, and water quality objectives, it shall be the policy of this State to:	
(1)	Foster educational activities that promote a better understanding of Hawaii's limited environmental resources.	NA
(2)	Promote the proper management of Hawaii's land and water resources.	A
(3)	Promote effective measures to achieve desired quality in Hawaii's surface, ground, and coastal waters.	A
(4)	Encourage actions to maintain or improve aural and air quality levels to enhance the health and well-being of Hawaii's people.	C
(5)	Reduce the threat to life and property from erosion, flooding, tsunamis, hurricanes, earthquakes, volcanic eruptions, and other natural or man-induced hazards and disasters.	A
(6)	Encourage design and construction practices that enhance the physical qualities of Hawaii's communities.	C
(7)	Encourage urban developments in close proximity to existing services and facilities.	NA
(8)	Foster recognition of the importance and value of the land, air, and water resources to Hawaii's people, their cultures and visitors.	NA
CONFORMANCE DETERMINATION: Development of a redundant jet fuel on-/off-loading facility and associated piping in this existing harbor facility is an example of proper management of resources, as the area surrounding the project site is already used for similar purposes.		
226-14	OBJECTIVE AND POLICIES FOR FACILITY SYSTEMS – IN GENERAL.	
(a)	Planning for the State's facility systems in general shall be directed towards achievement of the objective of water, transportation, waste disposal, and energy and telecommunication systems that support statewide social, economic, and physical objectives.	A
(b)	To achieve the general facility systems objective, it shall be the policy of this State to:	
(1)	Accommodate the needs of Hawaii's people through coordination of facility systems and capital improvement priorities in consonance with state and county plans.	A
(2)	Encourage flexibility in the design and development of facility systems to promote prudent use of resources and accommodate changing public demands and priorities.	C
(3)	Ensure that required facility systems can be supported within resource capacities and at reasonable cost to the user.	C

SECTION	CHAPTER 226 - PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES	RATING
A = ACTIVELY SUPPORTS **C**= CONFORMS **F** = FAILS TO MEET PLAN GOAL **NA** = GOAL IS NOT APPLICABLE		
(4)	Pursue alternative methods of financing programs and projects and cost-saving techniques in the planning, construction, and maintenance of facility systems.	C
CONFORMANCE DETERMINATION: The Proposed Action adds redundancy and resiliency to the State's jet fuel system, and therefore supports economic objectives. Using the KCT Project construction offers a cost savings during construction.		
226-15	OBJECTIVE AND POLICIES FOR FACILITY SYSTEMS -- SOLID AND LIQUID WASTES.	NA
226-16	OBJECTIVE AND POLICIES FOR FACILITY SYSTEMS – WATER.	NA
226-17	OBJECTIVES AND POLICIES FOR FACILITY SYSTEMS – TRANSPORTATION.	
(a)	Planning for the State's facility systems with regard to transportation shall be directed towards the achievement of the following objectives:	
(1)	An integrated multi-modal transportation system that services statewide needs and promotes the efficient, economical, safe, and convenient movement of people and goods.	A
(2)	A statewide transportation system that is consistent with and will accommodate planned growth objectives throughout the State.	A
(b)	To achieve the transportation objectives, it shall be the policy of this State to:	
(1)	Design, program, and develop a multi-modal system in conformance with desired growth and physical development as stated in this chapter;	A
(2)	Coordinate state, county, federal, and private transportation activities and programs toward the achievement of statewide objectives;	A
(3)	Encourage a reasonable distribution of financial responsibilities for transportation among participating governmental and private parties;	A
(4)	Provide for improved accessibility to shipping, docking, and storage facilities;	A
(5)	Promote a reasonable level and variety of mass transportation services that adequately meet statewide and community needs;	A
(6)	Encourage transportation systems that serve to accommodate present and future development needs of communities;	A
(7)	Encourage a variety of carriers to offer increased opportunities and advantages to inter- island movement of people and goods;	A
(8)	Increase the capacities of airport and harbor systems and support facilities to effectively accommodate transshipment and storage needs;	A
(9)	Encourage the development of transportation systems and programs which would assist statewide economic growth and diversification;	A
(10)	Encourage the design and development of transportation systems sensitive to the needs of affected communities and the quality of Hawaii's natural environment;	C
(11)	Encourage safe and convenient use of low-cost, energy-efficient, non-polluting means of transportation;	C

SECTION	CHAPTER 226 - PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES	RATING
A = ACTIVELY SUPPORTS **C**= CONFORMS **F** = FAILS TO MEET PLAN GOAL **NA** = GOAL IS NOT APPLICABLE		
(12)	Coordinate intergovernmental land use and transportation planning activities to ensure the timely delivery of supporting transportation infrastructure in order to accommodate planned growth objectives; and	A
(13)	Encourage diversification of transportation modes and infrastructure to promote alternate fuels and energy efficiency.	C
CONFORMANCE DETERMINATION: Development of a redundant jet fuel on-/off-loading facility in Honolulu Harbor will encourage economic growth and provides improved accessibility to shipping, docking, and storage of jet fuel.		
226-18	OBJECTIVES AND POLICIES FOR FACILITY SYSTEMS – ENERGY	
(a)	Planning for the State's facility systems with regard to energy shall be directed toward the achievement of the following objectives, giving due consideration to all	
(1)	Dependable, efficient, and economical statewide energy systems capable of supporting the needs of the people;	NA
(2)	Increased energy self-sufficiency where the ratio of indigenous to imported energy use is increased;	NA
(3)	Greater energy security in the face of threats to Hawaii's energy supplies and systems; and	NA
(4)	Reduction, avoidance, or sequestration of greenhouse gas emissions from energy supply and use.	NA
(b)	To achieve the energy objectives, it shall be the policy of this State to ensure the provision of adequate, reasonably priced, and dependable energy services to accommodate demand.	NA
(c)	To further achieve the energy objectives, it shall be the policy of this State to:	
(1)	Support research and development as well as promote the use of renewable energy sources;	NA
(2)	Ensure that the combination of energy supplies and energy-saving systems is sufficient to support the demands of growth;	NA
(3)	Base decisions of least-cost supply-side and demand-side energy resource options on a comparison of their total costs and benefits when a least-cost is determined by a reasonably comprehensive, quantitative, and qualitative accounting of their long-term, direct and indirect economic, environmental, social, cultural, and public health costs and benefits;	NA
(4)	Promote all cost-effective conservation of power and fuel supplies through measures including: (A) Development of cost-effective demand-side management programs; (B) Education; and (C) Adoption of energy efficient practices and technologies;	NA
(5)	Ensure to the extent that new supply-side resources are needed, the development or expansion of energy systems utilizes the least-cost energy supply option and maximizes efficient technologies;	C
(6)	Support research, development, and demonstration of energy efficiency, load management, and other demand-side management programs, practices, and technologies;	NA

SECTION	CHAPTER 226 - PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES	RATING
A = ACTIVELY SUPPORTS **C**= CONFORMS **F** = FAILS TO MEET PLAN GOAL **NA** = GOAL IS NOT APPLICABLE		
(7)	Promote alternate fuels and energy efficiency by encouraging diversification of transportation modes and infrastructure;	C
(8)	Support actions that reduce, avoid, or sequester greenhouse gases in utility, transportation, and industrial sector applications; and	C
(9)	Support actions that reduce, avoid, or sequester Hawaii's greenhouse gas emissions through agriculture and forestry initiatives.	NA
CONFORMANCE DETERMINATION: The development of the jet fuel line and on-/off-loading facility has no impact on the demand side of energy, and a positive impact on the supply side from the perspective of an increased demand.		
226-18.5	OBJECTIVES AND POLICIES FOR FACILITY SYSTEMS – TELECOMMUNICATIONS.	NA
226-19	OBJECTIVES AND POLICIES FOR SOCIO – CULTURAL ADVANCEMENT – HOUSING.	NA
226-20	OBJECTIVES AND POLICIES FOR SOCIO – CULTURAL ADVANCEMENT – HEALTH.	NA
226-21	OBJECTIVE AND POLICIES FOR SOCIO–CULTURAL ADVANCEMENT – EDUCATION.	NA
226-22	OBJECTIVE AND POLICIES FOR SOCIO-CULTURAL ADVANCEMENT – SOCIAL SERVICES.	NA
226-23	OBJECTIVE AND POLICIES FOR SOCIO-CULTURAL ADVANCEMENT – LEISURE.	NA
226-24	OBJECTIVE AND POLICIES FOR SOCIO-CULTURAL ADVANCEMENT – INDIVIDUAL RIGHTS AND PERSONAL WELL-BEING.	NA
226-25	OBJECTIVE AND POLICIES FOR SOCIO – CULTURAL ADVANCEMENT – CULTURE.	NA
226-26	SECTION 226-26 OBJECTIVES AND POLICIES FOR SOCIO – CULTURAL ADVANCEMENT – PUBLIC SAFETY.	
(a)	Planning for the State's socio-cultural advancement with regard to public safety shall be directed towards the achievement of the following objectives:	
(1)	Assurance of public safety and adequate protection of life and property for all people.	C
(2)	Optimum organizational readiness and capability in all phases of emergency management to maintain the strength, resources, and social and economic well-being of the community in the event of civil disruptions, wars, natural disasters, and other major disturbances.	C
(3)	Promotion of a sense of community responsibility for the welfare and safety of Hawaii's people.	NA
(b)	To achieve the public safety objectives, it shall be the policy of this State to:	
(1)	Ensure that public safety programs are effective and responsive to community needs.	NA

SECTION	CHAPTER 226 - PART I. OVERALL THEME, GOALS, OBJECTIVES AND POLICIES	RATING
A = ACTIVELY SUPPORTS **C**= CONFORMS **F** = FAILS TO MEET PLAN GOAL **NA** = GOAL IS NOT APPLICABLE		
(2)	Encourage increased community awareness and participation in public safety programs.	NA
(c)	To further achieve public safety objectives related to criminal justice, it shall be the policy of this State to:	
(1)	Support criminal justice programs aimed at preventing and curtailing criminal activities.	NA
(2)	Develop a coordinated, systematic approach to criminal justice administration among all criminal justice agencies.	NA
(3)	Provide a range of correctional resources which may include facilities and alternatives to traditional incarceration in order to address the varied security needs of the community and successfully reintegrate offenders into the community.	NA
(d)	To further achieve public safety objectives related to emergency management, it shall be the policy of this State to:	
(1)	Ensure that responsible organizations are in a proper state of readiness to respond to major war-related, natural, or technological disasters and civil disturbances at all times.	C
(2)	Enhance the coordination between emergency management programs throughout the State.	NA
CONFORMANCE DETERMINATION**:** The development of this redundant jet fuel line and on-/off-loading facility and the additional service of supplying jet fuel to the outer islands promotes readiness. A second fuel line, structurally protected, within the Pier 43 promotes resilience and reliability of the State's jet fuel system.		
226-27	OBJECTIVES AND POLICIES FOR SOCIO-CULTURAL ADVANCEMENT – GOVERNMENT.	NA

Table 7. Hawaii State Plan – HRS Chapter 226, Part III

SECTION	CHAPTER 226 - PART III. PRIORITY GUIDELINES	RATING
A = ACTIVELY SUPPORTS C= CONFORMS F = FAILS TO MEET PLAN GOAL NA = GOAL IS NOT APPLICABLE		
226-101	Establishes overall priority guidelines to address areas of statewide concern.	
226-102	Overall direction. The State shall strive to improve the quality of life for Hawaii's present and future population through the pursuit of desirable courses of action in five major areas of statewide concern which merit priority attention: economic development, population growth and land resource management, affordable housing, crime and criminal justice, and quality education.	A
226-103	ECONOMIC PRIORITY GUIDELINES	
(a)	Priority guidelines to stimulate economic growth and encourage business expansion and development to provide needed jobs for Hawaii's people and achieve a stable and diversified economy:	A
(1)	Seek a variety of means to increase the availability of investment capital for new and expanding enterprises.	NA
(A)	Encourage investments which:	

SECTION	CHAPTER 226 - PART III. PRIORITY GUIDELINES	RATING
A = ACTIVELY SUPPORTS C= CONFORMS F = FAILS TO MEET PLAN GOAL NA = GOAL IS NOT APPLICABLE		
i.	Reflect long term commitments to the State;	C
ii.	Rely on economic linkages within the local economy;	A
iii.	Diversify the economy;	C
iv.	Reinvest in the local economy;	C
v.	Are sensitive to community needs and priorities; and	
vi.	Demonstrate a commitment to provide management opportunities to Hawaii residents.	NA
(2)	Encourage the expansion of technological research to assist industry development and support the development and commercialization of technological advancements.	NA
(3)	Improve the quality, accessibility, and range of services provided by government to business, including data and reference services and assistance in complying with governmental regulations.	NA
(4)	Seek to ensure that state business tax and labor laws and administrative policies are equitable, rational, and predictable.	NA
(5)	Streamline the building and development permit and review process, and eliminate or consolidate other burdensome or duplicative governmental requirements imposed on business, where public health, safety and welfare would not be adversely affected.	NA
(6)	Encourage the formation of cooperatives and other favorable marketing or distribution arrangements at the regional or local level to assist Hawaii's small-scale producers, manufacturers, and distributors.	NA
(7)	Continue to seek legislation to protect Hawaii from transportation interruptions between Hawaii and the continental United States.	NA
(8)	Provide public incentives and encourage private initiative to develop and attract industries which promise long-term growth potentials and which have the following characteristics:	NA
(A)	An industry that can take advantage of Hawaii's unique location and available physical and human resources.	C
(B)	A clean industry that would have minimal adverse effects on Hawaii's environment.	C
(C)	An industry that is willing to hire and train Hawaii's people to meet the industry's labor needs at all levels of employment.	C
(D)	An industry that would provide reasonable income and steady employment.	C
(9)	Support and encourage, through educational and technical assistance programs and other means, expanded opportunities for employee ownership and participation in Hawaii business.	NA
(10)	Enhance the quality of Hawaii's labor force and develop and maintain career opportunities for Hawaii's people through the following actions:	
(A)	Expand vocational training in diversified agriculture, aquaculture, information industry, and other areas where growth is desired and feasible.	NA
(B)	Encourage more effective career counseling and guidance in high schools and post- secondary institutions to inform students of present and future career opportunities.	NA
(C)	Allocate educational resources to career areas where high employment is expected and where growth of new industries is desired.	NA

SECTION	CHAPTER 226 - PART III. PRIORITY GUIDELINES	RATING
A = ACTIVELY SUPPORTS C= CONFORMS F = FAILS TO MEET PLAN GOAL NA = GOAL IS NOT APPLICABLE		
(D)	Promote career opportunities in all industries for Hawaii's people by encouraging firms doing business in the State to hire residents.	NA
(E)	Promote greater public and private sector cooperation in determining industrial training needs and in developing relevant curricula and on-the-job training opportunities.	NA
(F)	Provide retraining programs and other support services to assist entry of displaced workers into alternative employment.	NA
(b)	Priority guidelines to promote the economic health and quality of the visitor industry:	
(1)	Promote visitor satisfaction by fostering an environment which enhances the aloha spirit and minimizes inconveniences to Hawaii's residents and visitors.	NA
(2)	Encourage the development and maintenance of well-designed, adequately serviced hotels and resort destination areas which are sensitive to neighboring communities and activities and which provide for adequate shoreline setbacks and beach access.	NA
(3)	Support appropriate capital improvements to enhance the quality of existing resort destination areas and provide incentives to encourage investment in upgrading, repair, and maintenance of visitor facilities.	NA
(4)	Encourage visitor industry practices and activities which respect, preserve, and enhance Hawaii's significant natural, scenic, historic, and cultural resources.	NA
(5)	Develop and maintain career opportunities in the visitor industry for Hawaii's people, with emphasis on managerial positions.	NA
(6)	Support and coordinate tourism promotion abroad to enhance Hawaii's share of existing and potential visitor markets.	NA
(7)	Maintain and encourage a more favorable resort investment climate consistent with the objectives of this chapter.	NA
(8)	Support law enforcement activities that provide a safer environment for both visitors and residents alike.	NA
(9)	Coordinate visitor industry activities and promotions to business visitors through the state network of advanced data communication techniques.	NA
(c)	Priority guidelines to promote the continued viability of the sugar and pineapple industries:	
(1)	Provide adequate agricultural lands to support the economic viability of the sugar and pineapple industries.	NA
(2)	Continue efforts to maintain federal support to provide stable sugar prices high enough to allow profitable operations in Hawaii.	NA
(3)	Support research and development, as appropriate, to improve the quality and production of sugar and pineapple crops.	NA
(d)	Priority guidelines to promote the growth and development of diversified agriculture and aquaculture:	
(1)	Identify, conserve, and protect agricultural and aquacultural lands of importance and initiate affirmative and comprehensive programs to promote economically productive agricultural and aquacultural uses of such lands.	NA

SECTION	CHAPTER 226 - PART III. PRIORITY GUIDELINES	RATING
A = ACTIVELY SUPPORTS C= CONFORMS F = FAILS TO MEET PLAN GOAL NA = GOAL IS NOT APPLICABLE		
(2)	Assist in providing adequate, reasonably priced water for agricultural activities.	NA
(3)	Encourage public and private investment to increase water supply and to improve transmission, storage, and irrigation facilities in support of diversified agriculture and aquaculture.	NA
(4)	Assist in the formation and operation of production and marketing associations and cooperatives to reduce production and marketing costs.	NA
(5)	Encourage and assist with the development of a waterborne and airborne freight and cargo system capable of meeting the needs of Hawaii's agricultural community.	A
(6)	Seek favorable freight rates for Hawaii's agricultural products from inter-island and overseas transportation operators.	NA
(7)	Encourage the development and expansion of agricultural and aquacultural activities which offer long-term economic growth potential and employment opportunities.	NA
(8)	Continue the development of agricultural parks and other programs to assist small independent farmers in securing agricultural lands and loans.	NA
(9)	Require agricultural uses in agricultural subdivisions and closely monitor the uses in these subdivisions.	NA
(10)	Support the continuation of land currently in use for diversified agriculture.	NA
(e)	Priority guidelines for water use and development:	
(1)	Maintain and improve water conservation programs to reduce the overall water consumption rate.	NA
(2)	Encourage the improvement of irrigation technology and promote the use of nonpotable water for agricultural and landscaping purposes.	NA
(3)	Increase the support for research and development of economically feasible alternative water sources.	NA
(4)	Explore alternative funding sources and approaches to support future water development programs and water system improvements.	NA
(f)	Priority guidelines for energy use and development:	
(1)	Encourage the development, demonstration, and commercialization of renewable energy sources.	NA
(2)	Initiate, maintain, and improve energy conservation programs aimed at reducing energy waste and increasing public awareness of the need to conserve energy.	NA
(3)	Provide incentives to encourage the use of energy conserving technology in residential, industrial, and other buildings.	NA
(4)	Encourage the development and use of energy conserving and cost-efficient transportation systems.	A
(g)	Priority guidelines to promote the development of the information industry:	
(1)	Establish an information network that will serve as the catalyst for establishing a viable information industry in Hawaii.	NA

SECTION	CHAPTER 226 - PART III. PRIORITY GUIDELINES	RATING
A = ACTIVELY SUPPORTS C= CONFORMS F = FAILS TO MEET PLAN GOAL NA = GOAL IS NOT APPLICABLE		
(2)	Encourage the development of services such as financial data processing, products and services exchange, foreign language translations, telemarketing, teleconferencing, a twenty- four-hour international stock exchange, international banking, and a Pacific Rim management center.	NA
(3)	Encourage the development of small businesses in the information field such as software development, the development of new information systems and peripherals, data conversion and data entry services, and home or cottage services such as computer programming, secretarial, and accounting services.	NA
(4)	Encourage the development or expansion of educational and training opportunities for residents in the information and telecommunications fields.	NA
(5)	Encourage research activities, including legal research in the information and telecommunications fields.	NA
(6)	Support promotional activities to market Hawaii's information industry services.	NA
226-104	POPULATION GROWTH AND LAND RESOURCES PRIORITY GUIDELINES.	
(a)	Priority guidelines to effect desired statewide growth and distribution:	
(1)	Encourage planning and resource management to insure that population growth rates throughout the State are consistent with available and planned resource capacities and reflect the needs and desires of Hawaii's people.	NA
(2)	Manage a growth rate for Hawaii's economy that will parallel future employment needs for Hawaii's people.	NA
(3)	Ensure that adequate support services and facilities are provided to accommodate the desired distribution of future growth throughout the State.	A
(4)	Encourage major state and federal investments and services to promote economic development and private investment to the neighbor islands, as appropriate.	NA
(5)	Explore the possibility of making available urban land, low-interest loans, and housing subsidies to encourage the provision of housing to support selective economic and population growth on the neighbor islands.	NA
(6)	Seek federal funds and other funding sources outside the State for research, program development, and training to provide future employment opportunities on the neighbor islands.	NA
(7)	Support the development of high technology parks on the neighbor islands.	NA
(b)	Priority guidelines for regional growth distribution and land resource utilization:	
(1)	Encourage urban growth primarily to existing urban areas where adequate public facilities are already available or can be provided with reasonable public expenditures, and away from areas where other important benefits are present, such as protection of important agricultural land or preservation of lifestyles.	NA

SECTION	CHAPTER 226 - PART III. PRIORITY GUIDELINES	RATING
A = ACTIVELY SUPPORTS C= CONFORMS F = FAILS TO MEET PLAN GOAL NA = GOAL IS NOT APPLICABLE		
(2)	Make available marginal or nonessential agricultural lands for appropriate urban uses while maintaining agricultural lands of importance in the agricultural district.	NA
(3)	Restrict development when drafting of water would result in exceeding the sustainable yield or in significantly diminishing the recharge capacity of any groundwater area.	NA
(4)	Encourage restriction of new urban development in areas where water is insufficient from any source for both agricultural and domestic use.	NA
(5)	In order to preserve green belts, give priority to state capital-improvement funds which encourage location of urban development within existing urban areas except where compelling public interest dictates development of a noncontiguous new urban core.	NA
(6)	Seek participation from the private sector for the cost of building infrastructure and utilities, and maintaining open spaces.	C
(7)	Pursue rehabilitation of appropriate urban areas.	NA
(8)	Support the redevelopment of Kakaako into a viable residential, industrial, and commercial community.	NA
(9)	Direct future urban development away from critical environmental areas or impose mitigating measures so that negative impacts on the environment would be minimized.	NA
(10)	Identify critical environmental areas in Hawaii to include but not be limited to the following: watershed and recharge areas; wildlife habitats (on land and in the ocean); areas with endangered species of plants and wildlife; natural streams and water bodies; scenic and recreational shoreline resources; open space and natural areas; historic and cultural sites; areas particularly sensitive to reduction in water and air quality; and scenic resources.	NA
(11)	Identify all areas where priority should be given to preserving rural character and lifestyle.	NA
(12)	Utilize Hawaii's limited land resources wisely, providing adequate land to accommodate projected population and economic growth needs while ensuring the protection of the environment and the availability of the shoreline, conservation lands, and other limited resources for future generations.	C
(13)	Protect and enhance Hawaii's shoreline, open spaces, and scenic resources.	C
226-105	CRIME AND CRIMINAL JUSTICE. PRIORITY GUIDELINES IN THE AREA OF CRIME AND CRIMINAL JUSTICE.	NA
226-106	AFFORDABLE HOUSING. PRIORITY GUIDELINES FOR THE PROVISION OF AFFORDABLE HOUSING.	NA
226-107	QUALITY EDUCATION. PRIORITY GUIDELINES TO PROMOTE QUALITY EDUCATION.	NA
226-108	SUSTAINABILITY. PRIORITY GUIDELINES AND PRINCIPLES TO PROMOTE SUSTAINABILITY.	
(1)	Encouraging balanced economic, social, community, and environmental priorities;	A

SECTION	CHAPTER 226 - PART III. PRIORITY GUIDELINES	RATING
A = ACTIVELY SUPPORTS C= CONFORMS F = FAILS TO MEET PLAN GOAL NA = GOAL IS NOT APPLICABLE		
(2)	Encouraging planning that respects and promotes living within the natural resources and limits of the State;	A
(3)	Promoting a diversified and dynamic economy;	C
(4)	Encouraging respect for the host culture;	C
(5)	Promoting decisions based on meeting the needs of the present without compromising the needs of future generations;	C
(6)	Considering the principles of the ahupuaa system; and	C
(7)	Emphasizing that everyone, including individuals, families, communities, businesses, and government, has the responsibility for achieving a sustainable Hawaii.	C
226-109	CLIMATE CHANGE ADAPTATION PRIORITY GUIDELINES. PRIORITY GUIDELINES TO PREPARE THE STATE TO ADDRESS THE IMPACTS OF CLIMATE CHANGE, INCLUDING IMPACTS TO THE AREAS OF AGRICULTURE; CONSERVATION LANDS; COASTAL AND NEARSHORE MARINE AREAS; NATURAL AND CULTURAL RESOURCES; EDUCATION; ENERGY; HIGHER EDUCATION; HEALTH; HISTORIC PRESERVATION; WATER RESOURCES; THE BUILT ENVIRONMENT, SUCH AS HOUSING, RECREATION, TRANSPORTATION; AND THE ECONOMY.	
(1)	Ensure that Hawaii's people are educated, informed, and aware of the impacts climate change may have on their communities;	NA
(2)	Encourage community stewardship groups and local stakeholders to participate in planning and implementation of climate change policies;	NA
(3)	Invest in continued monitoring and research of Hawaii's climate and the impacts of climate change on the State;	NA
(4)	Consider native Hawaiian traditional knowledge and practices in planning for the impacts of climate change;	NA
(5)	Encourage the preservation and restoration of natural landscape features, such as coral reefs, beaches and dunes, forests, streams, floodplains, and wetlands, that have the inherent capacity to avoid, minimize, or mitigate the impacts of climate change;	C
(6)	Explore adaptation strategies that moderate harm or exploit beneficial opportunities in response to actual or expected climate change impacts to the natural and built environments;	A
(7)	Promote sector resilience in areas such as water, roads, airports, and public health, by encouraging the identification of climate change threats, assessment of potential consequences, and evaluation of adaptation options;	A

SECTION	CHAPTER 226 - PART III. PRIORITY GUIDELINES	RATING
A = ACTIVELY SUPPORTS C= CONFORMS F = FAILS TO MEET PLAN GOAL NA = GOAL IS NOT APPLICABLE		
(8)	Foster cross-jurisdictional collaboration between county, state, and federal agencies and partnerships between government and private entities and other nongovernmental entities, including nonprofit entities;	NA
(9)	Use management and implementation approaches that encourage the continual collection, evaluation, and integration of new information and strategies into new and existing practices, policies, and plans; and	NA
(10)	Encourage planning and management of the natural and built environments that effectively integrate climate change policy.	NA

4.3.4 State Functional Plans

The Planning Act called for the creation of functional plans to set specific objectives, establish policies, and implement actions for a particular field of activity. These functional plans further identified those organizations responsible for carrying out the actions, the implementing timeframe, and the proposed budgets. The specific areas covered by the functional plans include (1) agriculture, (2) conservation lands, (3) primary, secondary, and higher education (4) employment, (5) energy, (6) health, (7) historic preservation, (8) housing, (9) human services, (10) recreation, (11) tourism, (12) transportation, and (13) water resource development.

The functional plans directly relevant to the Proposed Action are discussed in the following sections. It is important to note that while these plans are considered to be the current "official" State functional plans, they were last updated in 1990 and 1991. Hence, a deviation from the original goals of the plan may have occurred due to local, national, or world events or other unforeseeable factors.

4.3.4.1 State Agricultural Functional Plan (1991)

<u>Goals of the Plan</u>

The State Agricultural Functional Plan seeks to ultimately increase the overall level of agricultural development in Hawaii. At the time the plan was written, the two fundamental objectives were to (1) ensure the continued viability of Hawaii's sugar and pineapple industries, and (2) encourage the continued growth and development of diversified agriculture throughout the State. Diversified agriculture has helped to partially offset declines in sugar and pineapple. The total value of crop and livestock sales peaked at a total of $679 million in 2011, exceeding for the first time the level reached in 1990, and stood at $553 million in 2014 (DBEDT, 2017).

The functional plan for agriculture also set objectives to develop capabilities to convert Hawaii-grown crops into potential new value-added products for the local community, visitor industry, and export markets. The goal was to promote and develop a diverse range of products and programs focusing on niche marketing, such as ag-tourism, and to assist in the development of diversified agriculture.

Conformance with the Goals of the Plan

The Proposed Action will support the continuing movement of agricultural supplies and products by assuring the resilience and reliability of the jet fuel used to move agricultural products between the islands and out of state.

4.3.4.2 State Conservation Function Plan (1991)

Goals of the Plan

The State Conservation Lands Functional Plan addresses the impacts of population growth and economic development on Hawaii's natural environment and provides a framework for the protection and preservation of former forest reserves, shorelines, and submerged lands. The objective of the plan is to provide for a management program allowing the judicious use of the State's natural resources balanced with the need to protect them. The State's Office of Conservation and Coastal Lands (OCCL) is the lead authority for management of conservation areas.

Conformance with the Goals of the Plan

The Proposed Action would not utilize Conservation District lands. However, the KCT Project, on which the Proposed Action is dependent, would utilize submerged lands. Harbor area on submerged State-owned land lies within the Resource subzone of the Conservation District. The objective of the Resource subzone, as set forth in Section 13-5-13, HAR, is to develop, with proper management, areas to ensure sustained use of the natural resources of those areas. Under HRS Chapter 266 "Transportation and Utilities Harbors," DOT-HAR is exempt from the Conservation District Permit and Site Plan approval requirements for any work involving submerged lands in state commercial harbors. This exemption does not apply to tenant/lessee actions.

4.3.4.3 State Tourism Functional Plan (1991)

Goals of the Plan

The 1991 State Tourism Functional Plan focused on six issues: (1) the positive and negative impacts of tourism growth on the community; (2) physical development in terms of product quality, product diversity, land use planning, adequate infrastructure, and visitor use of public services; (3) environmental resources and cultural heritage; (4) community, visitor, and industry relations; (5) employment and career development; and (6) effective marketing. The plan primarily sought to strengthen tourism, while developing other industries to diversify the State's economic base in order to reduce its vulnerability from the fluctuations of a single market.

Conformance with the Plan

The Proposed Action generally conforms with the goals and objectives of the plan by ensuring resilience and reliability of the jet fuel used in the transportation of goods to, from, and among the islands for visitors and residents alike.

4.3.4.4 State Transportation Functional Plan (1991)

Goals of the Plan

The 1991 State Transportation Functional Plan sought to (1) construct facility and infrastructure improvements in support of Hawaii's thriving economy and growing population base; (2) develop a transportation system balanced with an array of new alternatives; (3) implement Transportation Systems Management to maximize the use of existing facilities and systems; (4) foster innovation and use of new technology in transportation; (5) maximize joint efforts with the private sector; (6) pursue land use initiatives which help reduce travel demand; (7) encourage resident quality-of life improvements through improved mobility opportunities and travel reduction.

Conformance with the Plan

The Proposed Action fully supports the State's Transportation Plan by contributing infrastructure improvements in support of Hawaii's thriving economy and growing population. The State's Transportation Plan seeks to maximize the use of existing facilities. This new pipeline would tie into an existing pipeline, and the terminal would be located within an existing planned harbor redevelopment area.

4.3.4.5 *Hawaii 2050 Sustainability Plan*

The Hawaii State Legislature in 2005 sought answers to the long-term future of the State and the pressing issues facing the people of Hawaii. Under the Special Session Laws of Hawaii 2005, the Legislature enacted Act 8, which provided for (1) the development of a sustainability plan to address the vital needs of Hawaii through the year 2050, and (2) the establishment of the Hawaii Sustainability Task Force under the guidance of the Office of the State Auditor (State of Hawaii Auditor, 2005).

Concerns over the "steady deterioration of public infrastructure, lack of affordable housing, continued reliance on a service-based economy, the vulnerability of Hawaii in a volatile global energy market, possible interruptions in travel and critical food supplies, threats to our fragile island ecosystems, and the ever-increasing numbers of residents and visitors" were vital issues that needed to be addressed. Questions were raised about the direction, the long-term limits of growth, and the need to plan and act to assure a preferred future for the people of Hawaii. Moreover, the task force addressed a most basic question: What is the State's carrying capacity?

The 2050 Plan recognized that tourism, defense, construction, and agriculture have been the foundation of the State's economy and likely to continue to be economic drivers in the future. Tourism alone generates an estimated 20 percent of all economic activity and a quarter of the State's tax revenue. While most residents support keeping the level of tourism and military activity the same, they also want a more diverse, sustainable, and resilient economy to expand our economic base beyond current industries.

The 2050 Plan recognized that diversified agriculture, knowledge- and innovation-based industries would offer quality employment and greater diversity to our economy, but that the replacement of one sector of the economy with another in the same way that the visitor industry supplanted agriculture would not be a solution. The creation of greater resiliency in the economy would mean

buying locally produced goods and services. However, as an island state, becoming totally economically self-sufficient would not be a possibility, but there are many products that residents could purchase locally to reduce dependence on outside sources.

The 2050 Plan called for a quality transportation system that links people to places and provides opportunities for social interaction, recreation, and community engagement. A system that enables the flow of commerce would ensure that businesses could transport their goods and services to their destination in a timely and cost-effective way.

The Proposed Action directly contributes to the improvement of transportation infrastructure through increasing resiliency, robustness, and reliability of jet fuel on-/off-loading, thereby supporting the movement of people and goods in a timely and cost-effective way.

4.3.5 State Land Use District – The Land Use Law

The Hawaii State Legislature determined in 1961 that a statewide zoning system was needed to protect Hawaii's valuable land from development that provided a short-term gain for a few and resulted in a long-term loss to the income and growth potential of the State's economy. Accordingly, the Legislature established an overall framework of land-use management and adopted the Land Use Law under HRS Chapter 205. The law placed all lands in the State in one of four land-use districts: Urban, Agricultural, Conservation, or Rural (the Rural District was added in 1963), and established the Land Use Commission (LUC) under HRS Section 205-1.

Section 205-2 (b) of the Land Use Law states that "Urban districts shall include activities or uses as provided by ordinances or regulations of the county within which the urban district is situated." The project area is within a designated Urban area.

4.3.6 Hawaii Coastal Zone Management (CZM) Program

The Hawaii CZM Program was established in 1977 as a result of the CZM Act of 1972 and federal CZM Program. The objectives and policies of the Hawaii CZM Program, which are intended to manage, develop, and protect resources of the coastal zone, are set forth in HRS Chapter 205A. The CZM area is defined as all lands of the State and all waters extending to the limits of the State's jurisdiction. The State DBEDT, Office of Planning is the lead agency responsible for conducting a continuing review of actions by State and county agencies for compliance with HRS 205A. Key objectives and policies of the CZM statute are related to recreational resources, historic resources, scenic and open space resources, coastal ecosystems, economic uses, coastal hazards, managing development, public participation, beach protection, and marine resources.

The Proposed Action actively supports the objectives associated with economic use outlined in the CZM Program. The CZM Program mandates requirements associated with the location of the development of facilities, harbors, ports, and coastal related/dependent facilities and that they are designed to minimize negative impacts to the natural and human environment and are appropriately located in areas designated for use of this type. Located within an existing developed harbor facility, the Proposed Action actively supports these goals, as described in the following table.

Table 8. Coastal Zone Management – HRS Chapter 205A

SECTION	CHAPTER 205A - 2 Objectives and Policies	RATING
A = ACTIVELY SUPPORTS **C**= CONFORMS **F** = FAILS TO MEET PLAN GOAL **NA** = GOAL IS NOT APPLICABLE		
(1)	**Recreational Resources**	
	Provide coastal recreational opportunities accessible to the public.	NA
	Improve coordination and funding of coastal recreational planning and management.	NA
	Provide adequate, accessible, and diverse recreational opportunities in the coastal zone management area.	NA
(2)	**Historic Resources**	
	Protect, preserve, and, where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.	C
	Identify and analyze significant archaeological resources.	A
	Maximize information retention through preservation of remains and artifacts or salvage operations.	A
	Support state goals for protection, restoration, interpretation, and display of historic resources.	C
(3)	**Scenic and Open Space Resources**	
	Protect, preserve, and, where desirable, restore or improve the quality of coastal scenic and open space resources.	C
	Identify valued scenic resources in the coastal zone management area.	NA
	Ensure that new developments are compatible with their visual environment by designing and locating such developments to minimize the alteration of natural landforms and existing public views to and along the shoreline.	C
	Preserve, maintain, and, where desirable, improve and restore shoreline open space and scenic resources.	C
	Encourage those developments that are not coastal dependent to locate in inland areas.	NA
(4)	**Coastal Ecosystems**	
	Protect valuable coastal ecosystems, including reefs, from disruption and minimize adverse impacts on all coastal ecosystems.	C
	Exercise an overall conservation ethic, and practice stewardship in the protection, use, and development of marine and coastal resources.	C
	Improve the technical basis for natural resource management.	NA
	Preserve valuable coastal ecosystems, including reefs, of significant biological or economic importance.	C
	Minimize disruption or degradation of coastal water ecosystems by effective regulation of stream diversions, channelization, and similar land and water uses, recognizing competing water needs.	NA
	Promote water quantity and quality planning and management practices that reflect the tolerance of fresh water and marine ecosystems and maintain and enhance water quality through the development and implementation of point and nonpoint source water pollution control measures.	NA

SECTION	CHAPTER 205A - 2 Objectives and Policies	RATING
A = ACTIVELY SUPPORTS **C**= CONFORMS **F** = FAILS TO MEET PLAN GOAL **NA** = GOAL IS NOT APPLICABLE		
(5)	**Economic Uses**	
	Provide public or private facilities and improvements important to the State's economy in suitable locations.	A
	Concentrate coastal dependent development in appropriate areas.	A
	Ensure that coastal dependent development such as harbors and ports, and coastal related development such as visitor industry facilities and energy generating facilities, are located, designed, and constructed to minimize adverse social, visual, and environmental impacts in the coastal zone management area.	A
	Direct the location and expansion of coastal dependent developments to areas presently designated and used for such developments and permit reasonable long-term growth at such areas, and permit coastal dependent development outside of presently designated areas when: (i) Use of presently designated locations is not feasible; (ii) Adverse environmental effects are minimized; and (iii) The development is important to the State's economy.	A
(6)	**Coastal Hazards**	
	Reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.	NA
	Develop and communicate adequate information about storm wave, tsunami, flood, erosion, subsidence, and point and nonpoint source pollution hazards.	NA
	Control development in areas subject to storm wave, tsunami, flood, erosion, hurricane, wind, subsidence, and point and nonpoint source pollution hazards.	C
	Ensure that developments comply with requirements of the Federal Flood Insurance Program.	C
	Prevent coastal flooding from inland projects.	NA
(7)	**Managing Development**	
	Improve the development review process, communication, and public participation in the management of coastal resources and hazards.	C
	Use, implement, and enforce existing laws effectively to the maximum extent possible in managing present and future coastal zone development.	C
	Facilitate timely processing of applications for development permits and resolve overlapping or conflicting permit requirements.	NA
	Communicate the potential short and long-term impacts of proposed significant coastal developments early in their life cycle and in terms understandable to the public to facilitate public participation in the planning and review process.	C
(8)	**Public Participation**	
	Stimulate public awareness, education, and participation in coastal management.	C
	Promote public involvement in coastal zone management processes.	C

SECTION	CHAPTER 205A - 2 Objectives and Policies	RATING
A = ACTIVELY SUPPORTS **C**= CONFORMS **F** = FAILS TO MEET PLAN GOAL **NA** = GOAL IS NOT APPLICABLE		
	Disseminate information on coastal management issues by means of educational materials, published reports, staff contact, and public workshops for persons and organizations concerned with coastal issues, developments, and government activities.	C
	Organize workshops, policy dialogues, and site-specific mediations to respond to coastal issues and conflicts.	NA
(9)	**Beach Protection**	
	Protect beaches for public use and recreation.	NA
	Locate new structures inland from the shoreline setback to conserve open space, minimize interference with natural shoreline processes, and minimize loss of improvements due to erosion.	NA
	Prohibit construction of private erosion-protection structures seaward of the shoreline, except when they result in improved aesthetic and engineering solutions to erosion at the sites and do not interfere with existing recreational and waterline activities.	NA
	Minimize the construction of public erosion-protection structures seaward of the shoreline.	C
	Prohibit private property owners from creating a public nuisance by inducing or cultivating the private property owner's vegetation in a beach transit corridor.	NA
	Prohibit private property owners from creating a public nuisance by allowing the private property owner's unmaintained vegetation to interfere or encroach upon a beach transit corridor.	NA
(10)	**Marine Resources**	
	Promote the protection, use, and development of marine and coastal resources to assure their sustainability.	C
	Ensure that the use and development of marine and coastal resources are ecologically and environmentally sound and economically beneficial.	C
	Coordinate the management of marine and coastal resources and activities to improve effectiveness and efficiency.	C
	Assert and articulate the interests of the State as a partner with federal agencies in the sound management of ocean resources within the United States exclusive economic zone.	NA
	Promote research, study, and understanding of ocean processes, marine life, and other ocean resources in order to acquire and inventory information necessary to understand how ocean development activities relate to and impact upon ocean and coastal resources.	NA
	Encourage research and development of new, innovative technologies for exploring, using, or protecting marine and coastal resources.	NA
CONFORMANCE DETERMINATION: The Proposed Action conforms to and supports HRS Section 205A-2 since development of redundant fuel on-/off-loading facility and fuel line will advance the economic uses objectives and policies of the CZM law and will follow best management practices to protect the coastal and marine environments.		

NOTE: In HRS 205A, objectives are listed for each topic, and the policies are listed separately, by the same topic order. In the above table, they are combined.

4.3.7 Hawaii Ocean Resources Management Plan

The Hawaii Ocean Resources Management Plan (ORMP), updated in July 2013, sets forth guiding principles and recommendations for the state to achieve comprehensive and integrated ocean and coastal resources management. The Office of Planning CZM Program is responsible for the review and update of the ORMP as well as with the coordination of the overall implementation of the plan.

The 2013 ORMP has established 13 Management Priorities under three Perspectives as follows:

<u>Perspective 1: Connecting Land and Sea</u>

Management Priority #1 Appropriate Coastal Development

Management Priority #2 Management of Coastal Hazards

Management Priority #3 Watershed Management

<u>Perspective 2: Preserving our Ocean Heritage</u>

Management Priority #4 Marine Resources

Management Priority #5 Coral Reef

Management Priority #6 Ocean Economy

Management Priority #7 Cultural Heritage of the Ocean

<u>Perspective 3: Promoting Collaboration and Stewardship</u>

Management Priority #8 Training, Education, and Awareness

Management Priority #9 Collaboration and Conflict Resolution

Management Priority #10 Community and Place-Based Ocean Management Projects

Management Priority #11 National Ocean Policy and Pacific Regional Ocean Initiatives

The goals of Management Priorities #1 and #6 have relevance to the Proposed Action.

MANAGEMENT PRIORITY #1, GOAL C: Expand options to protect existing developments from further coastal erosion.

RESPONSE: The Proposed Action would involve waterfront improvements within an established commercial harbor. The waterfront of the project site is currently subject to significant coastal erosion, but the KCT Project and associated planned pier improvements where this fuel pipeline project would be located, would effectively negate shoreline erosion at the project site, as the shoreline will be developed into an established concrete pier face. The design of the waterfront improvements must be approved by State of Hawaii Department of Transportation, and meet Harbors Division requirements.

MANAGEMENT PRIORITY #6, GOALS C AND D: Ensure healthy shipping and tourism industries that use ocean and coastal resources sustainably.

RESPONSE: The Proposed and Alternative Actions would utilize an existing harbor and utility easement space to bolster the reliability, robustness, and resiliency of jet fuel on-/off-loading in

Hawaii, which currently fuels much of the tourism and shipping industries in Hawaii. These industries will be more secure as a result of this project. Utilizing existing developed coastal areas (the Honolulu Harbor and planned Pier 43) is a more sustainable choice than developing an undeveloped area. The various protocols that will be in place to ensure safety and protect from material release supports sustainable ocean use in this commercially/industrially developed area.

4.3.8 HRS Chapter 6E, Historic Preservation

HRS Chapter 6E-8 states that "[b]efore any agency or officer of the state or its political subdivisions commences any project which may affect historic property, aviation artifact, or a burial site, the agency or officer shall advise the department (Department of Land and Natural Resources [DLNR], SHPD) and allow the department an opportunity for review of the effect of the Proposed Action on historic properties, aviation artifacts, or burial sites especially those listed on the Hawaii register of historic places. The Proposed Action will not be commenced until the department provides its written concurrence." The State Historic Preservation Division (SHPD) was provided an opportunity to review, and MNA received comments on the Draft EA for this project.

4.3.9 Hawaii Water Pollution Law

The Hawaii Water Pollution Law, which provides a comprehensive regulatory program for discharges of pollution to the waters of Hawaii, establishes the National Pollutant Discharge Elimination System (NPDES) permit program required under CWA, as amended. Permits covered under this program are issued by HDOH. HDOH is responsible for reviewing and approving project compliance with HRS Chapter 342D (water pollution), HAR Chapter 11-55 (Water Pollution Control), and HAR Chapter 11-54 (Water Quality Standards).

The Proposed Action would not discharge water to Honolulu Harbor or other surface waters. The Proposed Action's soil disturbance footprint is greater than one acre, and as a result, would require an NPDES Permit.

4.3.10 Plans for Development of the Honolulu Waterfront

Honolulu grew as an island port town, and the waterfront is the city's face to the world, the linchpin of all industrial activity and transportation, and an important recreational resource. Jurisdiction over the waterfront is shared by the U.S. Coast Guard, State agencies (DOT-HAR and DOT-Airports [DOT-A], Hawaii Community Development Authority [HCDA], Aloha Tower Development Corporation), and the City. During the past 30 years, multiple planning documents have been prepared in support of smart development for the anticipated population growth and increased demand for mobility of people and goods.

4.3.10.1 Honolulu Waterfront Master Plan

The Honolulu Waterfront Master plan was produced for the Governor's Office of State Planning in 1989 (State of Hawaii Office of Planning, 1989).

<u>Goals of the Plan</u>

The purpose of the Honolulu Waterfront Master Plan was three-fold:

- To identify and articulate "a long-range vision for the Honolulu Waterfront that is fiscally responsible but also innovative, challenging and responsive to the current and future needs of Hawaii's residents"
- To assure orderly and achievable phasing of improvements in a way that minimizes disruption
- To maximize public benefits associated with the improvement of State-owned lands

The Waterfront Plan treats maritime uses as a first priority, but also deals extensively with recreational uses and urban development.

Conformance with the Plan

The goal of the Proposed Action is responsive to the ever-increasing need to transport goods and people throughout the Hawaiian Islands. Phasing construction of this project with the adjacent Kapalama Container Terminal development project is aligned with the Honolulu Waterfront Master Plan's goal of phasing improvements in a way that minimizes disruption.

4.3.10.2 Oahu Commercial Harbors 2020 Master Plan

The DOT-HAR developed long-term master plans for its facilities serving each of the major islands of the state. The 2020 Master Plan for Oahu dealt with Honolulu Harbor, Barbers Point Harbor, and Kewalo Basin. It was developed by planning groups comprised of agency representatives and maritime stakeholders, after a technical study of port facilities requirements. It was approved by the Governor in 1997, with the explicit support of the Hawaii directors of Transportation; Budget and Finance; Business, Economic Development, and Tourism; Health; and Land and Natural Resources.

Goals of the Plan

Objectives of the plan were to:

- Plan development of Oahu's commercial harbors, facilitating maritime shipments for the state and its people
- Optimize the use of land and water resources for marine cargo, passenger, and fishing
- Provide terminals, other resources, and access to serve the port system in an efficient, safe and secure manner
- Minimize impacts on environmental quality and recreational opportunities

The recommended plan covered 20 major topics, all related to the development and use of the commercial harbors on Oahu in support of the growing population and increased demand.

Conformance with the Plan

The Proposed Action conforms with all goals of the 2020 Master Plan. The 2020 Plan promotes harbor development and improvements as a method of improving harbor activity efficiency and resiliency should emergency situations arise. The Plan also addresses the need for improvements within liquid bulk cargo terminals within the harbors. The new pipeline increases resiliency and

robustness of the jet fuel on-/off-loading that facilitates air cargo shipping. As an already industrialized area specifically planned for use associated with the movement of goods, this planned pipeline is optimal in this area to serve the port system as an additional service offered with a modern, safe, and secure facility that supports the efficient movement of goods and people. By revitalizing Pier 43, the Proposed Action conforms to the objective of optimizing the use of land resources.

4.3.11 Summary of Required State Permits and Approvals

Following is a summary list of State government permits and approvals that may be required for implementation of the Proposed Action (approving agency in parenthesis):

- Department of Transportation Approvals
    - DOT-HWY: Approval
    - DOT-HWY: Use and Occupancy Agreement
    - DOT-HWY: Lane Use/Occupancy Permit
    - DOT-HWY: Landscaping within Highway ROW
    - DOT-HWY: Routine Construction/Excavation within a State Highway
    - DOT-HWY: Permit to Discharge into the State Highways Drainage System
    - DOT-HAR: Construction Right-of-Entry
    - DOT-HAR: Hot Works Permit
- Chapter 6e Historic Preservation Review
- Department of Health (HDOH)
    - HDOH Clean Water Branch: National Pollutant Discharge Elimination System (NPDES) Permit (likely Appendices C, F, and G)
    - Indoor and Radiological Health Branch: Noise Permit
    - Solid and Hazardous Waste Branch: Solid Waste Permit

4.4 Relationship to Local Plans and Ordinances

State law and county charter require each county to prepare and adopt a long-range general plan to guide the overall future development of the county. HRS Chapter 46 grants the counties certain powers and responsibilities. Among them is the power to regulate land development through zoning, which must be based on a general plan.

A plan usually provides guidance for land use regulations, the location and character of new development and facilities, and planning for county and State facilities and services. Updates of a general plan occur from time to time, and the document becomes law through the adoption of an ordinance by the county council. Ordinances usually amend, repeal, or supplement the municipal code, provide zoning specifications, or appropriate money for specific purposes.

In addition, each county prepares plans at the regional level. These plans are intended to establish more detailed policies, strategies, and implementing actions in support of the general plans. Evaluations of the county general plans in this section are followed by discussion of the appropriate regional plan.

4.4.1 General Plan for Oahu (1992 Edition, amended in 2002)

Of the following sections contained in Oahu's General Plan, Section 2 - Economic Activity, and Section 5 - Transportation and Utilities will be discussed.

1. Population
2. Economic Activity
3. Natural Environment
4. Housing
5. Transportation and Utilities
6. Energy
7. Physical Development and Urban Design
8. Public Safety
9. Health and Education
10. Culture and Recreation
11. Government Operations and Fiscal Management

The Economic Activity Section of the General Plan has seven objectives, including promoting enjoyment opportunities, maintaining the viability of Oahu's visitor and agricultural industries, making full use of the economic resources of the sea, preventing large scale unemployment, increasing federal spending on Oahu, and bringing about orderly economic growth on Oahu. The new proposed pipeline conforms with this Section by maintaining viable visitor and agricultural industries through reinforcing the jet fuel supply resilience, reliability, and redundancy to the HIA and outer island airports.

The Transportation and Utilities Section of the General Plan has four objectives, including creating a transportation system which enables people and goods to move safely, efficiently, and at a reasonable cost; facilitating the development of a second deep-water harbor to relieve congestion in Honolulu Harbor; maintaining a high level of service for all utilities; and maintaining transportation and utility systems which will help Oahu to continue to be a desirable place to live and visit. The Proposed Action conforms with this Section by providing resiliency, reliability, and redundancy of the jet fuel supply to support safe, efficient, and cost effective movement of people and goods. Currently, the two on-island refineries, PAR Hawaii Refinery (formerly Tesoro) and One Rock Capital (formerly Chevron), are not able to meet the current demand for jet fuel. Therefore, one off-loading terminal was established at HFFC's Pier 51. This proposed new fuel delivery system will help to maintain an efficient jet fuel utility.

The City Department of Planning and Permitting (DPP) has begun a "focused update" process for the General Plan. The update will deal with objectives and policies related to Oahu's overall growth, the economy, affordable housing, and sustainability. No specific changes in policy have been proposed. The Proposed Action conforms to the vision and goals of the City General Plan as a means to support continuing economic growth for Oahu.

4.4.2 Primary Urban Center Development Plan (2004)

The Primary Urban Center (PUC) Development Plan (2004), covering the Honolulu Harbor area, is one of eight regional plans based on the Oahu General Plan that establish more detailed policies to shape growth in the urban core of the island. The PUC Development Plan identifies five major vision elements:

- Honolulu's natural, cultural, and scenic resources are protected and enhanced.
- Livable neighborhoods have business districts, parks and plazas, and walkable streets.
- The Primary Urban Center offers in-town housing choices for people of all ages and incomes.
- Honolulu is the Pacific's leading city and travel destination.
- A balanced transportation system provides excellent mobility.

The Proposed Action addresses the fourth of these elements, including the following specific actions named in the plan as implementing that element:

- Enhance Honolulu Harbor and harbor-related uses: Reserve lands adjacent to the harbor for harbor-related uses.

Based on the Land Use Maps, the existing HFFC Fuel Facility is situated on a designated *Parks and Open Space*, adjacent to the Keehi Lagoon Park. The proposed jet fuel line and on-/off-loading facility is located on designated *Industrial* land in the project area along the planned Pier 43 and east of Sand Island Access Road. The Proposed Action conforms to the *Industrial* land use within the Primary Urban Center Development Plan, but is not in conformance with the *Parks and Open Space* land use area, within the HFFC Fuel Facility.

The *Industrial* designation includes Honolulu Harbor, HIA, and the State-owned lands around Honolulu Harbor and Sand Island support cargo handling and port facilities. HIA consists of airfields linked to Joint Base Pearl Harbor-Hickam, aircraft maintenance facilities, and terminals for passengers and cargo.

The *Parks and Open Space* includes land areas such as golf courses, regional and district parks, botanical gardens and zoological parks. Community neighborhood and miniparks are also included as part of the open space system. The PUC outlines land use designations throughout the primary urban center. The land use designations are classified based on a desired character of the area and not its specific current use. Given its existing land use as an industrialized area, the Proposed Action does not directly conflict with the planned *Parks and Open Space* designated areas.

HFFC's facilities are critical to supporting the airline industry, which in turn is critical in supporting the tourism industry and ultimately supports one of the PUC's vision elements: Honolulu as the Pacific's leading city and travel destinations. The Proposed Action is an enhancement to Honolulu Harbor and supports continued industrial and commercial uses in designated areas.

4.4.3 City Land Use Ordinance

The project site is designated as Zone I-3, Waterfront Industrial.

Section 21-3.130 ROH "Zoning District Classifications and Map Designations" states the following:

> The intent of the I-3 waterfront industrial district is to set apart and protect areas considered vital to the performance of port functions and to their efficient operation. It is the intent to permit a full range of facilities necessary for successful and efficient performance of port functions. It is intended to exclude uses which are not only inappropriate but which could locate elsewhere.

The Proposed Action is an expansion of an existing facility and supports efficient and successful port function associated with an existing vital use. Therefore, it is consistent with the intended use of Zone I-3, Waterfront Industrial.

4.4.4 Special Management Area

Although the Special Management Areas (SMA) originated under the federal CZM and Hawaii CZM Programs, the counties in Hawaii regulate and administer the SMAs in their respective jurisdictions. The City and County of Honolulu has designated the shoreline and certain inland areas of Oahu as being within the SMA. SMA areas are designated sensitive environments that should be protected in accordance with the State's CZM policies, as outlined in ROH Section 25, Shoreline Management, and HRS Section 205A, Coastal Zone Management. The SMA in Honolulu Harbor is along the coastline seaward of Sand Island Access Road and inland boundary of Sand Island (Figure 10). Only the portion of the Proposed Action that is on the seaward side of Sand Island Access Road is within the SMA. The aboveground portion of the proposed jet fuel line will be less than 3 feet in height above ground surface and along existing utility corridors and therefore meets the definition of an aboveground appurtenance to an underground utility system, and is therefore exempt from permit requirements.

4.4.4.1 SMA, Chapter 25, ROH

The potential effects of the Proposed Action are evaluated based on the review guidelines in the ROH, Section 25-3.2. The following is a discussion of the applicability of the guidelines to the planned construction Kapalama Terminal Jet Fuel Line.

(a) All development in the special management area shall be subject to reasonable terms and conditions set by the council to ensure that:

(1) Adequate access, by dedication or other means, to publicly owned or used beaches, recreation areas and natural reserves is provided to the extent consistent with sound conservation principles;

The Proposed Action site is located within an existing utility easement and the planned Pier 43 at the Kapalama Container Terminal. Access to beaches and the Sand Island State Recreation Area will not be affected by project activities or operation of the pipeline.

(2) Adequate and properly located public recreation areas and wildlife preserves are reserved;

The Proposed Action consists of improvements within an existing functional transportation corridor and utility easement and within the planned Kapalama Container Terminal. Public recreation areas and wildlife preserves will not be affected by project activities or operation of the underground fuel delivery system.

(3) Provisions are made for solid and liquid waste treatment, disposition and management which will minimize adverse effects upon special management area resources; and,

Construction activities will not generate a significant quantity of wastewater. Construction personnel will be provided with Port-a-Johns. There is potential for soil within the project site to be contaminated with total petroleum hydrocarbons; however, there will be more fill than excavated soils onsite. Construction and use of the Proposed Action will not disrupt or otherwise adversely affect wastewater systems.

Construction activities will result in the generation of small amounts of construction and demolition debris. Construction and demolition debris will be managed appropriately and disposed of at a landfill on-island in accordance with the City and County of Honolulu and the HDOH regulations and provisions of the landfill permits.

(4) Alterations to existing land forms and vegetation; except crops, and construction of structures shall cause minimum adverse effect to water resources and scenic and recreational amenities and minimum danger of floods, landslides, erosion, siltation or failure in the event of earthquake.

The new fuel pipe is being constructed within an existing utility easement along Sand Island Access Road and at the planned Pier 43. BMPs will be undertaken during construction activities to ensure that silt and dust will not escape the project site during ground disturbing activities. Construction spoils will be tested to ensure proper soil management per relevant and applicable regulation. Other than during construction, there will be no major alteration to the existing landforms and vegetation at the project site.

The Proposed Action will be consistent with the industrial character of the existing facilities. Being mostly underground, the proposed facility will not be visible or apparent. The aboveground infrastructure would be within the HFFC Fuel Facility, and would be consistent with the character of that facility. The visual impact created by the new facility is not anticipated to reduce or impede views from urban Honolulu and surrounding areas. The development of the project will be

consistent with the zoning designation and any significant adverse visual impacts are not anticipated.

(b) No development shall be approved unless the council has first found that:

(1) The development will not have any substantial, adverse environmental or ecological effect except as such adverse effect is minimized to the extent practicable and clearly outweighed by public health and safety, or compelling public interest. Such adverse effect shall include, but not be limited to, the potential cumulative impact of individual developments, each one of which taken in itself might not have a substantial adverse effect and the elimination of planning options;

The Proposed Action is not anticipated to involve a substantial degradation of environmental quality. The site has long been developed and in use as part of Honolulu Harbor. Planning and design for the project includes mitigation measures to prevent or minimize potential adverse environmental effects in an unlikely event of an equipment malfunction. The Proposed Action will not result in cumulative impacts, will not involve a commitment to larger actions, and will not result in the elimination of planning options.

(2) The development is consistent with the objectives and policies set forth in Section 25-3.1 and area guidelines contained in HRS Section 205A-26;

The project is in compliance with the objectives and policies set forth in Chapter 205A-2, HRS, and SMA guidelines contained in Chapter 205-A26, HRS. This document is prepared to summarize the project effects in relation to the SMA guidelines in Section 205A-26, HRS, and Section 25, ROH. See Section 4.4.4 for discussion of the project's compliance with the State's objectives and policies for the Coastal Zone.

(3) The development is consistent with the county general plan, development plans and zoning. Such a finding of consistency does not preclude concurrent processing where a development plan amendment or zone change may also be required.

The project is in conformance with the General Plan objectives for Transportation and Utilities, as described in Section 4.4.1. The County zoning designation for the project site is I-3, Waterfront Industrial. The project conforms with the Development Plan for the Primary Urban Center, as described in Section 4.4.2.

(c) The council shall seek to minimize, where reasonable:

(1) Dredging, filling or otherwise altering any bay, estuary, salt marsh, river mouth, slough or lagoon;

The Proposed action does not involve filling or otherwise altering any water body. The Proposed Action does, however, rely on the construction and associated dredging planned as part of the development of the Kapalama Container Terminal. The area is within a heavily used harbor facility, and any dredging requirement for the KCT Project will be consistent with the regulations set forth for this area.

(2) Any development which would reduce the size of any beach or other area usable for public recreation;

The project site is located within the existing utility easement along Sand Island Access Road and within the planned KCT Project boundaries, which does not affect any beach or other area usable for public recreation.

(3) Any development which would reduce or impose restrictions upon public access to tidal and submerged lands, beaches, portions of rivers and streams within the special management area and the mean high tide line where there is no beach;

The Proposed Action is not located where it would reduce or impose restrictions upon public access to any shoreline areas or surface waters.

(4) Any development which would substantially interfere with or detract from the line of sight toward the sea from the state highway nearest the coast; and

The new proposed pipeline will not interfere with or detract from the line of sight from Sand Island Parkway toward the ocean. Most of the finished project will be subgrade. Any project aspects that are required to be aboveground would be within an existing fuel storage facility.

(5) Any development which would adversely affect water quality, existing areas of open water free of visible structures, existing and potential fisheries and fishing grounds, wildlife habitats, or potential or existing agricultural uses of land.

The project site is located within an existing, developed industrial area within Honolulu Harbor and along Sand Island Access Road. Project construction would conform to all construction requirements regarding storm water management, ensuring project construction does not affect water quality. Being located within an existing utility easement, fueling facility and planned container terminal, the project will not adversely affect water quality, existing areas of open water free of visible structures, existing and potential fisheries and fishing grounds, wildlife habitats, or potential or existing agricultural uses of land.

4.4.5 Shoreline Setback

In addition to the SMA authorized under the CZM Act and HRS, Chapter 205A, there is also a statewide shoreline setback regulation that generally prohibits within the shoreline setback area any construction or activity that may adversely affect beach processes, public access along the shoreline, or shoreline open space. DLNR is vested with the authority to determine the location of the shoreline, and the counties are authorized to enforce the land use restrictions in the setback areas.

Existing records at the State Survey Office indicate that the shoreline (for shoreline setback purposes) is located at the mouth of Honolulu Harbor. The shoreline follows the edge of Kalihi Channel to the seaward edge of the Sand Island Access Road bridge. It crosses Kalihi Channel along the bridge's seaward edge and then comes back out on the opposite side of the channel following the shoreline of Sand Island. The proposed fuel line corridor is located on the opposite side of the Sand Island Access Road bridge within Honolulu Harbor and outside of the shoreline setback area.

Legend and Notes

- Proposed Project Area Boundary
- Parcel Boundary
- Special Management Area

N

Scale

150 feet

Myounghee Noh &
Associates, L.L.C.

Figure 10. SMA Boundary in the Project Area
HFFC Kapalama Terminal Jet Fuel Line
TMK (1)-1-025:017, :020, :021
Kapalama, Island of Oahu

5.0 CUMULATIVE AND SECONDARY IMPACTS

5.1 Introduction

Cumulative impacts result when implementation of several projects that individually have limited impacts combine to produce more severe impacts or conflicts in mitigation measures. They can result from individually minor but collectively significant actions taking place over a period of time. The assessment of cumulative impacts is a required as part of the environmental impact assessment process as per HAR 11-200.

Secondary, or indirect, impacts may occur later in time or farther in distance than direct impacts, but are still reasonably foreseeable.

5.2 Actions and Projects Considered in the Cumulative Impact Analysis

A review of the Office of Environmental Quality Control (OEQC) EA/EIS online library revealed a number of past, ongoing, or future projects in the vicinity of the Proposed Action (Figure 11). Most relevant in the context of cumulative impact analysis are the following handful of Honolulu Harbor improvement projects:

- The New Kapalama Container Terminal Design at Honolulu Harbor, Oahu, Job H.C. 10502, is planned for construction FY 17 – 19. The Proposed Action's budget is about 1% of that of just the Container Yard portion of the KCT Project, with $255 million allocated to this use of the former Kapalama Military Reservation (KMR) for FY 17.
- The New Kapalama Container Terminal Wharf and Dredging at Honolulu Harbor, Oahu, Job H.C. 10498.
- Kapalama Weigh Station is planned for construction in Spring 2019.
- Honolulu Harbor Piers 24-29 Subdivision. DEA published January 2017.
- University of Hawaii Marine Center Relocation to Piers 34 and 35, Honolulu Harbor. Project completed March 2016. UH Marine Center relocated from the KCT Project project area.
- Pier 12 + Pier 15 Improvements, Oil Spill Response Vessel Piers, Honolulu Harbor, FEA published July 2013. Berthing and mooring structure improvements to accommodate two spill response boats and one spill response barge.
- Matson Cranes and Related Electrical Upgrades at Piers 51 B/C, 52, and 53 include the removal of four of the seven existing cranes and replacement with three to four new cranes. The new cranes will be able to service new vessels that the outdated are not able to. Upgrades to the electrical and civil infrastructure will be implemented to accommodate new cranes (Wilson Okamoto Corporation, 2017).

The projects listed above illustrate a long-term strategy of improvement to Honolulu Harbor facilities. This strategy was articulated in the Oahu Commercial Harbors 2020 Master Plan, which

described construction of Piers 42 and 43, and use of this area and the former Kapalama Military Reservation, for overseas container use (HDOT-Harbors, 1997).

5.3 Analysis of Cumulative Impacts

Implementation of the projects included in the cumulative impact analysis would likely reduce regulated air pollutant emissions within Honolulu Harbor for long-term operational usage, as described below. With modernization, improved operational handling and transportation, efficiencies are expected to increase. This, in addition to the use of newer technology and equipment associated with the Proposed Actions will also facilitate in reducing air pollutant emissions.

One newer technology that will be implemented is cold ironing. Cold ironing will allow vessels at port to draw power from an electrical source and shut down its engine, reducing long-term operational air pollutant emissions. During the construction phase of these projects, it is possible that air pollutant emissions may temporarily increase, although these temporary increases will be off-set by the long-term reduction of air pollutant emissions. Additionally, construction phase activities and operational activities will be compliant with existing air pollution control rules and regulations.

During the construction phase of these projects, it is likely that noise levels will temporarily increase. These increases would be to the immediate localized area and cumulatively would contribute little to no increase in the overall noise levels to the larger Honolulu Harbor area. Operational noise of these projects would be minimal due to the industrial nature of Honolulu Harbor. Noise levels during construction and operation are not expected to exceed HDOH regulations.

Cumulative impacts to geology and topography, soils, and hydrology and hydrogeology will be minimal or not present as Honolulu Harbor is industrial in use and is currently developed. Areas to be impacted have previously been developed; therefore, no additional adverse cumulative impacts regarding geology and hydrogeology are expected. The Proposed Actions will mostly exist in previously paved or graded areas and as a result, there will likely be little increase in impervious surfaces. Cumulatively, the Proposed Actions pose little to no change in the reduction to infiltration to groundwater. Additionally, the underlying aquifer is not considered a drinking water source. During construction phase, there is some potential for an increase in storm water runoff. Storm water runoff has the potential to discharge pollutants into Honolulu Harbor. This will be minimized though NPDES permits and establishing BMPs during construction until permanent BMPs are in place for operational use.

Cumulative impacts to terrestrial flora and fauna are expected to be minimal as the projects utilize previously developed land. As a result, no reduction in habitat for flora or fauna is expected. The spread of invasive species or introduction of new invasive species does pose a threat to native and endemic flora and fauna species in the Hawaiian Islands, as the increase in ship traffic provides a pathway for these migrations. Management measures and programs are currently in place and will continue to be followed. The Hawaii Department of Agriculture (HDOA) implements the biosecurity program at the state level. Multiple federal, state, county, and other agencies play

Legend and Notes

1. Kapalama Terminal - Landside
2. Kapalama Terminal - Pierside
3. University of Hawaii Marine Center Relocation Piers 34 & 35 Honolulu Harbor
4. Matson Cranes and Related Electrical Upgrades at Piers 51 B/C, 52 & 53
5. Honolulu Harbor Pier 12-15 Improvements
6. Honolulu Harbor Piers 24-29 Subdivision
7. Kapalama Weigh Station

Scale
500 feet

Myounghee Noh & Associates, L.L.C.

Figure 11. Projects Considered In The Cumulative Impact Analysis
HFFC Kapalama Terminal Jet Fuel Line
TMK (1)-1-025:017, :020, :021
Kapalama, Island of Oahu

important roles in supplementing prohibition of the spread of invasive species through regulations and enforcement. In addition to following established protocol, a biosecurity facility will be developed as part of the proposed KCT construction plans. The facility is planned in 2.5 acres within the proposed KCT project next to the HDOA's existing facility and includes inspection bays and a treatment area building (Belt Collins Hawaii, LLC, 2014). This expansion will improve intervention efforts and will overall reduce the cumulative impacts of terrestrial invasive species.

Cumulative impacts to marine resources are likely during the construction phase of the KCT Project in the form of dredging and filling, although the construction of the pipeline and valve pit of this project has little potential to contribute to these impacts. Operational use may pose adverse cumulative impacts to marine resources in the form of introduced species and/or the spread of invasive species due to increased vessel traffic. Invasive marine species are most common in ballast water (Belt Collins Hawaii, LLC, 2014). Established regulations prevent the discharge of ballast water.

Cultural cumulative impacts would be unlikely, as historical fishponds in the area were filled in decades ago. Additionally, cultural recreational activities such as fishing and outrigger canoe paddling are not permitted in the area of the Harbor surrounding the Proposed Actions. Recreational facilities are unlikely to be cumulatively impacted as recreation use of the area is not permitted. Damage to inadvertently discovered archaeological resources is mitigated through the use of archaeological monitors during ground disturbance.

Socio-economic cumulative impacts during construction phases will include job growth and economic throughput from the purchase of construction goods and services. Long-term operational cumulative impacts will be job growth opportunities associated with the increased import of goods. Overall, the socio-economic impacts of the proposed surrounding projects would be net positive.

There are short term cumulative impacts to public services and facilities in the form of increased traffic and lane closures during the construction phases of the Proposed Actions. Lane closures will occur only after applicable permits are obtained and coordination with HDOT is conducted. Approved traffic control plans will detail notification to public utilities including police, fire, and medical services to anticipate and avoid traffic delays should an emergency occur. Operational impacts are expected to be minimal as there will not be a high net gain in traffic flow and no changes in traffic flow that would impact emergency services. Cumulative impacts associated with infrastructure and utilities are expected to be minimal, as the area is currently serviced by public utilities and no significant increases in utility demands are anticipated as the project area is already industrial in use.

Cumulative impacts to public health and safety are associated with the increased risk of releases of hazardous materials and an increased explosion and fire risk. Construction activities have little potential to impact public health and safety, as the public will not be allowed in areas where construction is occurring and construction will be conducted in accordance with applicable rules and regulations to ensure safety. There is little to no potential for the public to be affected by soil and groundwater contaminant exposure during construction activities. If contaminated soil is encountered during construction it will be managed as contaminated and controlled; only clean

soil will be imported for fill, if required. Additionally, all underground utilities will be toned and marked prior to earthwork, which greatly reduces the potential for construction to pose an explosion or fire hazard. Long-term impacts associated with operational use include the increased risk of release of hazardous materials and the potential for that to impact marine resources. These risks will be minimized by following applicable rules and regulations and the implementation of operational BMPs. Should a release occur, SPCC plans would be implemented. Additionally, the area is currently industrial in use, and historic uses / releases of hazardous materials have occurred, adversely impacting soil and groundwater.

It should be noted and observed that the Proposed Action, if included in the Kapalama Container Terminal and Tenant Relocations EIS, would be a very minor component of the KCT Project. The Proposed Action is a negligible component of the total cumulative and secondary impacts due to the Harbor improvement projects listed above. Furthermore, the cumulative impacts of the Proposed Action and the Harbor improvement projects listed above would not appear to be adverse, as the area of cumulative impacts has already been developed for industrial uses, and they simply continue the long-term trend of improving Harbor facilities.

5.4 Secondary Impacts

A potential indirect/secondary impact of the Proposed Action could result if fuel loading/unloading caused interruptions/delays in cargo loading/unloading, which in turn could have adverse secondary/indirect economic impacts on the businesses that rely on those timely cargo shipments. Per HAR 19-42-89 preference in the use of piers in Honolulu Harbor shall be given to vessels loading or unloading shipping containers. Furthermore, it is anticipated that the HRTF recommended prioritization process will be developed and implemented to support the increase in jet fuel delivery and additional uses planned for the KCT Project area.

There will be secondary beneficial impacts to the aviation industry including the assurance that sufficient jet fuel will be available to meet the increasing demand that on-island refineries are not capable of meeting.

Another secondary impact would be that increased transportation efficiency would increase both visitors and goods coming into the state. This increase equates to more waste. Because of the limited landfill space, a new landfill will eventually need to be developed.

Other secondary impacts would be associated with the increased efficiency of the transport of goods via air transport. This would increase the volume of exported goods out of Hawaii and between neighbor islands, resulting in an increase of jobs and increased economic throughput.

6.0 DETERMINATION

Based on the findings of this environmental assessment, it is expected that the State of Hawaii Department of Transportation Harbors Division will determine that the Proposed Action will not significantly and/or adversely affect the environment. Therefore, an Environmental Impact Statement is not warranted and the DOT-HAR will issue a Finding of No Significant Impact

(FONSI). A final determination will be made by the DOT-HAR after consideration of comments on the Draft EA.

7.0 FINDINGS AND REASONS

HAR Chapter 11-200-12 outlines the following significance criteria that agencies must consider when determining whether an action has significant effects:

1. *The project will not involve an irrevocable commitment or loss or destruction of any natural or cultural resources.* No valuable natural or cultural resources would be committed or lost. The Proposed Action is not located near native habitat or other areas of particular natural or cultural resources, nor is it located near areas recognized as being culturally significant. The Proposed Action is located in an area used for industrial and harbor uses.

2. *The project will not curtail the range of beneficial uses of the environment.* No restriction of beneficial uses would occur. The Proposed Action represents a use of the environment that would promote the economic well-being of the State of Hawaii.

3. *The project will not conflict with the State's long-term environmental policies*. The State's long-term environmental policies are set forth in HRS Chapter 344. The broad goals of this policy are to conserve natural resources and enhance the quality of life. The project is minor and fulfills aspects of these policies calling for an improved social environment and enhancement of economic diversity. Potential construction-phase adverse impacts to air and water quality would be mitigated. It is thus consistent with all elements of the State's long-term environmental policies.

4. *The project will not substantially affect the economic or social welfare of the community or state.* The project would not have any adverse effect on the economic or social welfare of the City and County of Honolulu or State of Hawaii, and would improve the economic welfare of the state by improving the robustness and reliability of fuel supply to the State's airports.

5. *The project does not substantially affect public health in any detrimental way.* The Proposed Action would not adversely affect public health in any way, and would serve to protect public health by helping to ensure that the State's airports have an adequate jet fuel supply, a potentially critical resource during a natural or other disaster. It should be noted that based on the Phase I Environmental Site Assessment completed as part of this environmental assessment, there is potential that contaminated soils will be encountered during construction. This will be mitigated through construction specifications requiring the contractor to perform personal air monitoring and soil sampling during earthwork. Being a jet fuel pipeline with on-/off-loading facility, there is potential for a spill to occur. However, that risk and the associated risk it poses to detrimentally affect public health are mitigated through the SPCC Plan and use of procedures as outlined in the Dock Operations Manual.

6. *The project will not involve substantial secondary impacts, such as population changes or effects on public facilities.* No adverse secondary effects are expected to result from the Proposed Action. The State's airports would benefit from the Proposed Action through the enhanced robustness and resilience of jet fuel supply.

7. *The project will not involve a substantial degradation of environmental quality.* The project is environmentally benign. The potential for adverse air and water quality impacts during construction would be mitigated. While an additional fuel line and on-/off-loading terminal could increase the potential for a release of petroleum hydrocarbons to the environment, the site and facility is bound to the requirements of the SPCC Plan, including stringent requirements for monitoring, testing, and spill preparedness.

8. *The project will not substantially affect any rare, threatened or endangered species of flora or fauna or habitat.* The project site supports sparse alien vegetation and some common native plant species. Common non-threatened bird species were observed at the project site. Impacts to rare, threatened, or endangered species of flora would not occur as none are present. Endangered seabirds could occur in the project area. To mitigate risk of disorientation or downing, shielded lights are recommended.

9. *The project is not one that is individually limited but cumulatively may have considerable effect upon the environment or involves a commitment for larger actions.* The Proposed Action is not related to other activities in the region in such a way as to produce adverse cumulative effects or involve a commitment for larger actions.

10. *The project will not detrimentally affect air or water quality or ambient noise levels.* No adverse effects on these resources would occur. Mitigation of construction-phase impacts by preparation and implementation of a Best Management Practices to prevent the discharge of polluted storm water runoff and an Air Quality Mitigation Plan will preserve air and water quality. Ambient noise impacts due to construction will be temporary and restricted to daytime hours. There is potential for inadvertent release of petroleum hydrocarbons to the Harbor waters. However, the site and facility are bound to the requirements of the SPCC Plan and use of procedures as outlined in the Dock Operations Manual.

11. *The project does not affect nor would it likely to be damaged as a result of being located in environmentally sensitive area such as a flood plain, tsunami zone, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal area.* The Proposed Action is located in a tsunami inundation zone, but is not likely to be damaged in the event of flooding, as a majority of the project components would be located below ground surface. The project site is built upon dredged material in a largely industrial area with increased harbor uses planned, and no major freshwater or estuarine features are associated with the area.

12. *The project will not substantially affect scenic vistas and viewplanes identified in county or state plans or studies.* The Proposed Action would not affect scenic vistas or viewplanes

as most of the project components would be constructed below ground surface, and any above the ground surface would be lower than other structures in the same area.

13. *The project will not require substantial energy consumption*. The project's construction would not demand substantial energy consumption. No adverse effects would be expected.

For the reasons above, the State of Hawaii Department of Transportation Harbors Division is expected to determine that the Proposed Action will not have any significant effect in the context of HRS Chapter 343 and HAR Section 11-200-12.

8.0 REFERENCES

ASTM International. (2013). *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.* West Conshohocken: ASTM International.

Belt Collins Hawaii LLC. (2013). *Traffic Impact Report, Kapalama Container Terminal.* Honolulu: State of Hawaii.

Belt Collins Hawaii, LLC. (2014). *Kapalama Container Terminal and Tenant Relocations Final Environmental Impact Statement.* Honolulu: Belt Collins Hawaii Ltd.

Burton, F. & Farrell, M. (2007). *World War II Japanese American Internment Sites in Hawaii.* Tucson, Arizona: Trans-Sierran Archaeological Research.

City and County of Honolulu. (2017, February 22). *The ROH Online*. Retrieved from Office of Council Services: https://www.honolulu.gov/ocs/roh/193-site-ocs-cat/839-table-of-contents.html

Code of Federal Regulations. (1993 Rev. 2010b). 40 CFR 93.152. *General Conformity Regulations*.

Code of Federal Regulations. (2001, July 1). 33 CFR 126.15.

Code of Federal Regulations. (2008, July 1). 33 CFR 165.1407. *Security Zones, Oahu, HI.*

Code of Federal Regulations. (2010a, July 10). *33 CFR 154*.

Commission on Water Resource Management. (1990). *Hawaii Stream Assessment, A Preliminary Appraisal of Hawaii's Stream Resources, Report R84.* Honolulu: State of Hawaii.

DBEDT. (2017, March). *State of Hawaii Data Book 2015.* Retrieved from http://hawaii.gov/dbedt/info/economic/databook/db2010

Department of Emergency Management. (2017). *Tsunami Maps and Information*. Retrieved from https://www.honolulu.gov/demevacuate/tsunamimaps.html

Department of Planning and Permitting. (2016, February 28). *Maps of Oahu*. Retrieved from honolulugis.org.

EPA. (2017, March 1). *U.S. Greenhouse Gas Inventory Report: 1990-2014.* Retrieved from Greenhouse Gas Emissions: https://www.epa.gov/ghgemissions/us-greenhouse-gas-inventory-report-1990-2014

ERM-WEST, Inc. (2016). *Spill Prevention, Control, and Countermeasure Plan, Aircraft Services International Group, Sand Island Facility, Sand Island Access Road.* Honolulu.

Federal Emergency Management Agency. (2017). *Flood Map Service Center.* Retrieved August 10, 2015, from FEMA's National Flood Hazard Layer (Official): https://msc.fema.gov/portal/search?AddressQuery=Wahiawa%2C%20hawaii

Fletcher, C. (2010). *Hawaii's Changing Climate, Briefing Sheet.* Honolulu: School of OCean and Earth Science and Technology, University of Hawaii at Manoa.

Giambelluca, T.W., et al. (2013). Online Rainfall Atlas of Hawaii. *Bulletin of the American Meterological Society, Vol. 94*, pp. 313-316.

Hawaii Administrative Rules. (1982). Vessel and Harbor Controls - Safety, Cleanliness, and Use of Facilities. *HAR 19-42.133*.

Hawaii Administrative Rules. (2014, August 15). State Fire Code Chapter 12-45.3.

Hawaii Department of Health Safe Drinking Water Branch. (1999, September). *UIC Map of Oahu.* Retrieved January 26, 2010, from Underground Injection Control (UIC) Program: http://hawaii.gov/health/environmental/water/sdwb/uic/pdf/oahuic.pdf

Hawaii Office of Planning. (2013, July). Hawaii Ocean Resources Management Plan. Hawaii Office of Planning.

Hazlett, R. W., & Hyndman, D. W. (1996). *Roadside Geology of Hawai'i.* Missoula, Montana: Montana Press Pubishing Company.

HDOH. (2014). *2014 State of Hawaii Water Quality Monitoring and Assessment Report: Integrated Report to the U.S. Environmental Protection Agency and the U.S. Congress Pursuant to §303(d) and §305(b), Clean Water Act (P.L. 97-117)* . Honolulu: State of Hawaii.

HDOT-Airports. (2010). *Honolulu International Airport Master Plan Update, State Project No. AO1011-08.* Honolulu, Hawaii: State of Hawaii, Department of Transportation Airports Division.

HDOT-Harbors. (1997). *Oahu Commercial Harbors 2020 Master Plan.* Honolulu: State of Hawaii.

ICF International. (2014). *Hawaii Refinery Task Force Final Report.* Honolulu: Hawaii Department of Business, Economic Development & Tourism.

International Chamber of Shipping. (2015). *International Safety Guide for Oil Tankers & Terminals.* London: Witherby & Co. Ltd.

MacDonald, G. A., & Abott, A. T. (1996). *Volcanoes in the Sea.* Honolulu: Univeristy of Hawaii Press.

Mana. (2017, March). *Mokauea Lives and Breathes.* . Retrieved from http://www.welivemana.com/articles/mokauea-lives-and-breathes.

Mink and Lau. (1990). *Aquifer Identification and Classification for O'ahu: Groundwater Protection Strategy for Hawai'i.* University of Hawaii, Water Resources Research Center.

Mink, J. F., & Lau, L. S. (1990). *Aquifer Identification and Classification for O'ahu: Groundwater Protection Strategy for Hawai'i.* University of Hawaii, Water Resources Research Center.

Sherrod, D. S. (2007). *Geologic Map of the State of Hawaii, Open-File Report 2007-1089.* United States Geological Survey, U.S. Department of the Interior.

Stark, R., et al. . (2015). *Archaeological Assessment Report for the School of Ocean and Earth Science and Technology (SOEST) Facility at Sand Island and Floating Dock at the Marine Education Training Center (METC), Honolulu Ahupuaa, Honolulu (Kona) District, Oahu.* Kailua, Oahu. : Cultural Surveys Hawaii.

State of Hawaii Auditor. (2005, December). Hawai'i 2050 Sustainability Task Force Report.

State of Hawaii Office of Planning. (1989). *Honolulu Waterfront Master Plan. Final Report.* . Honolulu: Prepared by Helber, Hastert, and Kimura, Planners, and R.M. Towill Corporation.

State of Hawaii, Department of Transportation, Harbors Division [HDOT-Harbors]. (2014). *Kapalama Container Terminal and Tenant Relocations, Final Environmental Impact Statement.* Prepared by Belt Collins Hawaii LLC.

Stearns, H. T. (1985). *Geology of the State of Hawai'i.* Palo Alto: Pacific Books.

SWCA Environmental Consultants. (2017). *Biological Resources Survey Report for Kapalama Fuel Line.* Honolulu: SWCA Environmental Consultants.

U.S. Census Bureau. (2017, March 1). *American Fact Finder, Honolulu, City & County of.* . Retrieved from https://factfinder.census.gov

U.S. Fish and Wildlife Service. (2017, January 3). *National Wetlands Inventory, Wetlands Mapper.* Retrieved from https://www.fws.gov/wetlands/data/Mapper.html

U.S.D.A. (2009). *Bats of the Pacific Islands. Biology Technical Note No. 20.* . Natural Resources Conservation Service, Pacific Islands Area.

United States Code. (1994). *United States Code, 1994 Edition, Title 50 - WAR AND NATIONAL DEFENSE.*

United States Code. (2006). *United States Code, 2006 Edition, Supplement 4, Title 33 - NAVIGATION AND NAVIGABLE WATERS.*

United States Department of Agriculture. (2017). *Natural Resources Conservation Service.* Retrieved August 3, 2015, from Web Soil Survey: http://websoilsurvey.sc.egov.usda.gov/app/HomePage.htm

US Army Corps of Engineers Honolulu District. (2015). *Final Environmental Assessment for Proposed Dredging of Honolulu Harbor.* Honolulu.

USFWS. (1998). *Recovery Plan for the Hawaiian Hoary Bat.* Portland, Oregon: U.S. Fish and Wildlife Service, Region 1.

Wilson Okamoto Corporation. (2017, February 10). Matson Terminal Improvements EA Pre-Assessment Consultation.

Wolfe, E.W, & Morris, J. (1999). *Geologic Map of the Island of Hawaii.* Reston, Virginia: U.S. Department of the Interior, U.S. Geological Survey.

APPENDIX A

Pre-Consultation

A-1. Comment Letters

Date of Correspondence	Agency/ Organization	Summary of Comments	Action Taken
FEDERAL			
03-06-2017	U.S. Fish and Wildlife Service	The endangered Hawaiian hoary bat, petrel, and wedge-tailed shearwater may occur within the vicinity of the project. Recommend use of shielded lights to project against disorientation and downing of endangered seabirds. Concern that construction activities could result in the release of contaminants. Provided specific recommendations for use of silt curtains and standard BMP list for sedimentation and erosion control.	Sent acknowledgement letter on 06-12-17.
STATE			
01-31-17	HDOH CWB	Compliance with HAR Sections 11-54-.1, 11-54-3, 11-54-4 to 11-54-8 and State's Water Quality Standards. NPDES permit and Section 401 WQC requirements.	Sent acknowledgement letter on 06-12-17.
01-31-17	HDOH EPO	Provided resources related to land use, environmental health programs, environmental health portal, CWB regulations, environmental justice, and sea level rise/climate change.	Sent acknowledgement letter on 06-12-17.
01-25-17	HDOH IRHB	Compliance with HAR Chapter 11-46, Community Noise Control.	Sent acknowledgement letter on 06-12-17.
02-02-17	HDLNR DOBOR	No comment.	Sent acknowledgement letter on 06-12-17.
02-02-17	HDLNR DAR	Requested a copy of the DEA.	Sent acknowledgement letter on 06-12-17.
02-02-17	HDLNR ED	Compliance with CFR 44, NFIP.	Sent acknowledgement letter on 06-12-17.
02-09-2017	HI OP	Compliance with HAR 11-200-10(4), HRS 205A, and HAR 200-10(6).	Sent acknowledgement letter on 06-12-17.
02-14-17	HDLNR LD	Compliance with land disposition/easement requirements.	Sent acknowledgement letter on 06-12-17.
02-23-17	HDOT-HAR	Coordination with KCT Project.	Sent acknowledgement letter on 06-12-17.
02-23-17	HDOT-HWY	Compliance with DOT-HWY requirements for work in state R/W and State Drainage Criteria.	Sent acknowledgement letter on 06-12-17.
COUNTY			
02-02-17	CCH DPP	Exempt from SMA. Project is within I-3 Waterfront Industrial District, per LUO, Chapter 21, ROH. Pipeline along Honolulu Harbor would not require shoreline set back per ROH, Chapter 23.	Sent acknowledgement letter on 06-12-17.
02-02-17	CCH DDC	No comment.	Sent acknowledgement letter on 06-12-17.
02-07-17	CCH DTS	Construction materials transferred to and from project site during off-peak hours. Consult the area Neighborhood Board, residents, businesses, emergency personnel, Oahu Transit Services should be kept apprised of the projects. Please provide copy of the DEA.	Sent acknowledgement letter on 06-12-17.
02-24-17	CCH BWS	Transmission mains present in the project area, design requirements per Water System Standards 2002. Precautions and mitigation of stray current from the fuel line cathodic protection appurtenances. Confer with QUINCI program representatives. Submit construction drawings for BWS review. Provide a copy of the DEA.	Sent acknowledgement letter on 06-12-17.

A-2. Response Letters

A-1. Comment Letters

Date of Correspondence	Agency/ Organization	Summary of Comments	Action Taken
FEDERAL			
03-06-2017	U.S. Fish and Wildlife Service	The endangered Hawaiian hoary bat, petrel, and wedge-tailed shearwater may occur within the vicinity of the project. Recommend use of shielded lights to project against disorientation and downing of endangered seabirds. Concern that construction activities could result in the release of contaminants. Provided specific recommendations for use of silt curtains and standard BMP list for sedimentation and erosion control.	Sent acknowledgement letter on 06-12-17.
STATE			
01-31-17	HDOH CWB	Compliance with HAR Sections 11-54-.1, 11-54-3, 11-54-4 to 11-54-8 and State's Water Quality Standards. NPDES permit and Section 401 WQC requirements.	Sent acknowledgement letter on 06-12-17.
01-31-17	HDOH EPO	Provided resources related to land use, environmental health programs, environmental health portal, CWB regulations, environmental justice, and sea level rise/climate change.	Sent acknowledgement letter on 06-12-17.
01-25-17	HDOH IRHB	Compliance with HAR Chapter 11-46, Community Noise Control.	Sent acknowledgement letter on 06-12-17.
02-02-17	HDLNR DOBOR	No comment.	Sent acknowledgement letter on 06-12-17.
02-02-17	HDLNR DAR	Requested a copy of the DEA.	Sent acknowledgement letter on 06-12-17.
02-02-17	HDLNR ED	Compliance with CFR 44, NFIP.	Sent acknowledgement letter on 06-12-17.
02-09-2017	HI OP	Compliance with HAR 11-200-10(4), HRS 205A, and HAR 200-10(6).	Sent acknowledgement letter on 06-12-17.
02-14-17	HDLNR LD	Compliance with land disposition/easement requirements.	Sent acknowledgement letter on 06-12-17.
02-23-17	HDOT-HAR	Coordination with KCT Project.	Sent acknowledgement letter on 06-12-17.
02-23-17	HDOT-HWY	Compliance with DOT-HWY requirements for work in state R/W and State Drainage Criteria.	Sent acknowledgement letter on 06-12-17.
COUNTY			
02-02-17	CCH DPP	Exempt from SMA. Project is within I-3 Waterfront Industrial District, per LUO, Chapter 21, ROH. Pipeline along Honolulu Harbor would not require shoreline set back per ROH, Chapter 23.	Sent acknowledgement letter on 06-12-17.
02-02-17	CCH DDC	No comment.	Sent acknowledgement letter on 06-12-17.
02-07-17	CCH DTS	Construction materials transferred to and from project site during off-peak hours. Consult the area Neighborhood Board, residents, businesses, emergency personnel, Oahu Transit Services should be kept apprised of the projects. Please provide copy of the DEA.	Sent acknowledgement letter on 06-12-17.
02-24-17	CCH BWS	Transmission mains present in the project area, design requirements per Water System Standards 2002. Precautions and mitigation of stray current from the fuel line cathodic protection appurtenances. Confer with QUINCI program representatives. Submit construction drawings for BWS review. Provide a copy of the DEA.	Sent acknowledgement letter on 06-12-17.

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122
Honolulu, Hawai'i 96850

MAR 0 6 2017

In Reply Refer To:
01EPIF00-2017-TA-0146

Mr. Graham Knopp, PhD.
Environmental Planner
Myounghee Noh & Associates, L.L.C.
200 Kohala Street
Hilo, Hawai'i 96720

Subject: Technical Assistance for the Proposed Hawai'i Fueling Facilities Corporation Kapālama Terminal Jet Fuel Pipeline Environmental Assessment, Sand Island Access Road, Honolulu Harbor, Kapālama, O'ahu

Dear Mr. Knopp:

The U.S. Fish and Wildlife Service received your letter on February 15, 2017, requesting our comments on the proposed Hawai'i Fueling Facilities Corporation Kapālama Terminal Jet Fuel Pipeline Environmental Assessment, Sand Island Access Road, Honolulu Harbor, Kapālama, O'ahu. The Hawai'i Fueling Facilities Corporation (HFFC) proposes to construct a jet fuel on/off –loading terminal at Pier 43 and an associated fuel line along Sand Island Access Road. This will connect the on/off-loading terminal to the HFFC Sand Island Fuel Facility on Sand Island Access Road before (north of) the bridge. The proposed project will consist of: (1) a fuel on/off-loading site with valve pit a Pit 43, (2) approximately 1,850 linear feet of 18 inch, below grade fuel line at Pier 43 and along Sand Island Access Road, transiting under Sand Island aCcess Road to the HFFC Tank Farm, and (3) a new tie-in at the HFFC Sand Island Tank Farm. The on/off –loading site would be located at Pier 43, which is planned for renovations as described in the *Kapālama Container Terminal and Tenant Relocation Final Environmental Impact Statement* (HDOT-Harbors, 2014). The fuel line would extend from the pier to the near side (i.e. east) of Sand Island Access road eventually passing under Sand Island Access road, to a proposed tie-in at the existing HFFC Sand Island Tank Farm.

Our comments are provided under the authorities of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 *et seq.*), the Migratory Bird Treaty Act [16 U.S.C. 703-712] (MBTA), Fish and Wildlife Coordination Act of 1934, as amended (16 U.S.C. 661 *et seq.*; 48 Stat. 401), and the National Environmental Policy Act of 1969, as amended (42 U.S.C. 4321 *et seq.*; 83 Stat. 401).

We have reviewed the information you provided and pertinent information in our files, including data compiled by the Hawai'i Biodiversity and Mapping Program as it pertains to listed species and designated critical habitat in accordance with section 7 of the Endangered Species Act of 1973 (ESA), as amended (16 U.S.C. 1531 *et seq.*). Our data indicate the endangered Hawaiian

hoary bat (*Lasiurus cinereus semotus*), endangered Hawaiian petrel or ‘ua‘u (*Pterodroma sandwichensis*), and the wedge-tailed shearwater or ‘ua‘u kani (*Puffinus pacificus*), may occur within the vicinity of the proposed project. We offer the following comments for your consideration.

Hawaiian seabirds
Outdoor lighting, such as street lights and night-time work, can adversely impact listed and migratory seabird species found in the vicinity of the proposed project. Seabirds fly at night and are attracted to artificially lighted areas which can result in disorientation and subsequent fallout due to exhaustion or collision with objects such as utility lines, guy wires, and towers that protrude above the vegetation layer. Once grounded, they are vulnerable to predators or often struck by vehicles along roadways. Wedge-tailed shearwater nesting colonies are located on offshore islets and several locations on O‘ahu and every year many young shearwaters are downed and struck along O‘ahu roadways. Any increase in the use of night-time lighting, particularly during each year’s peak fallout period (September 15 - December 15), could result in additional seabird injury or mortality.

If night-time work is proposed for your project, impacts to seabirds can be minimized by shielding outdoor lights to the maximum extent possible, eliminating night-time construction, and providing all project staff with information about seabird fallout. Downed seabirds may be taken to Sea Life Park for rehabilitation. All lights, including street lights, should be shielded so the bulb can only be seen from below and use the lowest wattage bulbs possible. The project should address all potential impacts to seabirds and outline conservation measures to minimize these impacts.

Fish and Wildlife Coordination Act Comments
If the project is to impact any in water resources, we recommend that surveys be conducted to evaluate fish and wildlife resources such as benthic habitat, which may occur within the project area. The EA should identify fish and wildlife resources to their lowest taxonomic level that may be either directly or indirectly impacted due to project construction-related activities. We also recommend the EA evaluate project impacts to resources, and identify measures to avoid and minimize such impacts. Our primary concern regarding the proposed project is the potential for project-related impacts to sensitive aquatic biological resources that may occur in the vicinity of the project site. Construction activities could result in the release of contaminants potentially occurring in the proposed project area. We are concerned that vertebrate and invertebrate larvae within estuarine and nearshore marine environments may be at risk of exposure to contaminants during construction activities as a consequence of mobilized sediments. We are concerned that larvae exposure to contaminants could result in a loss of coral colonies and affect, indirectly, other marine animals and plants that rely upon coral habitat for shelter, forage, and reproduction.

We appreciate your coordination with us to incorporate fish and wildlife conservation measures into your project description, including measures to avoid and minimize impacts to listed species and protect water quality. Because the proposed project will involve work within the vicinity of open water (Honolulu Harbor), we are attaching the Service’s recommended Best Management Practices regarding sedimentation and erosion control. Also, we recommend the following best management practices for the effective use of silt curtains where silt curtains are appropriate for use:

- Use full depth silt curtains in all practical situations for this project;
- Place silt curtains as close as possible to the project boundary to minimize secondary effects from increased sedimentation;
- Leave silt curtains in place (not moved or shifted) until water turbidity has returned to ambient conditions; and
- Properly secure silt curtains to minimize them from breaking free and causing additional impact.

We encourage you to incorporate the relevant practices into your project design to avoid or minimize project-related degradation of water quality, which may impact fish and wildlife resources. Should project plans change, if additional information becomes available, or implementation of minimization measures will not ensure take of listed species can be avoided, we recommend you contact our office so that we can assist you in re-assessing project impact.

We appreciate your efforts to conserve listed species. If you have questions about our comments regarding this letter, please contact Joy Browning, Fish and Wildlife Biologist (phone: 808-792-9400, email: joy_browning@fws.gov) and reference: 01EPIF00-2017-TA-0146.

Sincerely,

Aaron Nadig
Island Team Manager
O'ahu, Kaua'i, North Western Hawaiian Islands, and American Samoa

Enclosure: Service BMPs for erosion and sediment control

U.S. Fish and Wildlife Service
Recommended Standard Best Management Practices

The U.S. Fish and Wildlife Service (USFWS) recommends the following measures to be incorporated into project planning to avoid or minimize impacts to fish and wildlife resources. Best Management Practices (BMPs) include the incorporation of procedures or materials that may be used to reduce either direct or indirect negative impacts to aquatic habitats that result from project construction-related activities. These BMPs are recommended in addition to, and do not over-ride any terms, conditions, or other recommendations prepared by the USFWS, other federal, state or local agencies. If you have questions concerning these BMPs, please contact the USFWS Aquatic Ecosystems Conservation Program at 808-792-9400.

1. Authorized dredging and filling-related activities that may result in the temporary or permanent loss of aquatic habitats should be designed to avoid indirect, negative impacts to aquatic habitats beyond the planned project area.

2. Dredging/filling in the marine environment should be scheduled to avoid coral spawning and recruitment periods, and sea turtle nesting and hatching periods. Because these periods are variable throughout the Pacific islands, we recommend contacting the relevant local, state, or federal fish and wildlife resource agency for site specific guidance.

3. Turbidity and siltation from project-related work should be minimized and contained within the project area by silt containment devices and curtailing work during flooding or adverse tidal and weather conditions. BMPs should be maintained for the life of the construction period until turbidity and siltation within the project area is stabilized. All project construction-related debris and sediment containment devices should be removed and disposed of at an approved site.

4. All project construction-related materials and equipment (dredges, vessels, backhoes, silt curtains, etc.) to be placed in an aquatic environment should be inspected for pollutants including, but not limited to; marine fouling organisms, grease, oil, etc., and cleaned to remove pollutants prior to use. Project related activities should not result in any debris disposal, non-native species introductions, or attraction of non-native pests to the affected or adjacent aquatic or terrestrial habitats. Implementing both a litter-control plan and a Hazard Analysis and Critical Control Point plan (HACCP – see *http://www.haccp-nrm.org/Wizard/default.asp*) can help to prevent attraction and introduction of non-native species.

5. Project construction-related materials (fill, revetment rock, pipe, etc.) should not be stockpiled in, or in close proximity to aquatic habitats and should be protected from erosion (*e.g.*, with filter fabric, etc.), to prevent materials from being carried into waters by wind, rain, or high surf.

6. Fueling of project-related vehicles and equipment should take place away from the aquatic environment and a contingency plan to control petroleum products accidentally spilled during the project should be developed. The plan should be retained on site with the person responsible for compliance with the plan. Absorbent pads and containment booms should be stored on-site to facilitate the clean-up of accidental petroleum releases.

7. All deliberately exposed soil or under-layer materials used in the project near water should be protected from erosion and stabilized as soon as possible with geotextile, filter fabric or native or non-invasive vegetation matting, hydro-seeding, etc.

DAVID Y. IGE
GOVERNOR OF HAWAII

VIRGINIA PRESSLER, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
EMD/CWB

01031PMHK.17

January 31, 2017

Mr. Graham Knopp, Ph.D.
Environmental Planner
Myounghee Noh & Associates, L.L.C.
99-1046 Iwaena Street, 210A
Aiea, Hawaii 96701

Dear Mr. Knopp:

SUBJECT: Comments on the Proposed Hawaii Fueling Facilities Corporation Kapalama Terminal Jet Fuel Pipeline Environmental Assessment TMKs: (1) 2-025:017, (1) 2-025:027, (1) 2-025:020, and (1) 2-025:021 Portion of Sand Island Access Road Honolulu Harbor, Island of Oahu, Hawaii

The Department of Health (DOH), Clean Water Branch (CWB), acknowledges receipt of your letter, dated January 19, 2017, requesting comments on the subject project. The DOH-CWB has reviewed the document and offers these comments. Please note that our review is based solely on the information provided in the subject document and its compliance with the Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. The Hawaii Fueling Facilities Corporation (Applicant) may be responsible for fulfilling additional requirements related to our program. We recommend that they also read our standard comments on our website at: http://health.hawaii.gov/epo/files/2013/05/Clean-Water-Branch-Std-Comments.pdf.

1. Any project and its potential impacts to State waters must meet the following criteria:

   a. Antidegradation policy (HAR, Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected.

   b. Designated uses (HAR, Section 11-54-3), as determined by the classification of the receiving State waters.

   c. Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).

2. The Applicant may be required to obtain National Pollutant Discharge Elimination System (NPDES) permit coverage for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55).

For NPDES general permit coverage, a Notice of Intent (NOI) form must be submitted at least 30 calendar days before the commencement of the discharge. An application for an NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. To request NPDES permit coverage, your Applicant must submit the applicable form ("CWB Individual NPDES Form" or "CWB NOI Form") through the e-Permitting Portal and the hard copy certification statement with the respective filing fee ($1,000 for an individual NPDES permit or $500 for a Notice of General Permit Coverage). Please open the e-Permitting Portal website located at: https://eha-cloud.doh.hawaii.gov/epermit/. They will be asked to do a one-time registration to obtain your login and password. After they register, click on the Application Finder tool and locate the appropriate form. They can then follow the instructions to complete and submit the form.

3. If your Applicant's project involves work in, over, or under waters of the United States, it is highly recommended that they contact the Army Corp of Engineers, Regulatory Branch (Tel: 835-4303) regarding their permitting requirements.

   Pursuant to Federal Water Pollution Control Act [commonly known as the "Clean Water Act" (CWA)], Paragraph 401(a)(1), a Section 401 Water Quality Certification (WQC) is required for "[a]ny applicant for Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may **result** in any discharge into the navigable waters..." (emphasis added). The term "discharge" is defined in CWA, Subsections 502(16), 502(12), and 502(6); Title 40 of the Code of Federal Regulations, Section 122.2; and HAR, Chapter 11-54.

4. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 WQC are required, must comply with the State's Water Quality Standards. Noncompliance with water quality requirements contained in HAR, Chapter 11-54, and/or permitting requirements, specified in HAR, Chapter 11-55, may be subject to penalties of $25,000 per day per violation.

5. It is the State's position that all projects must reduce, reuse, and recycle to protect, restore, and sustain water quality and beneficial uses of State waters. Project planning should:

   a. Treat storm water as a resource to be protected by integrating it into project planning and permitting. Storm water has long been recognized as a source of irrigation that will not deplete potable water resources. What is often overlooked is that storm water recharges ground water supplies and feeds streams and estuaries; to ensure that these water cycles are not disrupted, storm water cannot be relegated as a waste product of impervious surfaces. Any project

planning must recognize storm water as an asset that sustains and protects natural ecosystems and traditional beneficial uses of State waters, like community beautification, beach going, swimming, and fishing. The approaches necessary to do so, including low impact development methods or ecological bio-engineering of drainage ways must be identified in the planning stages to allow designers opportunity to include those approaches up front, prior to seeking zoning, construction, or building permits.

b. Clearly articulate the State's position on water quality and the beneficial uses of State waters. The plan should include statements regarding the implementation of methods to conserve natural resources (e.g., minimizing potable water for irrigation, gray water re-use options, energy conservation through smart design) and improve water quality.

c. Consider storm water Best Management Practice (BMP) approaches that minimize the use of potable water for irrigation through storm water storage and reuse, percolate storm water to recharge groundwater to revitalize natural hydrology, and treat storm water which is to be discharged.

d. Consider the use of green building practices, such as pervious pavement and landscaping with native vegetation, to improve water quality by reducing excessive runoff and the need for excessive fertilization, respectively.

e. Identify opportunities for retrofitting or bio-engineering existing storm water infrastructure to restore ecological function while maintaining, or even enhancing, hydraulic capacity. Particular consideration should be given to areas prone to flooding, or where the infrastructure is aged and will need to be rehabilitated.

If you have any questions, please visit our website at: http://health.hawaii.gov/cwb, or contact the Engineering Section, CWB, at (808) 586-4309.

Sincerely,

Alec Wong

ALEC WONG, P.E., CHIEF
Clean Water Branch

MHK:ctt

c: Mr. Graham Knopp, Myounghee Noh & Associates, L.L.C.
[via e-mail myounghee@noh-associates.com]
DOH-EPO [via e-mail Noella.Narimatsu@doh.hawaii.gov only]

DAVID Y. IGE
GOVERNOR OF HAWAII

VIRGINIA PRESSLER, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
File:

EPO 17-024

January 31, 2017

Graham Knopp, Ph.D.
Environmental Planner
Myounghee Noh & Associates, LLC
200 Kohola Street
Hilo, Hawaii 96720
Email: graham@noh-associates.com

Dear Dr. Knopp:

SUBJECT: Pre-Consultation Environmental Assessment (PC EA) for Hawaii Fueling Facilities Corporation Kapalama Terminal Jet Fuel Pipeline, Sand Island Access Road, Honolulu, Oahu TMK: (1) 2-025:017, 027, 020, 021

The Department of Health (DOH), Environmental Planning Office (EPO), acknowledges receipt of your PC EA to our office on January 23, 2017.

We understand from your PC EA that "*The purpose of the project is to increase jet fuel supply resilience, reliability, and redundancy to the Honolulu International Airport (HIA) and outer island airports. Currently a significant portion of the jet fuel supplied to HIA is off-loaded from HFFC's Pier 5 IA terminal in Honolulu Harbor and is stored at the HFFC Sand Island Fuel Facility. This is due to the fact that the two on-island refineries are unable to meet the significant jet fuel demand at HIA, and must be supplemented by imports of jet fuel that are exclusively off-loaded at Pier 5 IA. Under Hawaii Administrative Rules (HAR) 19-42-89 Priorities and Scheduling of Vessel Movements in Honolulu Harbor and Barbers Point Harbor, unloading of container ships receives priority over fuel off-loading at the Pier 51A location. Moreover, this project would support future HIA increases in aircraft capacity. Therefore, increased jet fuel supply resilience is essential to ensure that adequate fuel supply for air transport is available to meet both current and future demands.*"

In the development and implementation of all projects, EPO strongly recommends regular review of State and Federal environmental health land use guidance. State standard comments and available strategies to support sustainable and healthy design are provided at: http://health.hawaii.gov/epo/landuse. Projects are required to adhere to all applicable standard comments.

EPO has recently updated the environmental Geographic Information System (GIS) website page. It now compiles various maps and viewers from our environmental health programs. The eGIS website page is continually updated so please visit it regularly at: http://health.hawaii.gov/epo/egis.

EPO also encourages you to examine and utilize the Hawaii Environmental Health Portal at: https://eha-cloud.doh.hawaii.gov. This site provides links to our e-Permitting Portal, Environmental Health Warehouse, Groundwater Contamination Viewer, Hawaii Emergency Response Exchange, Hawaii State and Local Emission Inventory System, Water Pollution Control Viewer, Water Quality Data, Warnings, Advisories and Postings.

We suggest you review the requirements of the Clean Water Branch (HAR, Section 11-54-1.1, -3, 4-8) and/or the National Pollutant Discharge Elimination System (NPDES) permit (HAR, Chapter 11-55) at: http://health.hawaii.gov/cwb. If you have any questions, please contact the Clean Water Branch, Engineering Section at (808) 586-4309 or cleanwaterbranch@doh.hawaii.gov. If your project involves waters of the U.S., it is highly recommended that you contact the Army Corps of Engineers, Regulatory Branch at: (808) 835-4303.

You may also wish to review the draft Office of Environmental Quality Control (OEQC) viewer at: http://eha-web.doh.hawaii.gov/oeqc-viewer. This viewer geographically shows where some previous Hawaii Environmental Policy Act (HEPA) {Hawaii Revised Statutes, Chapter 343} documents have been prepared.

In order to better protect public health and the environment, the U.S. Environmental Protection Agency (EPA) has developed a new environmental justice (EJ) mapping and screening tool called EJSCREEN. It is based on nationally consistent data and combines environmental and demographic indicators in maps and reports. EPO encourages you

to explore, launch and utilize this powerful tool in planning your project. The EPA EJSCREEN tool is available at: http://www.epa.gov/ejscreen.

Hawaii's climate is changing. Sea level rise and the associated coastal impacts have the potential to harm an array of natural and built environments in Hawaii. For additional information on projected sea level rise in Hawaii, EPO recommends that you visit the following informative links:

- State of Hawaii Climate Adaptation Portal: http://climateadaptation.hawaii.gov
- University of Hawaii, Manoa, School of Ocean and Earth Sciences and Technology, Coastal Geology Group: http://www.soest.hawaii.edu/coasts/index.html
- US Environmental Protection Agency – Climate Impacts on Coastal Areas: https://www.epa.gov/climate-impacts/climate-impacts-coastal-areas

We request that you utilize all of this information on your proposed project to increase sustainable, innovative, inspirational, transparent and healthy design. Thank you for the opportunity to comment.

Mahalo nui loa,

Laura Leialoha Phillips McIntyre, AICP
Program Manager, Environmental Planning Office

LM:nn

Attachment 1: DOH: CWB letter , January 31, 2017
Attachment 2: Environmental Health Management Web App Snipit of Project Area: http://health.hawaii.gov/epo/egis
Attachment 3: Clean Water Branch: Water Quality Standards Map
Attachment 4: Wastewater Branch: Recycled Water Use Map of Project Area
Attachment 5: U.S. EPA EJSCREEN Report for Project Area

c: DOH: HEER, CWB {via email only}

DAVID Y. IGE
GOVERNOR OF HAWAII

VIRGINIA PRESSLER, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
EMD/CWB

01031PMHK.17

January 31, 2017

Mr. Graham Knopp, Ph.D.
Environmental Planner
Myounghee Noh & Associates, L.L.C.
99-1046 Iwaena Street, 210A
Aiea, Hawaii 96701

Dear Mr. Knopp:

SUBJECT: Comments on the Proposed Hawaii Fueling Facilities Corporation Kapalama Terminal Jet Fuel Pipeline Environmental Assessment TMKs: (1) 2-025:017, (1) 2-025:027, (1) 2-025:020, and (1) 2-025:021 Portion of Sand Island Access Road Honolulu Harbor, Island of Oahu, Hawaii

The Department of Health (DOH), Clean Water Branch (CWB), acknowledges receipt of your letter, dated January 19, 2017, requesting comments on the subject project. The DOH-CWB has reviewed the document and offers these comments. Please note that our review is based solely on the information provided in the subject document and its compliance with the Hawaii Administrative Rules (HAR), Chapters 11-54 and 11-55. The Hawaii Fueling Facilities Corporation (Applicant) may be responsible for fulfilling additional requirements related to our program. We recommend that they also read our standard comments on our website at: http://health.hawaii.gov/epo/files/2013/05/Clean-Water-Branch-Std-Comments.pdf.

1. Any project and its potential impacts to State waters must meet the following criteria:

   a. Antidegradation policy (HAR, Section 11-54-1.1), which requires that the existing uses and the level of water quality necessary to protect the existing uses of the receiving State water be maintained and protected.

   b. Designated uses (HAR, Section 11-54-3), as determined by the classification of the receiving State waters.

   c. Water quality criteria (HAR, Sections 11-54-4 through 11-54-8).

2. The Applicant may be required to obtain National Pollutant Discharge Elimination System (NPDES) permit coverage for discharges of wastewater, including storm water runoff, into State surface waters (HAR, Chapter 11-55).

For NPDES general permit coverage, a Notice of Intent (NOI) form must be submitted at least 30 calendar days before the commencement of the discharge. An application for an NPDES individual permit must be submitted at least 180 calendar days before the commencement of the discharge. To request NPDES permit coverage, your Applicant must submit the applicable form ("CWB Individual NPDES Form" or "CWB NOI Form") through the e-Permitting Portal and the hard copy certification statement with the respective filing fee ($1,000 for an individual NPDES permit or $500 for a Notice of General Permit Coverage). Please open the e-Permitting Portal website located at: https://eha-cloud.doh.hawaii.gov/epermit/. They will be asked to do a one-time registration to obtain your login and password. After they register, click on the Application Finder tool and locate the appropriate form. They can then follow the instructions to complete and submit the form.

3. If your Applicant's project involves work in, over, or under waters of the United States, it is highly recommended that they contact the Army Corp of Engineers, Regulatory Branch (Tel: 835-4303) regarding their permitting requirements.

   Pursuant to Federal Water Pollution Control Act [commonly known as the "Clean Water Act" (CWA)], Paragraph 401(a)(1), a Section 401 Water Quality Certification (WQC) is required for "[a]ny applicant for Federal license or permit to conduct any activity including, but not limited to, the construction or operation of facilities, which may **result** in any discharge into the navigable waters..." (emphasis added). The term "discharge" is defined in CWA, Subsections 502(16), 502(12), and 502(6); Title 40 of the Code of Federal Regulations, Section 122.2; and HAR, Chapter 11-54.

4. Please note that all discharges related to the project construction or operation activities, whether or not NPDES permit coverage and/or Section 401 WQC are required, must comply with the State's Water Quality Standards. Noncompliance with water quality requirements contained in HAR, Chapter 11-54, and/or permitting requirements, specified in HAR, Chapter 11-55, may be subject to penalties of $25,000 per day per violation.

5. It is the State's position that all projects must reduce, reuse, and recycle to protect, restore, and sustain water quality and beneficial uses of State waters. Project planning should:

   a. Treat storm water as a resource to be protected by integrating it into project planning and permitting. Storm water has long been recognized as a source of irrigation that will not deplete potable water resources. What is often overlooked is that storm water recharges ground water supplies and feeds streams and estuaries; to ensure that these water cycles are not disrupted, storm water cannot be relegated as a waste product of impervious surfaces. Any project

planning must recognize storm water as an asset that sustains and protects natural ecosystems and traditional beneficial uses of State waters, like community beautification, beach going, swimming, and fishing. The approaches necessary to do so, including low impact development methods or ecological bio-engineering of drainage ways must be identified in the planning stages to allow designers opportunity to include those approaches up front, prior to seeking zoning, construction, or building permits.

b. Clearly articulate the State's position on water quality and the beneficial uses of State waters. The plan should include statements regarding the implementation of methods to conserve natural resources (e.g., minimizing potable water for irrigation, gray water re-use options, energy conservation through smart design) and improve water quality.

c. Consider storm water Best Management Practice (BMP) approaches that minimize the use of potable water for irrigation through storm water storage and reuse, percolate storm water to recharge groundwater to revitalize natural hydrology, and treat storm water which is to be discharged.

d. Consider the use of green building practices, such as pervious pavement and landscaping with native vegetation, to improve water quality by reducing excessive runoff and the need for excessive fertilization, respectively.

e. Identify opportunities for retrofitting or bio-engineering existing storm water infrastructure to restore ecological function while maintaining, or even enhancing, hydraulic capacity. Particular consideration should be given to areas prone to flooding, or where the infrastructure is aged and will need to be rehabilitated.

If you have any questions, please visit our website at: http://health.hawaii.gov/cwb, or contact the Engineering Section, CWB, at (808) 586-4309.

Sincerely,

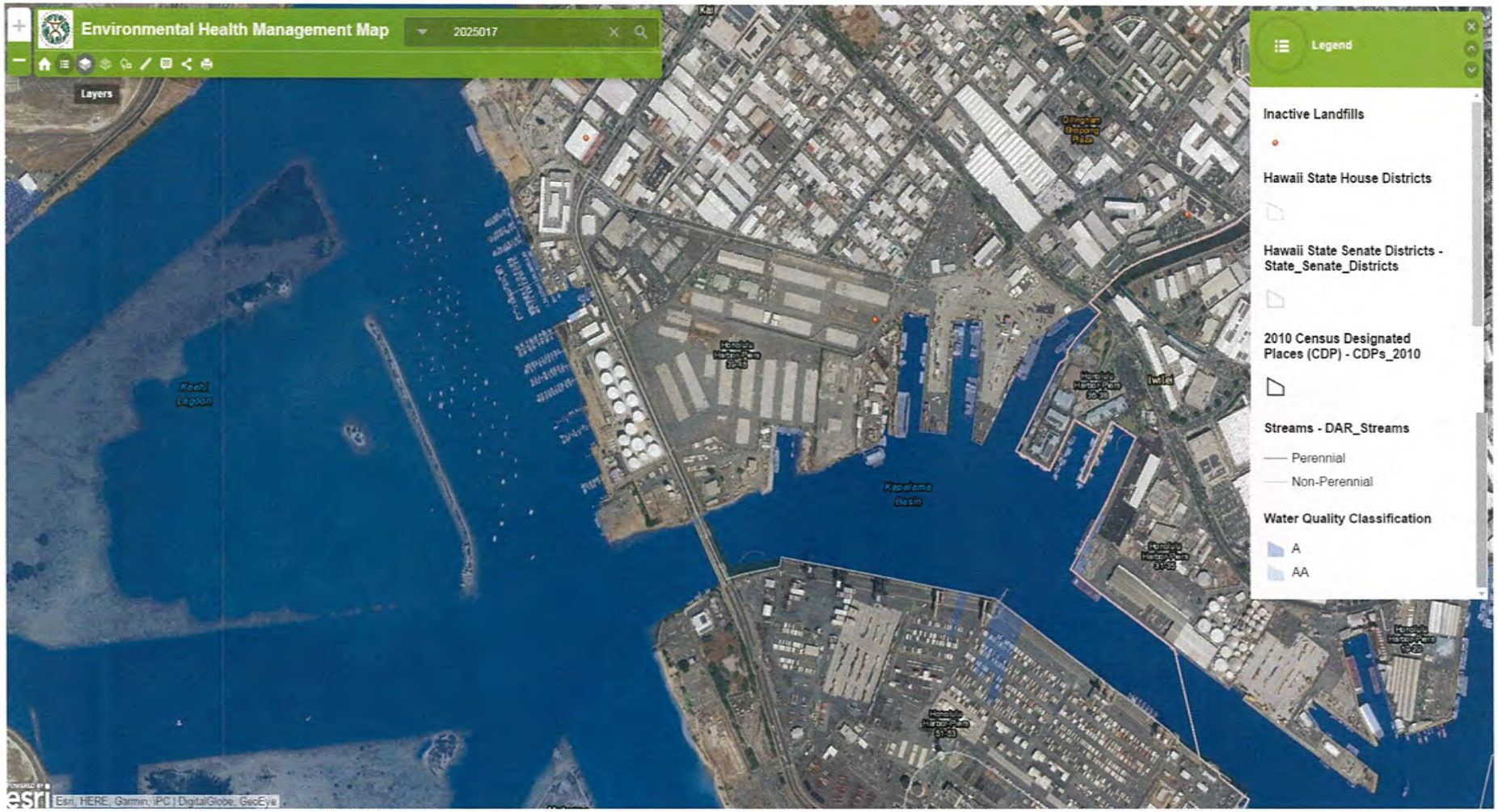
Alec Wong

ALEC WONG, P.E., CHIEF
Clean Water Branch

MHK:ctt

c: Mr. Graham Knopp, Myounghee Noh & Associates, L.L.C.
[via e-mail myounghee@noh-associates.com]
DOH-EPO [via e-mail Noella.Narimatsu@doh.hawaii.gov only]

Attachment 2: Environmental Health Management Web App Snipit of Project Area: http://health.hawaii.gov/epo/egis



Attachment 3: Clean Water Branch: Water Quality Standards Map

Attachment 4: Wastewater Branch: Recycled Water Use Map of Project Area

Attachment 5: U.S. EPA EJSCREEN Report for Project Area

EJSCREEN Report (Version 2016)

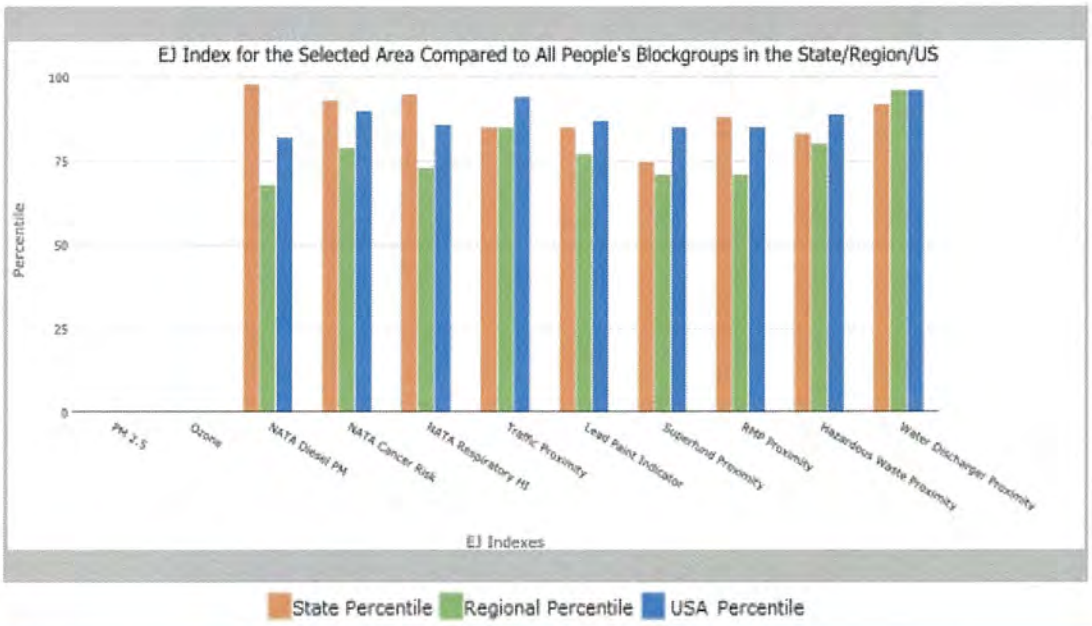
1 mile Ring Centered at 21.318843,-157.890202, HAWAII, EPA Region 9

Approximate Population: 7,080

Input Area (sq. miles): 3.14

ıposed Fuel Line, Sand Island, Oahu (The study area contains 1 blockgroup(s) with zero populati

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
EJ Indexes			
EJ Index for PM2.5	N/A	N/A	N/A
EJ Index for Ozone	N/A	N/A	N/A
EJ Index for NATA* Diesel PM	98	68	82
EJ Index for NATA* Air Toxics Cancer Risk	93	79	90
EJ Index for NATA* Respiratory Hazard Index	95	73	86
EJ Index for Traffic Proximity and Volume	85	85	94
EJ Index for Lead Paint Indicator	85	77	87
EJ Index for Superfund Proximity	75	71	85
EJ Index for RMP Proximity	88	71	85
EJ Index for Hazardous Waste Proximity*	83	80	89
EJ Index for Water Discharger Proximity	92	96	96



This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

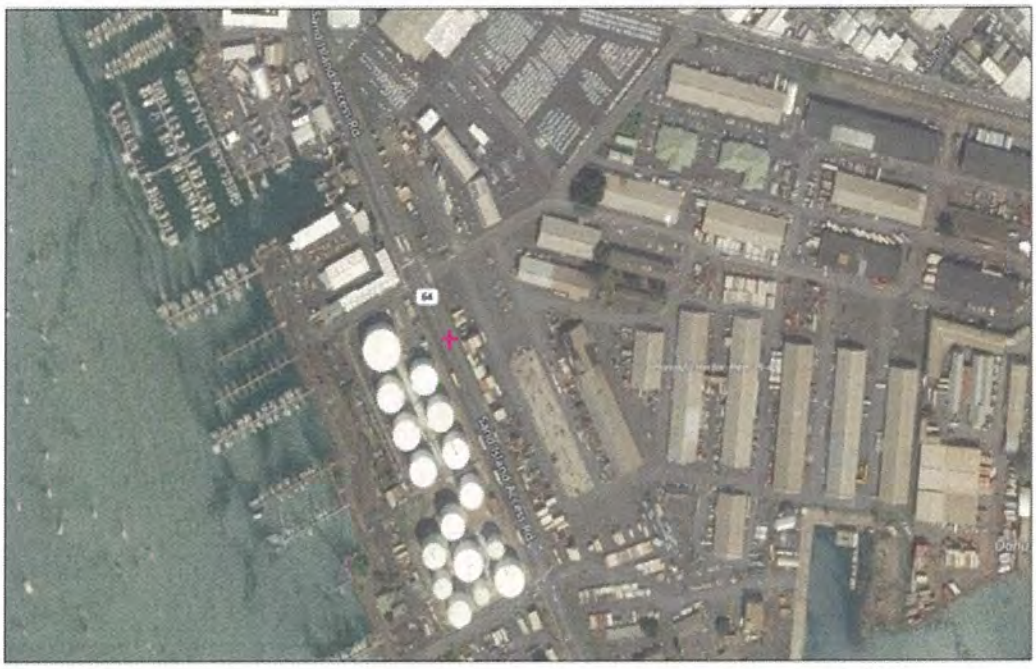
EJSCREEN Report (Version 2016)

1 mile Ring Centered at 21.318843,-157.890202, HAWAII, EPA Region 9

Approximate Population: 7,080

Input Area (sq. miles): 3.14

posed Fuel Line, Sand Island, Oahu (The study area contains 1 blockgroup(s) with zero populatic



January 30, 2017

Digitized Point

1:4,514

0 0.0375 0.075 0.15 mi

0 0.05 0.1 0.2 km

© 2017 DigitalGlobe © 2017 GeoEye Earthstar Geographics SIO © 2017 Microsoft Corporation © 2017 HERE © AND

Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0
National Pollutant Discharge Elimination System (NPDES)	0

EJSCREEN Report (Version 2016)

1 mile Ring Centered at 21.318843,-157.890202, HAWAII, EPA Region 9

Approximate Population: 7,080

Input Area (sq. miles): 3.14

ıposed Fuel Line, Sand Island, Oahu (The study area contains 1 blockgroup(s) with zero populatic

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
Environmental Indicators							
Particulate Matter (PM 2.5 in µg/m³)	N/A	N/A	N/A	9.37	N/A	9.32	N/A
Ozone (ppb)	N/A	N/A	N/A	51	N/A	47.4	N/A
NATA* Diesel PM (µg/m³)	0.784	0.149	98	0.978	<50th	0.937	50-60th
NATA* Cancer Risk (lifetime risk per million)	56	34	97	43	90-95th	40	90-95th
NATA* Respiratory Hazard Index	2.1	1	96	2	60-70th	1.8	70-80th
Traffic Proximity and Volume (daily traffic count/distance to road)	1500	990	83	1100	80	590	91
Lead Paint Indicator (% Pre-1960 Housing)	0.27	0.16	74	0.24	62	0.3	57
Superfund Proximity (site count/km distance)	0.08	0.098	65	0.15	55	0.13	59
RMP Proximity (facility count/km distance)	0.31	0.19	87	0.57	61	0.43	67
Hazardous Waste Proximity+ (facility count/km distance)	0.15	0.14	80	0.14	75	0.11	81
Water Discharger Proximity (facility count/km distance)	0.75	0.34	89	0.2	95	0.31	90
Demographic Indicators							
Demographic Index	63%	52%	82	47%	72	36%	83
Minority Population	95%	77%	86	58%	89	37%	93
Low Income Population	29%	26%	60	36%	43	35%	44
Linguistically Isolated Population	27%	6%	96	9%	91	5%	95
Population With Less Than High School Education	24%	9%	96	17%	70	14%	82
Population Under 5 years of age	5%	6%	36	7%	35	6%	38
Population over 64 years of age	9%	15%	24	13%	44	14%	33

* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: https://www.epa.gov/national-air-toxics-assessment.

+ The hazardous waste environmental indicator and the corresponding EJ index will appear as N/A if there are no hazardous waste facilities within 50 km of a selected location.

For additional information, see: www.epa.gov/environmentaljustice

EJSCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJSCREEN outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.

DAVID Y. IGE
GOVERNOR OF HAWAII

VIRGINIA PRESSLER, M.D.
DIRECTOR OF HEALTH

STATE OF HAWAII
DEPARTMENT OF HEALTH
P. O. BOX 3378
HONOLULU, HI 96801-3378

In reply, please refer to:
File:

January 25, 2017

Mr. Graham Knopp, Ph.D.
Myounghee Noh & Associates, LLC
200 Kohola Street
Hilo, HI 96720

Dear Mr. Knopp:

Thank you for your submittal requesting comments to the Hawaii Fueling Facilities Corporation Kapalama Terminal Jet Fuel Pipeline Environmental Assessment, Sand Island Access Road, Honolulu Harbor, Kapalama, Oahu.

Project activities shall comply with the following Administrative Rules of the Department of Health:

- Chapter 11-46 Community Noise Control

Should you have any questions, please contact me at (808) 586-4700.

Sincerely,

Jeffrey M. Eckerd
Program Manager
Indoor and Radiological Health Branch

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

RECEIVED
LAND DIVISION
2017 FEB -1 AM 10:58
DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII

January 26, 2017

MEMORANDUM

TO: FR:

DLNR Agencies:
X Div. of Aquatic Resources
X Div. of Boating & Ocean Recreation
X Engineering Division
__Div. of Forestry & Wildlife
__Div. of State Parks
X Commission on Water Resource Management
X Office of Conservation & Coastal Lands
X Land Division – Oahu District
X Historic Preservation

TO:

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Kapalama Terminal Jet Fuel Pipeline Environmental Assessment
LOCATION: Kapalama, Honolulu, Island of Oahu; TMK: (1) 1-2-025:017, 020-021 & 027
APPLICANT: Hawaii Fueling Facilities Corporation

Transmitted for your review and comment is information on the above-referenced project. We would appreciate your comments on this project. Please submit any comments by **February 15, 2017.**

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Lydia Morikawa at 587-0410. Thank you.

Attachments

( ) We have no objections.
(X) We have no comments.
( ) Comments are attached.

Signed: Edward R Underwood

Print Name: Edward R Underwood
Date: 1/30/17

cc: Central Files
Ian Hirokawa

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RECEIVED
JAN 27 2017
Division of Aquatic Resources
DAR 5466

RECEIVED
LAND DIVISION
2017 FEB -2 AM 10:45
DEPT. OF LAND & NATURAL RESOURCES STATE OF HAWAII

JK

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

January 26, 2017

MEMORANDUM

TO: **DLNR Agencies:**
X Div. of Aquatic Resources
X Div. of Boating & Ocean Recreation
X Engineering Division
__Div. of Forestry & Wildlife
__Div. of State Parks
X Commission on Water Resource Management
X Office of Conservation & Coastal Lands
X Land Division – Oahu District
X Historic Preservation

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Kapalama Terminal Jet Fuel Pipeline Environmental Assessment
LOCATION: Kapalama, Honolulu, Island of Oahu; TMK: (1) 1-2-025:017, 020-021 & 027
APPLICANT: Hawaii Fueling Facilities Corporation

Transmitted for your review and comment is information on the above-referenced project. We would appreciate your comments on this project. Please submit any comments by **February 15, 2017**.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Lydia Morikawa at 587-0410. Thank you.

Attachments

( ) We have no objections.
( ) We have no comments.
(X) Comments are attached.

Signed: Bruce S. Anderson

Print Name: Bruce S. Anderson, Ph.D. DAR Adminstrator
Date: 1-31-17

cc: Central Files
Ian Hirokawa

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

KEKOA KALUHIWA
FIRST DEPUTY

JEFFREY T. PEARSON
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
DIVISION OF AQUATIC RESOURCES
1151 PUNCHBOWL STREET, ROOM 330
HONOLULU, HAWAII 96813

Date: 01-24-17
DAR #5466

MEMORANDUM

TO: Bruce S. Anderson, DAR Administrator

DATE: 1/31/17

FROM: Jo-Anne N. Kushima, Aquatic Biologist

SUBJECT: Pre-Consultation for EA for Hawaii Fueling Facilities Corporation Kapalama Terminal Jet Fuel Pipeline
Sand Island Access Road

Comment	Date Request	Receipt	Referral	Due Date
	01-19-17	01-23-17	01-24-17	02-03-17

Requested by: Myounghee Noh & Associates, L.L.C.
Graham Knopp, Ph.D.
Environmental Planner

Summary of Proposed Project

Title: Notification Letter for Pre-Consultation for EA for Hawaii Fueling Facilities Corporation Kapalama Terminal Jet Fuel Pipeline

Project by: Hawaii Fueling Facilities Corporation (HFFC)

Location: Honolulu Harbor, Kapalama, Oahu

Brief Description:
Myounghee Noh & Associates, L.L.C has been retained to perform an EA compliant with HRS Section 343, the Hawaii Environmental Policy Act for a proposed fuel on/off-loading facility and fuel line at Honolulu Harbor. The Hawaii Fueling Facilities Corporation (HFFC), a consortium of 20 airlines and provider of storage and distribution services for all jet fuel delivered to Honolulu International Airport (HIA) proposes to construct a jet fuel on/off-loading terminal at Pier 43 and an associated fuel line along Sand Island Access Road. This will connect the on/off-loading terminal to the HFFC Sand Island Fuel Facility on Sand Island Access Road before (north of) the bridge.

The purpose of the project is to increase jet fuel supply resilience, reliability and redundancy to the Honolulu International Airport (HIA) and outer island airports. The increased jet fuel supply resilience is essential to ensure that adequate fuel supply for air transport is available to meet both current and future demands.

The project consists of 1) a fuel on/off-loading site with valve pit at Pier 43, 2) approximately 1,850 linear feet of 18-inch, below-grade fuel line at Pier 43 and along Sand Island Access Road, transiting under Sand Island Access Road to the HFFC Tank Farm, and 3) a new tie-in at the HFFC Sand Island Tank Farm. Plans are to have the project coordinated with the harbor improvements scheduled for construction during Fiscal Year 2017-2019. The proposed fuel line would occupy State of Hawaii Department of Transportation (HDOT)-Harbors owned property along Pier 43 and utilize an easement along Sand Island Access Road.

Comments:
The Division of Aquatic Resources (DAR) requests an electronic copy of the Draft Environmental Assessment (EA) upon its publication. We will review the information provided in the Draft (EA) and provide comments at that time.

Thank you for sending DAR the notification letter for the pre-consultation for the Draft Environmental Assessment for the proposed Kapalama Terminal Jet Fuel Pipeline. Comments on the proposed project are forthcoming.

DAVID Y. IGE
GOVERNOR OF HAWAII

RECEIVED
LAND DIVISION

2017 FEB -6 AM 10: 40

DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII

'17 JAN 27 AM 10:53 ENGINEERING

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

January 26, 2017

MEMORANDUM

TO: **DLNR Agencies:**
X Div. of Aquatic Resources
X Div. of Boating & Ocean Recreation
From: X Engineering Division
__Div. of Forestry & Wildlife
__Div. of State Parks
X Commission on Water Resource Management
X Office of Conservation & Coastal Lands
X Land Division – Oahu District
X Historic Preservation

~~FROM:~~ To: Russell Y. Tsuji, Land Administrator
SUBJECT: Kapalama Terminal Jet Fuel Pipeline Environmental Assessment
LOCATION: Kapalama, Honolulu, Island of Oahu; TMK: (1) 1-2-025:017, 020-021 & 027
APPLICANT: Hawaii Fueling Facilities Corporation

Transmitted for your review and comment is information on the above-referenced project. We would appreciate your comments on this project. Please submit any comments by **February 15, 2017**.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Lydia Morikawa at 587-0410. Thank you.

Attachments

( ) We have no objections.
( ) We have no comments.
(X) Comments are attached.

Signed: _____

Print Name: Carty S. Chang, Chief Engineer
Date: 2/1/17

cc: Central Files
Ian Hirokawa

DEPARTMENT OF LAND AND NATURAL RESOURCES
ENGINEERING DIVISION

LD/Russell Tsuji
Ref: Kapalama Terminal Jet Fuel Pipeline Environmental Assessment

COMMENTS

The rules and regulations of the National Flood Insurance Program (NFIP), Title 44 of the Code of Federal Regulations (44CFR), are in effect when development falls within a designated Flood Hazard.

The owner of the project property and/or their representative is responsible to research the Flood Hazard Zone designation for the project. Flood Hazard Zone designations can be found using the Flood Insurance Rate Map (FIRM), which can be accessed through the Flood Hazard Assessment Tool (FHAT) (http://gis.hawaiinfip.org/FHAT).

Be advised that 44CFR reflects the minimum standards as set forth by the NFIP. Local community flood ordinances may take precedence over the NFIP standards as local designations prove to be more restrictive. If there are questions regarding the local flood ordinances, please contact the applicable County NFIP Coordinators below:

- Oahu: City and County of Honolulu, Department of Planning and Permitting (808) 768-8098.
- Hawaii Island: County of Hawaii, Department of Public Works (808) 961-8327.
- Maui/Molokai/Lanai County of Maui, Department of Planning (808) 270-7253.
- Kauai: County of Kauai, Department of Public Works (808) 241-4846.

Signed: _____
CARTY S. CHANG, CHIEF ENGINEER

Date: 2/1/17

DAVID Y. IGE
GOVERNOR OF HAWAII

SUZANNE D. CASE
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE
MANAGEMENT

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

January 26, 2017

RECEIVED
LAND DIVISION
2017 FEB 14 AM 11:03
DEPT. OF LAND & NATURAL RESOURCES
STATE OF HAWAII

MEMORANDUM

TO: **DLNR Agencies:**
X Div. of Aquatic Resources
X Div. of Boating & Ocean Recreation
X Engineering Division
__Div. of Forestry & Wildlife
__Div. of State Parks
X Commission on Water Resource Management
X Office of Conservation & Coastal Lands
X Land Division – Oahu District
X Historic Preservation

FROM: Russell Y. Tsuji, Land Administrator
SUBJECT: Kapalama Terminal Jet Fuel Pipeline Environmental Assessment
LOCATION: Kapalama, Honolulu, Island of Oahu; TMK: (1) 1-2-025:017, 020-021 & 027
APPLICANT: Hawaii Fueling Facilities Corporation

Transmitted for your review and comment is information on the above-referenced project. We would appreciate your comments on this project. Please submit any comments by **February 15, 2017**.

If no response is received by this date, we will assume your agency has no comments. If you have any questions about this request, please contact Lydia Morikawa at 587-0410. Thank you.

Attachments

The proposed improvements at Pier 43, including the on/off-loading site and portion of the fuel-line, will require a land disposition, likely by a non-exclusive easement, from the Land Board, further subject to the concurrence of DOT's Harbors Division.

( ) We have no objections.
( ) We have no comments.
(x) Comments are attached.

Signed: Darlene J. Bryant-Takamatsu

Print Name: Darlene J. Bryant-Takamatsu
Date: 2/14/2017

cc: Central Files
Ian Hirokawa

OFFICE OF PLANNING
STATE OF HAWAII

DAVID Y. IGE
GOVERNOR

LEO R. ASUNCION
DIRECTOR
OFFICE OF PLANNING

235 South Beretania Street, 6th Floor, Honolulu, Hawaii 96813
Mailing Address: P.O. Box 2359, Honolulu, Hawaii 96804

Telephone: (808) 587-2846
Fax: (808) 587-2824
Web: http://planning.hawaii.gov/

Ref. No. P-15475

February 9, 2017

Mr. Graham Knoop, Ph.D.
Environmental Planner
Myounghee Noh & Associates, LLC
99-1046 Iwaena Street
Aiea, Hawaii 96701

Dear Mr. Knoop:

Subject: Pre-Consultation for Environmental Assessment – Hawaii Fueling Facilities Corporation, Kapalama Terminal Jet Fuel Pipeline, Sand Island Access Road, Honolulu Harbor, Kapalama, Oahu
TMK: (1) 1-2-025:017, 020, 021, and 027

Thank you for the opportunity to provide comments on this consultation request for the preparation of a Draft Environmental Assessment (Draft EA) on the Kapalama Terminal jet fuel pipeline being proposed by the Hawaii Fueling Facilities Corporation (HHFC). The consultation review material was transmitted to our office via letter dated January 19, 2017.

It is our understanding that the purpose of this project is to provide a reliable jet fuel supply for the Honolulu International Airport. The project proposes a jet fuel on/off-loading site at Pier 43, 1,850 linear feet of an 18-inch fuel line along Sand Island Access Road, and a new tie-in at the HFFC Sand Island Tank Farm. The proposed fuel line would extend from the pier to the near side fuel line easement and tie-in at the existing HFFC Sand Island Tank Farm.

The Office of Planning (OP) has reviewed the transmitted material and has the following comments to offer:

1. Pursuant to Hawaii Administrative Rules (HAR) § 11-200-10(4) – general description of the action's technical, economic, social, and environmental characteristics; this project must demonstrate that it is consistent with a number of state environmental, social, economic goals, and policies for land use. Hawaii Revised Statutes (HRS) Chapter 226, the Hawaii State Planning Act provides goals, objectives, policies, and priority guidelines for growth, development, and the allocation of resources throughout the state in areas of state interest.

   The analysis on the Hawaii State Planning Act should also include a discussion on the project's ability to meet all of the goals, objectives, policies, and priority guidelines or clarify where it is in conflict with them. If any of these themes are not applicable to the

project, the Draft EA should affirmatively state such determination. The most efficient method is summarizing these in tabular form, followed by discussion paragraphs.

2. The coastal zone management (CZM) area is defined as "all lands of the State and the area extending seaward from the shoreline to the limit of the State's police power and management authority, including the U.S. territorial sea" (see HRS § 205A-1, the definition of "coastal zone management area").

   HRS Chapter 205A-5(b) requires all state and county agencies to enforce the CZM objectives and policies. The Draft EA should include an assessment as to how the proposed action conforms to the goals and objectives of the Hawaii CZM program as listed in HRS § 205A-2. Compliance with HRS § 205A-2 is an important component for satisfying the requirements of HRS Chapter 343.

3. A portion of this project falls within the Special Management Area (SMA) delineated by the City and County of Honolulu. Please consult with the City and County of Honolulu, Department of Planning and Permitting on permitting issues and the requirements of SMA use.

4. Pursuant to HAR § 11-200-10(6) – the identification and summary of impacts and alternatives considered; in order to ensure that the natural resources and coastal areas within the State of Hawaii remain protected, the Draft EA should summarize the potential impact to marine resources adjoining Honolulu Harbor. The analysis should evaluate and detail the effectiveness of mitigation efforts employed during the construction phase and beyond to ensure the coastal and marine ecosystems are protected. The marine water quality classification should be considered when developing mitigation measures.

   The Draft EA should detail the required permit, proposed best management practices that will be employed during the construction phase, and long-term mitigation measures utilized for accidental fuel spills and land-based polluted runoff.

If you have any questions regarding this comment letter, please contact Joshua Hekekia of our office at (808) 587-2845.

Sincerely,

Leo R. Asuncion
Director

DAVID Y. IGE
GOVERNOR

FORD N. FUCHIGAMI
DIRECTOR

Deputy Directors
JADE T. BUTAY
ROSS M. HIGASHI
EDWIN H. SNIFFEN
DARRELL T. YOUNG

STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097

IN REPLY REFER TO:
DIR 0075
STP 8.2082

February 23, 2017

Mr. Graham Knopp, Ph.D.
Environmental Planner
Myounghee Noh and Associates, L.L.C.
200 Kohola Street
Hilo, Hawaii 96720

Dear Mr. Knopp:

Subject: Pre-Consultation for the Environmental Assessment
Hawaii Fueling Facilities Corporation (HFFC)
Kapalama Terminal Jet Fuel Pipeline
Honolulu Harbor, Kapalama, Oahu
TMK: (1) 1-2-025:017, 027, 020, and 021

The Hawaii Fueling Facilities Corporation (HFFC) proposes to construct a jet fuel on/off-loading terminal at Pier 43 and an associated fuel line along Sand Island Access Road and crossing under Sand Island Access Road to connect to the existing HFFC Tank Farm. Our Department of Transportation (DOT) comments are presented below. Also, we would like to receive an electronic copy of the draft environmental assessment when it is published.

Harbors Division (DOT-HAR)

Pier 43 and the adjacent lands are part of the DOT-HAR's planned Kapalama Container Terminal (KCT). The proposed project is anticipated to have significant impacts on DOT-HAR's design, construction, and maintenance of the forthcoming KCT pier/yard. In addition, here may be operational conflicts with the future user of the KCT. The draft environmental assessment must thoroughly discuss these and any other safety issues regarding the comingling of fueling and cargo operations, e.g., the safety or clear zones required while a fuel ship is operating at berth, etc.

Other government entities such as the U.S. Coast Guard, the U.S. Army Corps of Engineers, the State Department of Land and Natural Resources, the State Department of Business and Economic Development, and the State Office of Planning, should also be consulted if you have not done so already.

There is a discrepancy between one of the TMKs listed for the project and the accompanying Figure 1. TMK (1) 2-025:027 (HDOT-Harbors), Sand Island Access Road is listed as one of the parcels for the project. However, the accompanying Figure 1 does not show the pipeline on this parcel, but rather a different ((1)-2-025:119) one.

Also, please note that the TMK numbering used in the pre-consultation notice is confusing. Typically, parenthesis is used to indicate the Tax Division, followed by the Zone number, Section number, Plat number and Parcel number. For example, the pre-consultation notice should have indicated the TMK as either (1) 1-2-025:017 or, if Tax Division (1) Oahu is assumed, 1-2-025:017.

Highways Division (DOT-HWY)

Sand Island Access Road is a State Road (Route 64). A permit from the DOT-HWY is required for work in the State highway right-of-way. Construction plans for the proposed pipeline must be submitted for DOT-HWY review and approval.

The fuel line must have proper clearances from existing utilities. In particular, please note that there are existing underground drain lines aligned longitudinally on both sides of Sand Island Access Road in the vicinity of the proposed jet fuel pipeline. The minimum clearances from drain lines are one (1) foot minimum vertical and two (2) feet minimum horizontal, as noted in the DOT-HWY's current State Drainage Criteria.

Should you have any questions regarding this matter, please contact Mr. Norren Kato of the DOT Statewide Transportation Planning Office at telephone number (808) 831-7976.

Sincerely,

FORD N. FUCHIGAMI
Director of Transportation

DEPARTMENT OF PLANNING AND PERMITTING
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 7TH FLOOR • HONOLULU, HAWAII 96813
PHONE: (808) 768-8000 • FAX: (808) 768-6041
DEPT. WEB SITE: www.honoluludpp.org • CITY WEB SITE: www.honolulu.gov

KIRK CALDWELL
MAYOR

KATHY K. SOKUGAWA
ACTING DIRECTOR

TIMOTHY F. T. HIU
ACTING DEPUTY DIRECTOR

2017/ELOG-189(ST)

February 2, 2017

Mr. Graham Knopp, Ph.D.
Myounghee Noh & Associates, L.L.C.
200 Kohola Street
Hilo, Hawaii 96720

Dear Mr. Knopp:

SUBJECT: Hawaii Fueling Facilities Corporation
Kapalama Terminal Jet Fuel Pipeline Project
Pre-assessment Consultation
Sand Island
Tax Map Keys 1-2-25: portions 17, 20, 21, and 27

This responds to your request for comments on the forthcoming Draft Environmental Assessment (EA) which is to be prepared for the above Project.

The Special Management Area (SMA) boundary, established by Chapter 25, Revised Ordinances Honolulu (ROH), runs along and near the mid-point of Sand Island Access Road. Based on your attached Figure 1, it appears that only a small segment of the proposed below-grade jet fuel line exiting Parcel 21 would be located in the SMA at the tie-in with the Hawaii Fueling Facilities Corporation (HFFC) Project. However, since this proposed jet fuel line is considered an underground utility line, its construction under Sand Island Access Road is not considered "development," and is therefore exempt from SMA requirements, pursuant to ROH Section 25-1.3(2)(N).

The proposed jet fuel line is a permitted use within the I-3 Waterfront Industrial District, pursuant to Land Use Ordinance, Chapter 21, ROH. Therefore no land use permits are required. Finally, inasmuch as the shoreline would likely be located across the makai side of the Sand Island Access Road bridge, the remaining pipeline proposed along Honolulu Harbor would not require a shoreline setback variance pursuant to ROH, Chapter 23.

Should you have any questions, please contact Steve Tagawa of our staff at 768-8024.

Very truly yours,

For: Kathy K. Sokugawa,
Acting Director

DEPARTMENT OF DESIGN AND CONSTRUCTION
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 11TH FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 768-8480 • Fax: (808) 768-4567
Web site: www.honolulu.gov

KIRK CALDWELL
MAYOR

ROBERT J. KRONING, P.E.
DIRECTOR DESIGNATE

MARK YONAMINE, P.E.
DEPUTY DIRECTOR

February 2, 2017

Myounghee Noh & Associates, LLC
Attn: Mr. Graham Knopp
99-1046 Iwaena Street, 210A
Aiea, Hawaii 96701

Dear Mr. Knopp,

Subject: Hawaii Fueling Facilities Corporation Kapalama Terminal Jet Fuel Pipeline Environmental Assessment, Sand Island Access Road, Honolulu Harbor, Kapalama, Oahu

Thank you for the opportunity to review and comment. The Department of Design and Construction has no comments at this time.

Should you have any further questions, please contact me at 768-8480.

Sincerely,

Robert Kroning, P.E.
Director Designate

RJK:ms(677978)

DEPARTMENT OF TRANSPORTATION SERVICES
CITY AND COUNTY OF HONOLULU
650 SOUTH KING STREET, 3RD FLOOR
HONOLULU, HAWAII 96813
Phone: (808) 768-8305 • Fax: (808) 768-4730 • Internet: www.honolulu.gov

KIRK CALDWELL
MAYOR

MARK K. KIKUCHI, P.E.
ACTING DIRECTOR

JON Y. NOUCHI
DEPUTY DIRECTOR

TP1/17-678197R

February 7, 2017

Mr. Graham Knopp, Ph.D.
Environmental Planner
Myounghee Noh & Associates, L.L.C.
99-1046 Iwaena Street, Suite 210A
Aiea, Hawaii 96701

Dear Mr. Knopp:

SUBJECT: Pre-Consultation Draft Environmental Assessment (DEA) for Hawaii Fueling Facilities Corporation Kapalama Terminal Jet Fuel Pipeline, Honolulu Harbor, Oahu, Hawaii

This is in response to your letter dated January 19, 2017, requesting our comments, concerns or suggestions for the subject project. When appropriate, incorporate the following comments:

1. Construction materials and equipment should be transferred to and from the project site during off-peak traffic hours (8:30 a.m. to 3:30 p.m.) to minimize any possible disruption to traffic on the local streets.

2. The area Neighborhood Board, as well as the area residents, businesses, emergency personnel (fire, ambulance and police), Oahu Transit Services, Inc. (TheBus), etc., should be kept apprised of the details of the proposed project and the impacts that the project may have on the adjoining local street area network.

We would like to receive an electronic copy of the DEA and reserve further comment pending review of the DEA.

Thank you for the opportunity to review this matter. Should you have any questions, please contact Renee Yamasaki of my staff at 768-8383.

Very truly yours,

Mark K. Kikuchi, P.E.
Acting Director

BOARD OF WATER SUPPLY

CITY AND COUNTY OF HONOLULU
630 SOUTH BERETANIA STREET
HONOLULU, HI 96843
www.boardofwatersupply.com

KIRK CALDWELL, MAYOR

BRYAN P. ANDAYA, Chair
ADAM C. WONG, Vice Chair
DAVID C. HULIHEE
KAPUA SPROAT
KAY C. MATSUI

ROSS S. SASAMURA, Ex-Officio
FORD N. FUCHIGAMI, Ex-Officio

ERNEST Y. W. LAU, P.E.
Manager and Chief Engineer

ELLEN E. KITAMURA, P.E.
Deputy Manager and Chief Engineer

February 24, 2017

Mr. Graham Knopp, Ph.D.
Myounghee Noh & Associates, LLC
200 Kohola Street
Hilo, Hawaii 96720

Dear Mr. Knopp:

Subject: Your Letter Dated January 19, 2017 Requesting Comments on the Draft Environmental Assessment Preparation Notice for Hawaii Fueling Facilities Corporation - Tax Map Key: 1-2-025: 017 & 021

Thank you for the opportunity to comment on the proposed jet-fuel pipeline project along Sand Island Access Road.

The Board of Water Supply (BWS) has major transmission mains in the project area that supply water and fire protection to our customers on Sand Island. A 16" concrete cylinder water main is located along the south-west portion of Sand Island Access Road; a 16" ductile iron and a 12" cast iron water main intersect Sand Island Access Road and cross the Kapalama Basin channel to the west of the access bridge.

We require that the fuel line be installed below our water mains and laterals based on our existing pipe inverts, grading, and vertical clearance requirements. We require that the fuel line be encased in a reinforced concrete jacket at locations which cross under our water mains, with a minimum 5' clearance on either side. All routing and horizontal/vertical clearances are to be consistent with the requirements set forth in our Water System Standards 2002 or latest revision.

Precautions and appropriate mitigation of stray current from the fuel line cathodic protection appurtenances should be addressed in the Draft Environmental Assessment (DEA).

The BWS would like the consultant to confer with our Quality Infrastructure Conservation Initiative (QUINCI) program representatives regarding the cathodic protection of the fuel line.

The construction drawings should be submitted for our review.

The BWS requests an electronic copy of the DEA upon its publication for our review.

If you have any questions, please contact Robert Chun, Project Review Branch of our Water Resources Division at 748-5443.

Very truly yours,

for ERNEST Y. W. LAU, P.E.
Manager and Chief Engineer

A-2. Response Letters

Myounghee Noh & Associates, L.L.C.
Environmental Studies and Consulting Services

June 12, 2017

Aaron Nadig
300 Ala Moana Boulevard, Room 3-122
Honolulu, Hawaii 96850

Dear Aaron Nadig,

Subject: Pre-Consultation Response for Hawaii Fueling Facilities Corporation Kapalama Terminal Jet Fuel Pipeline Environmental Assessment, Sand Island Access Road, Honolulu Harbor, Kapalama, Oahu

Thank you for your letter and input on the project development and regulatory requirements for the above referenced project. We will address your areas of interest in the Draft Environmental Assessment, which is expected to be available later this year.

If you requested an electronic copy of the Draft Environmental Assessment, we will provide it to the email address indicated. Thank you for your participation in the review of this very important project.

Sincerely,

Jessica Walsh
Environmental Planner

200 Kohola Street, Hilo, HI 96720 • Tel 808.935.8727
99-1046 Iwaena Street, 210A, Aiea, HI 96701 • Tel 808.484.9214
myounghee@noh-associates.com • www.noh-associates.com

Myounghee Noh & Associates, L.L.C.
Environmental Studies and Consulting Services

June 12, 2017

Alec Wong, P.E.
P.O. Box 3378
Honolulu, Hawaii 96801-3378

Dear Alec Wong, P.E.,

Subject: Pre-Consultation Response for Hawaii Fueling Facilities Corporation Kapalama Terminal Jet Fuel Pipeline Environmental Assessment, Sand Island Access Road, Honolulu Harbor, Kapalama, Oahu

Thank you for your letter and input on the project development and regulatory requirements for the above referenced project. We will address your areas of interest in the Draft Environmental Assessment, which is expected to be available later this year.

If you requested an electronic copy of the Draft Environmental Assessment, we will provide it to the email address indicated. Thank you for your participation in the review of this very important project.

Sincerely,

Jessica Walsh
Environmental Planner

200 Kohola Street, Hilo, HI 96720 • Tel 808.935.8727
99-1046 Iwaena Street, 210A, Aiea, HI 96701 • Tel 808.484.9214
myounghee@noh-associates.com • www.noh-associates.com

Myounghee Noh & Associates, L.L.C.
Environmental Studies and Consulting Services

June 12, 2017

Laura Leialoha Phillips McIntyre, AICP
P.O. Box 3378
Honolulu, Hawaii 96801-3378

Dear Laura Leialoha Phillips McIntyre, AICP,

Subject: Pre-Consultation Response for Hawaii Fueling Facilities Corporation Kapalama Terminal Jet Fuel Pipeline Environmental Assessment, Sand Island Access Road, Honolulu Harbor, Kapalama, Oahu

Thank you for your letter and input on the project development and regulatory requirements for the above referenced project. We will address your areas of interest in the Draft Environmental Assessment, which is expected to be available later this year.

If you requested an electronic copy of the Draft Environmental Assessment, we will provide it to the email address indicated. Thank you for your participation in the review of this very important project.

Sincerely,

Jessica Walsh
Environmental Planner

200 Kohola Street, Hilo, HI 96720 • Tel 808.935.8727
99-1046 Iwaena Street, 210A, Aiea, HI 96701 • Tel 808.484.9214
myounghee@noh-associates.com • www.noh-associates.com

Myounghee Noh & Associates, L.L.C.
Environmental Studies and Consulting Services

June 12, 2017

Jeffrey Eckerd
99-945 Halawa Valley Street
Aiea, , Hawaii 96701

Dear Jeffrey Eckerd ,

Subject: Pre-Consultation Response for Hawaii Fueling Facilities Corporation Kapalama Terminal Jet Fuel Pipeline Environmental Assessment, Sand Island Access Road, Honolulu Harbor, Kapalama, Oahu

Thank you for your letter and input on the project development and regulatory requirements for the above referenced project. We will address your areas of interest in the Draft Environmental Assessment, which is expected to be available later this year.

If you requested an electronic copy of the Draft Environmental Assessment, we will provide it to the email address indicated. Thank you for your participation in the review of this very important project.

Sincerely,

Jessica Walsh
Environmental Planner

200 Kohola Street, Hilo, HI 96720 • Tel 808.935.8727
99-1046 Iwaena Street, 210A, Aiea, HI 96701 • Tel 808.484.9214
myounghee@noh-associates.com • www.noh-associates.com

Myounghee Noh & Associates, L.L.C.
Environmental Studies and Consulting Services

June 12, 2017

Edward R. Underwood
4 Sand Island Access Road
Honolulu, Hawaii 96819

Dear Edward R. Underwood,

Subject: Pre-Consultation Response for Hawaii Fueling Facilities Corporation Kapalama Terminal Jet Fuel Pipeline Environmental Assessment, Sand Island Access Road, Honolulu Harbor, Kapalama, Oahu

Thank you for your letter and input on the project development and regulatory requirements for the above referenced project. We will address your areas of interest in the Draft Environmental Assessment, which is expected to be available later this year.

If you requested an electronic copy of the Draft Environmental Assessment, we will provide it to the email address indicated. Thank you for your participation in the review of this very important project.

Sincerely,

Jessica Walsh
Environmental Planner

200 Kohola Street, Hilo, HI 96720 • Tel 808.935.8727
99-1046 Iwaena Street, 210A, Aiea, HI 96701 • Tel 808.484.9214
myounghee@noh-associates.com • www.noh-associates.com

Myounghee Noh & Associates, L.L.C.
Environmental Studies and Consulting Services

June 12, 2017

Dr. Bruce S. Anderson
P.O Box 621
Honolulu, Hawaii 96809

Dear Dr. Bruce S. Anderson ,

Subject: Pre-Consultation Response for Hawaii Fueling Facilities Corporation Kapalama Terminal Jet Fuel Pipeline Environmental Assessment, Sand Island Access Road, Honolulu Harbor, Kapalama, Oahu

Thank you for your letter and input on the project development and regulatory requirements for the above referenced project. We will address your areas of interest in the Draft Environmental Assessment, which is expected to be available later this year.

If you requested an electronic copy of the Draft Environmental Assessment, we will provide it to the email address indicated. Thank you for your participation in the review of this very important project.

Sincerely,

Jessica Walsh
Environmental Planner

200 Kohola Street, Hilo, HI 96720 • Tel 808.935.8727
99-1046 Iwaena Street, 210A, Aiea, HI 96701 • Tel 808.484.9214
myounghee@noh-associates.com • www.noh-associates.com

Myounghee Noh & Associates, L.L.C.
Environmental Studies and Consulting Services

June 12, 2017

Carty Chang, P.E.
P.O Box 621
Honolulu, Hawaii 96809

Dear Carty Chang, P.E.,

Subject: Pre-Consultation Response for Hawaii Fueling Facilities Corporation Kapalama Terminal Jet Fuel Pipeline Environmental Assessment, Sand Island Access Road, Honolulu Harbor, Kapalama, Oahu

Thank you for your letter and input on the project development and regulatory requirements for the above referenced project. We will address your areas of interest in the Draft Environmental Assessment, which is expected to be available later this year.

If you requested an electronic copy of the Draft Environmental Assessment, we will provide it to the email address indicated. Thank you for your participation in the review of this very important project.

Sincerely,

Jessica Walsh
Environmental Planner

200 Kohola Street, Hilo, HI 96720 • Tel 808.935.8727
99-1046 Iwaena Street, 210A, Aiea, HI 96701 • Tel 808.484.9214
myounghee@noh-associates.com • www.noh-associates.com

Myounghee Noh & Associates, L.L.C.
Environmental Studies and Consulting Services

June 12, 2017

Darlene J. Bryant-Takamatsu
P.O Box 621
Honolulu, Hawaii 96809

Dear Darlene J. Bryant-Takamatsu,

Subject: Pre-Consultation Response for Hawaii Fueling Facilities Corporation Kapalama Terminal Jet Fuel Pipeline Environmental Assessment, Sand Island Access Road, Honolulu Harbor, Kapalama, Oahu

Thank you for your letter and input on the project development and regulatory requirements for the above referenced project. We will address your areas of interest in the Draft Environmental Assessment, which is expected to be available later this year.

If you requested an electronic copy of the Draft Environmental Assessment, we will provide it to the email address indicated. Thank you for your participation in the review of this very important project.

Sincerely,

Jessica Walsh
Environmental Planner

200 Kohola Street, Hilo, HI 96720 • Tel 808.935.8727
99-1046 Iwaena Street, 210A, Aiea, HI 96701 • Tel 808.484.9214
myounghee@noh-associates.com • www.noh-associates.com

Myounghee Noh & Associates, L.L.C.
Environmental Studies and Consulting Services

June 12, 2017

Leo R. Asuncion
P.O. Box 2359
Honolulu, Hawaii 96804

Dear Leo R. Asuncion,

Subject: Pre-Consultation Response for Hawaii Fueling Facilities Corporation Kapalama Terminal Jet Fuel Pipeline Environmental Assessment, Sand Island Access Road, Honolulu Harbor, Kapalama, Oahu

Thank you for your letter and input on the project development and regulatory requirements for the above referenced project. We will address your areas of interest in the Draft Environmental Assessment, which is expected to be available later this year.

If you requested an electronic copy of the Draft Environmental Assessment, we will provide it to the email address indicated. Thank you for your participation in the review of this very important project.

Sincerely,

Jessica Walsh
Environmental Planner

200 Kohola Street, Hilo, HI 96720 • Tel 808.935.8727
99-1046 Iwaena Street, 210A, Aiea, HI 96701 • Tel 808.484.9214
myounghee@noh-associates.com • www.noh-associates.com

Myounghee Noh & Associates, L.L.C.
Environmental Studies and Consulting Services

June 12, 2017

Ford N. Fushigami
869 Punchbowl Street, Room 513
Honolulu, Hawaii 96813

Dear Ford N. Fushigami,

Subject: Pre-Consultation Response for Hawaii Fueling Facilities Corporation Kapalama Terminal Jet Fuel Pipeline Environmental Assessment, Sand Island Access Road, Honolulu Harbor, Kapalama, Oahu

Thank you for your letter and input on the project development and regulatory requirements for the above referenced project. We will address your areas of interest in the Draft Environmental Assessment, which is expected to be available later this year.

If you requested an electronic copy of the Draft Environmental Assessment, we will provide it to the email address indicated. Thank you for your participation in the review of this very important project.

Sincerely,

Jessica Walsh
Environmental Planner

200 Kohola Street, Hilo, HI 96720 • Tel 808.935.8727
99-1046 Iwaena Street, 210A, Aiea, HI 96701 • Tel 808.484.9214
myounghee@noh-associates.com • www.noh-associates.com

Myounghee Noh & Associates, L.L.C.
Environmental Studies and Consulting Services

June 12, 2017

Ford N. Fushigami
869 Punchbowl Street, Room 513
Honolulu, Hawaii 96813

Dear Ford N. Fushigami,

Subject: Pre-Consultation Response for Hawaii Fueling Facilities Corporation Kapalama Terminal Jet Fuel Pipeline Environmental Assessment, Sand Island Access Road, Honolulu Harbor, Kapalama, Oahu

Thank you for your letter and input on the project development and regulatory requirements for the above referenced project. We will address your areas of interest in the Draft Environmental Assessment, which is expected to be available later this year.

If you requested an electronic copy of the Draft Environmental Assessment, we will provide it to the email address indicated. Thank you for your participation in the review of this very important project.

Sincerely,

Jessica Walsh
Environmental Planner

200 Kohola Street, Hilo, HI 96720 • Tel 808.935.8727
99-1046 Iwaena Street, 210A, Aiea, HI 96701 • Tel 808.484.9214
myounghee@noh-associates.com • www.noh-associates.com

Myounghee Noh & Associates, L.L.C.
Environmental Studies and Consulting Services

June 12, 2017

Kathy K. Sokugawa
650 South King Street, 7th floor
Honolulu, Hawaii 96813

Dear Kathy K. Sokugawa,

Subject: Pre-Consultation Response for Hawaii Fueling Facilities Corporation Kapalama Terminal Jet Fuel Pipeline Environmental Assessment, Sand Island Access Road, Honolulu Harbor, Kapalama, Oahu

Thank you for your letter and input on the project development and regulatory requirements for the above referenced project. We will address your areas of interest in the Draft Environmental Assessment, which is expected to be available later this year.

If you requested an electronic copy of the Draft Environmental Assessment, we will provide it to the email address indicated. Thank you for your participation in the review of this very important project.

Sincerely,

Jessica Walsh
Environmental Planner

200 Kohola Street, Hilo, HI 96720 • Tel 808.935.8727
99-1046 Iwaena Street, 210A, Aiea, HI 96701 • Tel 808.484.9214
myounghee@noh-associates.com • www.noh-associates.com

Myounghee Noh & Associates, L.L.C.
Environmental Studies and Consulting Services

June 12, 2017

Robert J. Kroning, P.E.
650 South King Street, 11th Floor
Honolulu, Hawaii 96813

Dear Robert J. Kroning, P.E.,

Subject: Pre-Consultation Response for Hawaii Fueling Facilities Corporation Kapalama Terminal Jet Fuel Pipeline Environmental Assessment, Sand Island Access Road, Honolulu Harbor, Kapalama, Oahu

Thank you for your letter and input on the project development and regulatory requirements for the above referenced project. We will address your areas of interest in the Draft Environmental Assessment, which is expected to be available later this year.

If you requested an electronic copy of the Draft Environmental Assessment, we will provide it to the email address indicated. Thank you for your participation in the review of this very important project.

Sincerely,

Jessica Walsh
Environmental Planner

200 Kohola Street, Hilo, HI 96720 • Tel 808.935.8727
99-1046 Iwaena Street, 210A, Aiea, HI 96701 • Tel 808.484.9214
myounghee@noh-associates.com • www.noh-associates.com

Myounghee Noh & Associates, L.L.C.
Environmental Studies and Consulting Services

June 12, 2017

Mark K. Kikuchi, P.E.
650 South King Street, Third Floor
Honolulu, Hawaii 96813-3017

Dear Mark K. Kikuchi, P.E.,

Subject: Pre-Consultation Response for Hawaii Fueling Facilities Corporation Kapalama Terminal Jet Fuel Pipeline Environmental Assessment, Sand Island Access Road, Honolulu Harbor, Kapalama, Oahu

Thank you for your letter and input on the project development and regulatory requirements for the above referenced project. We will address your areas of interest in the Draft Environmental Assessment, which is expected to be available later this year.

If you requested an electronic copy of the Draft Environmental Assessment, we will provide it to the email address indicated. Thank you for your participation in the review of this very important project.

Sincerely,

Jessica Walsh
Environmental Planner

200 Kohola Street, Hilo, HI 96720 • Tel 808.935.8727
99-1046 Iwaena Street, 210A, Aiea, HI 96701 • Tel 808.484.9214
myounghee@noh-associates.com • www.noh-associates.com

Myounghee Noh & Associates, L.L.C.
Environmental Studies and Consulting Services

June 12, 2017

Ernest Y.W. Lau, P.E.
630 South Bertania Street,
Honolulu, Hawaii 96813

Dear Ernest Y.W. Lau, P.E.,

Subject: Pre-Consultation Response for Hawaii Fueling Facilities Corporation Kapalama Terminal Jet Fuel Pipeline Environmental Assessment, Sand Island Access Road, Honolulu Harbor, Kapalama, Oahu

Thank you for your letter and input on the project development and regulatory requirements for the above referenced project. We will address your areas of interest in the Draft Environmental Assessment, which is expected to be available later this year.

If you requested an electronic copy of the Draft Environmental Assessment, we will provide it to the email address indicated. Thank you for your participation in the review of this very important project.

Sincerely,

Jessica Walsh
Environmental Planner

200 Kohola Street, Hilo, HI 96720 • Tel 808.935.8727
99-1046 Iwaena Street, 210A, Aiea, HI 96701 • Tel 808.484.9214
myounghee@noh-associates.com • www.noh-associates.com

APPENDIX B

Phase I Environmental Site Assessment Report

Phase I Environment. l Site Assessment
for
Proposed Kapalama Terminal Jet Fuel Pipeline from HFFC Sand Island Fuel Facility to Pier 42 Sand Island Access Road Honolulu, Hawaii 96819

TMK (1) 1-2-025:017
TMK (1) 1-2-025:020
TMK (1) 1-2-025:021
Sand Island Access Road

MNA Project 2212_5

May 5, 2017

Myounghee Noh & Associates

Environmental Studies and Consulting Services

200 Kohola Street, Hilo, Hawaii 96720
99-1046 Iwaena Street, Suite 210A, Aiea, Hawaii 96701

This Phase I ESA report is prepared for:

Burns & McDonnell 733 Bishop Street, Suite 2150 Honolulu, HI 96813	and	Hawaii Fueling Facilities Corporation 3201 Aolele Street Honolulu, HI 96819

PHASE I
ENVIRONMENTAL SITE ASSESSMENT REPORT
FOR PROPOSED KAPALAMA TERMINAL JET FUEL PIPELINE
FROM HFFC SAND ISLAND FUEL FACILITY TO PIER 42
SAND ISLAND ACCESS ROAD
HONOLULU, HAWAII 96819

TMK (1) 1-2-025:017
TMK (1) 1-2-025:020
TMK (1) 1-2-025:021
Sand Island Access Road

MNA Job No. 2212_5

May 5, 2017

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

I have the specific qualifications based on education, training, and experience to assess a *property* of the nature, history, and setting of the subject *property*. I have developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR 312.

Myougnhee Noh
Environmental Professional

Myounghee Noh & Associates, L.L.C.
Environmental Studies and Consulting Services
99-1046 Iwaena Street, 210A
Aiea, Hawaii 96701
www.noh-associates.com

TABLE OF CONTENTS

SIGNATURE PAGE i

LIST OF ABBREVIATIONS v

EXECUTIVE SUMMARY vi

FINDINGS vi
RECOGNIZED ENVIRONMENTAL CONDITIONS vi

1.0 INTRODUCTION 1

1.1 PURPOSE 1
1.2 DETAILED SCOPE OF SERVICES 1
1.2.1 Site History 1
1.2.2 Regulatory Records 3
1.2.3 Site Reconnaissance 3
1.2.4 Site Geology and Hydrogeology 3
1.2.5 Data Evaluation and Reporting 3
1.3 SIGNIFICANT ASSUMPTIONS 4
1.4 LIMITATIONS AND EXCEPTIONS 4
1.5 SPECIAL TERMS AND CONDITIONS 4
1.6 USER RELIANCE 4

2.0 SITE DESCRIPTION 4

2.1 LOCATION AND LEGAL DESCRIPTION 5
2.2 SITE AND VICINITY GENERAL CHARACTERISTICS 5
2.3 GEOLOGY 5
2.4 HYDROLOGY AND HYDROGEOLOGY 7
2.5 CURRENT USE OF THE SUBJECT PROPERTY 8
2.6 STRUCTURES, ROADS, AND OTHER IMPROVEMENTS 8
2.7 PAST USES OF THE SUBJECT PROPERTY 8
2.8 CURRENT AND PAST USES OF ADJOINING PROPERTIES 8

3.0 USER PROVIDED INFORMATION 17

3.1 ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS 17
3.2 SPECIALIZED KNOWLEDGE 17
3.3 VALUATION REDUCTION 17
3.4 REASON FOR PERFORMING THE PHASE I ESA 17

4.0 RECORDS REVIEW 17

4.1 STANDARD ENVIRONMENTAL RECORD SOURCES 17
4.1.1 Federal National Priorities List 18
4.1.2 Federal RCRA CORRACTS TSD Facilities List 18
4.1.3 Delisted NPL Site List 18
4.1.4 Federal CERCLIS List 19
4.1.5 Federal CERCLIS NFRAP Site List 19
4.1.6 Federal RCRA non-CORRACTS TSD Facilities List 19
4.1.7 State Brownfield Sites 19
4.1.8 State Hazardous Waste Sites 19
4.1.9 State Landfill/Solid Waste Disposal Sites 20
4.1.10 State Leaking UST List 20
4.1.11 State Voluntary Cleanup Sites 21
4.1.12 Federal RCRA Generators List 21
4.1.13 State Registered UST List 22
4.1.14 Federal ICs and ECs Registries 23

4.1.15 State ICs and ECs Registries *23*
4.1.16 Federal ERNS List *23*
4.1.17 State Releases List *23*
4.1.18 U.S. Brownfields *24*
4.2 ADDITIONAL RECORD SOURCES 24
4.2.1 Subject Property *24*
4.2.2 Surrounding Properties *25*
4.3 HISTORICAL USE INFORMATION ON THE SUBJECT PROPERTY 25
4.3.1 Historical Aerial Photographs *25*
4.3.2 Historical Topographic Maps *26*
4.3.3 Sanborn Fire Insurance Map *27*

5.0 SITE RECONNAISSANCE 27

5.1 METHODOLOGY AND LIMITING CONDITIONS 27
5.2 GENERAL SITE SETTING 27
5.3 EXTERIOR OBSERVATIONS 28
5.4 INTERIOR OBSERVATIONS 28
5.5 HAZARDOUS SUBSTANCES AND PETROLEUM PRODUCTS 28
5.6 ABOVE GROUND AND UNDERGROUND STORAGE TANKS 29

6.0 INTERVIEWS 29

6.1 Alexander "Sandy" Shor, UH 29
6.2 Ross Barnes, UH 29

7.0 DATA GAPS AND DEVIATIONS 30

8.0 KEY FINDINGS AND OPINION 30

8.1 Subject Property - REC 30
8.2 Surrounding Area - REC 31

9.0 CONCLUSION 31

REFERENCES 33

FIGURES

Figure 1. Site Location Map 2
Figure 2. TMK Map 6
Figure 3. Site Map 32

TABLES

Table 1. Lower Honolulu Kalihi Aquifer Classification System Information 8
Table 2. Users and Primary Uses of Subject Property 9
Table 3. Users and Primary Uses of Adjoining Properties 11
Table 4. Aerial Photograph Details 26

APPENDICES

Appendix A Environmental Data Resources Report and Maps
Appendix B Site Reconnaissance Photographs
Appendix C Additional Supporting Materials - Honolulu Harbor 1819 to 1961

CONTRIBUTORS

Project Manager	Graham Knopp
Site Assessors	Graham Knopp, Myounghee Noh, Joanna Boyette
Report Writer	Joanna Boyette, Myounghee Noh
Drafter/Illustrator	Kristin Cabanila, Dolores Camacho
QA Review	Jessica Walsh

LIST OF ABBREVIATIONS

AST	Aboveground Storage Tank
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CESQG	Conditionally Exempt Small Quantity Generators
CORRACTS	RCRA Facilities that are undergoing "corrective action"
EC	Engineering Control
EDR	Environmental Data Resources, Inc.
EPA	Environmental Protection Agency
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
HDOH	Hawaii Department of Health
HDOT	Hawaii Department of Transportation
HFD	Honolulu Fire Department
HFFC	Hawaii Fueling Facilities Corporation
HEER	Hazard Evaluation and Emergency Response
HECO	Hawaii Electric Company
IC	Institutional Control
KMR	Kapalama Military Reservation
LQG	Large Quantity Generator
LUST	Leaking Underground Storage Tank
MNA	Myounghee Noh & Associates, L.L.C.
NFRAP	No Further Remedial Action Planned
NLR	No Longer Regulated Generators
NPL	National Priorities List
RCRA	Resource Conservation and Recovery Act
REC	Recognized Environmental Condition
SHWB	Solid and Hazardous Waste Branch
SQG	Small Quantity Generator
TMK	Tax Map Key
TSD	Treatment, Storage, and Disposal
USGS	United States Geological Survey
UH	University of Hawaii at Manoa
UIC	Underground Injection Control
UST	Underground Storage Tank
VRP	Voluntary Response Program

EXECUTIVE SUMMARY

Myounghee Noh & Associates, L.L.C. (MNA), was retained in December 2016 to conduct a Phase I Environmental Site Assessment (ESA) for the proposed Kapalama Terminal Jet Fuel Pipeline, *subject property*, along Sand Island Access Road, Honolulu, Oahu. This Phase I ESA was completed for Burns & McDonnell and Hawaii Fueling Facilities Corporation (HFFC). At the time of this Phase I ESA, the subject property was owned by the State of Hawaii and operated by the Hawaii Department of Transportation Airports, Harbors, and Highway Divisions. TMK 1-2-025:020 and 021 of the subject property are currently leased by HFFC for fueling operations, and TMK 1-2-025:017 is vacant, except for occasional access given to it for filming and special events.

The purpose of this Phase I ESA is to identify *recognized environmental conditions* (REC) at the subject property, with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and petroleum products.

FINDINGS

The Kapalama Military Reservation (KMR) was established by the U.S. Army in 1941 for a port and warehousing facility. Since the 1970s, portions of the KMR were no longer needed by the Army, and today the State of Hawaii has the ownership and control of the former KMR area. Industrial activities in KMR included, but were not limited to, paint booth, solvent cleaning, equipment maintenance and repair, fumigation, equipment storage, and mortuary, and the Central Identification Laboratory.

Warehouse buildings were constructed on approximately 80-acres of land during 1943-1945 and in 1965 for office buildings and the Central Identification Laboratory. All KMR buildings have been demolished in recent years, and new commercial vehicles are stored in the yard. Four buildings used by the University of Hawaii Marine Center during 1977-2016 on TMK 1-2-025:017, at the west end of Honolulu Harbor, were vacant.

Information provided as part of the User Questionnaire completed by Jason Maga, General Manager of HFFC, and various environmental documents indicated soil and groundwater contaminations which led to the determination of *recognized environmental conditions (REC)*.

<u>Limitations/Data Gaps/Deviations</u>

There were no data gaps or deviations from the standard practice of the ASTM International E1527-13.

RECOGNIZED ENVIRONMENTAL CONDITIONS

MNA performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM E 1527-13 of the *subject property*, a fuel pipeline corridor from the HFFC Sand Island Fuel Facility lot to Pier 42, Honolulu Harbor, Oahu. Any exceptions to, or deletions from, this practice are described in Section 7.0 of this report. This assessment has revealed no evidence of *recognized environmental conditions* except for the following:

- Based on the historical use of landfill materials as fill, former land use for industrial activities, and reported material releases, the proposed fuel pipeline corridor from HFFC Sand Island Fuel Facility to Pier 42 may encounter soil and/or groundwater contaminated with petroleum, heavy metals, and other industrial hazardous materials. This is considered a *REC*.
- Environmental Data Resources identified 19 State Hazardous Waste Sites, 18 Leaking UST sites, and three sites listed on the State Institutional Control/Engineering Control registries within ½ mile and upgradient from the subject property. Due to the short distance and hydrologic proximity of these sites to the parcels 017, 020, and 021, the present and former impact at these sites likely contribute to the area-wide contamination and are therefore considered a *REC*.

1.0 INTRODUCTION

This report presents the results of a Phase I Environmental Site Assessment (ESA) conducted during December 2016 - March 2017 for the subject property, the proposed jet fuel pipeline, identified by the Tax Map Key (TMK) of Island 1, Zone 1, Section 2, Plat 025, and Parcels 017, 020, and 121 [TMKs (1) 1-2-025:017, 020, and 121], and Sand Island Access Road, Honolulu, Oahu. The location of the subject property is identified in Figure 1.

This Phase I ESA was conducted for Burns & McDonnell and Hawaii Fueling Facilities Corporation (HFFC) by Myounghee Noh & Associates, L.L.C., herein referred to as MNA. At the time of this Phase I ESA, the subject property was owned by the State of Hawaii and operated by the Hawaii Department of Transportation Airports, Harbors, and Highway Divisions. The subject property at parcels 020 and 021 were leased by HFFC for current fueling operations from the HFFC Sand Island Fuel Facility to Pier 51 on Sand Island.

1.1 PURPOSE

The purpose of this Phase I ESA is to identify any *recognized environmental conditions* (RECs) at the subject property, with respect to the range of contaminants within the scope of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) and petroleum products. This practice is intended to permit a user to satisfy one of the requirements to qualify for the innocent landowner defense to CERCLA liability, "all appropriate inquiry into the previous ownership and uses of the site consistent with good commercial or customary practice." The term *recognized environmental condition* denotes the presence, or likely presence, of any hazardous substances or petroleum products on the property under conditions that indicate an existing release, a past release, or a material threat of a release into structures on the property or into the ground, groundwater, or surface water of the property (ASTM International, 2013).

This report is part of the Phase I ESA conducted for the subject property. The assessment was conducted in accordance with the practices described in Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM International, 2013).

1.2 DETAILED SCOPE OF SERVICES

A Phase I ESA has four components: records review, site reconnaissance, interview, and report. MNA conducted this ESA using information sources with the potential to identify past or current releases of hazardous substances or petroleum products into the subject property. Adjoining properties were also evaluated for their potential to impact the subject property. Per the ASTM International Phase I ESA Standard, adjoining properties include parcels touching the subject property as well as those properties across a roadway or other public thoroughfare (ASTM International, 2013).

1.2.1 Site History

Where available and as needed, MNA researched historical and current topographic maps, environmental reports, tax records, fire insurance maps, and aerial photographs to identify previous and current uses of the property, adjoining properties, and the surrounding area.

Legend and Notes

Proposed Fuel Pipeline

Scale

250 feet

Myounghee Noh & Associates, L.L.C.

Figure 1. Site Location Map
Phase I Environmental Site Assessment
TMK (1)-1-025:017, :020, :021
Kapalama, Island of Oahu

1.2.2 Regulatory Records

MNA examined government records with respect to environmental conditions, citations, complaints, and permits at the subject property, at adjoining properties, and within the surrounding area. MNA utilized a records search provided by Environmental Data Resources, Inc. (EDR), to review records from the following federal and state programs:

- National Priorities List (NPL)
- Delisted NPL
- Resource Conservation and Recovery Act (RCRA) facilities that are undergoing "corrective action" (CORRACTS)
- RCRA-Treatment, Storage, & Disposal (TSD)
- Comprehensive Environmental Response, Compensation & Liability Information System (CERCLIS) List
- CERCLIS No Further Remedial Action Planned (NFRAP) List
- Federal and Hawaii State Brownfields
- Hawaii Solid Waste & Landfill
- Leaking Underground Storage Tank (LUST)
- RCRA-Violators/Enforcement
- Underground Storage Tank (UST)
- Emergency Response Notification System (ERNS)
- RCRA – Generators, including those No Longer Regulated (NLR)
- Hawaii Sites of Interest
- Hawaii Releases
- Federal and Hawaii State Land Use Controls
- Hawaii Voluntary Cleanup Sites
- Tribal Lands

Additionally, MNA requested environmental case files from the Hawaii Department of Health (HDOH), Honolulu Fire Department, and Hawaii Electric Company, and existing reports from the Hawaii Department of Transportation (HDOT).

1.2.3 Site Reconnaissance

MNA performed a site reconnaissance to obtain information indicating the likelihood of contamination, to interview available site personnel, and to conduct a brief assessment of the adjoining properties. During the site reconnaissance, MNA looked for a variety of indicators of environmental hazards including, but not limited to, stained surface soil, dead or stressed vegetation, hazardous substances, aboveground and underground storage tanks, disposal areas, groundwater wells, drywells, and sumps. Sampling and testing of soil, surface water, or groundwater were not part of this assessment.

1.2.4 Site Geology and Hydrogeology

MNA reviewed published information for the property and surrounding area on surface and subsurface conditions such as topography, drainage, surface water bodies, subsurface geology, and groundwater. MNA used this information to assess the potential for migration and impact of the subject property by releases of hazardous substances or petroleum products at off-site properties.

1.2.5 Data Evaluation and Reporting

MNA evaluated the information collected, and prepared this report as part of the assessment. Section 2 presents the site background information; Section 3 user provided information; Section

4 information collected from records review; Section 5 site reconnaissance; Section 6 interviews; Section 7 data gaps, if any; Section 8 key findings and opinion; and Section 9 conclusion.

1.3 SIGNIFICANT ASSUMPTIONS

The conclusion presented in this report is based upon the assumption that reasonably ascertainable and relevant information pertaining to the environmental condition of the subject property was made available to MNA during the assessment. Information obtained from government agencies and other resources is presumed to be accurate and updated. Additionally, information collected in interviews is collected in "good faith" and believed to be true and accurate to the best knowledge of the interviewee.

1.4 LIMITATIONS AND EXCEPTIONS

The Phase I ESA provides a "snapshot" of the property conditions at the time of the assessment. Findings, opinions, and conclusions apply to property conditions existing at the time of the investigation and those reasonably foreseeable. They do not apply to conditions at, or changes to, the property, of which MNA is not aware, could not reasonably be aware, and has not had the opportunity to evaluate.

This report is based upon visual observations of the subject property and its vicinity, interpretation of the available historical and regulatory information and documents reviewed, and interviews of individuals with knowledge of the subject or surrounding property. MNA cannot ensure the accuracy of the historical or regulatory information. This report is intended exclusively for the purpose outlined and applies only to the subject property.

This Phase I ESA excludes asbestos, lead paint, and investigation of geotechnical or geophysical concerns. No surface or subsurface sampling was involved.

1.5 SPECIAL TERMS AND CONDITIONS

This Phase I ESA was conducted and prepared by MNA for the exclusive use of Burns & McDonnell and HFFC. This report shall not be relied upon or transferred to any other party without written authorization from Burns & McDonnell and HFFC.

1.6 USER RELIANCE

This report is an instrument of service of MNA, which summarizes its findings and opinions with respect to *recognized environmental conditions* at the subject property. Findings and opinions are predicated on information that MNA obtained on the dates and from individuals stated herein, from public records reviewed, a site reconnaissance, and ancillary Phase I ESA activities. This assessment relies upon the accuracy and completeness of the information provided. The information obtained for this assessment is used without extraordinary verification. It is possible that other information exists and is discovered, or environmental conditions change subsequent to the submittal of this Phase I ESA report, to which MNA shall not be held responsible for exclusion.

2.0 SITE DESCRIPTION

This section contains location and legal description; site and vicinity general characteristics; current subject property use; structures, roads, and other improvements; past subject property use; and current and past use of adjoining properties.

2.1 LOCATION AND LEGAL DESCRIPTION

The subject property is located on Sand Island Access Road and TMKs (1) 1-2-025:017, 020, and 021, Honolulu, Oahu. According to the City and County of Honolulu tax records, the parcels are zoned as industrial (City and County of Honolulu, 2016). A TMK map is presented in Figure 2.

2.2 SITE AND VICINITY GENERAL CHARACTERISTICS

The subject property is located in the west end of Honolulu Harbor and is used as an industrial area. The Kapalama Military Reservation (KMR) was established in 1941 by the U.S. Army for a military port and warehousing. The area was expanded by filling in a series of Hawaiian fish ponds with coral dredge material from nearby basin and by using land that was previously used as disposal and landfill area by the City and County of Honolulu (Department of the Army, 1991). There were many warehouses, built during1943-1945, where the ground surface beneath had been treated for termite control. At this writing, all warehouses and shed structures on the 80-acres land were demolished. Four buildings used by the former University of Hawaii (UH) Marine Center, a long time lessee of parcel 017 during 1977-2016, were observed.

The UH Marine Center supported its oceanography research vessels. The site usage was largely operations and maintenance of research ships and machines, storage of scientific equipment, and bio-geochemistry laboratories, all in support of the marine research under the Oceanography Department at the School of Ocean and Earth Science and Technology. Four buildings remained vacant and secured on parcel 017; the site was occasionally used by film production companies for Hawaii Five-O and other special events. Some vandalism was reported after UH relocated to Pier 35 in 2016.

2.3 GEOLOGY

The Emperor Seamount-Hawaiian Chain was formed by a small area of abnormally hot rock in the mantle (asthenosphere), a hotspot beneath the Pacific Oceanic Plate. The Hawaiian hotspot is firmly rooted in the earth's interior (depth of 40-60 miles) and is 50 miles in diameter. The oceanic plate (lithosphere) glides slowly over it moving at a rate of 4 inches per year towards the northwest. Molten rock erupts from the hotspot onto the ocean floor and builds a volcano. The Big Island lies mostly over the hotspot. Towards the end of the chain, five volcanoes have erupted in historic time. In the main Hawaiian archipelago the volcanoes are extinct but have not subsided, forming high standing islands (Hazlett and Hyndman, 1996).

Oahu began as a small, vigorously active volcanic islet that first rose above sea level nearly 4 million years ago. During the next million years, the young island grew rapidly as lava flows built the huge shield volcano. Its eroded remnants are the Waianae Range spanning the western side of the island. The overwhelming bulk of Waianae Volcano is composed of thin flows of pahoehoe lava. Koolau Volcano is younger and larger than Waianae, and accounts for two-thirds of the island. It rose above sea level 2.7 million years ago when Waianae was becoming extinct. The first stage of volcanism is characterized by pahoehoe basalts. Two vigorously active rift zones trended northwest and southeast of the caldera, parallel to the rift zones of Waianae (Hazlett and Hyndman, 1996).

Legend and Notes

Parcels containing Subject Property

Scale

200 feet

Warehouses to the north have been demolished and are no longer present.

Myounghee Noh & Associates, L.L.C.

Figure 2. TMK Map
Phase I Environmental Site Assessment
TMK (1)-1-025:017, :020, :021
Kapalama, Island of Oahu

Koolau and Waianae may have grown as separate islands. The broad saddle of the Leilehua Plateau that connects them consists mainly of alluvial deposits shed from Waianae and lava flows from Koolau. Koolau shed more alluvium onto the saddle as volcanic activity wane about 1.8 million years ago (Stearns, 1985).

The decay of Koolau was interrupted as a vigorous episode of rejuvenated volcanism produced the Honolulu Basalts. The first eruptions began a million to 850,000 years ago on Mokapu Peninsula, the northern margin of Koolau caldera. The largest group of Honolulu Volcanic Series trends south from the Mokapu Peninsula across the range crest to Honolulu's coastal plain. It includes cinder cones (puu) known locally as Punchbowl, Sugarloaf, Tantalus Peak, Roundtop, and Diamond Head (MacDonald et al., 1983). The coastal plain between Honolulu and Pearl Harbor were eruption sites of volcanic vents that include Salt Lake Crater, Makalapa, and Aliamanu. A younger cluster of pyroclastic cones erupted between 32,000 and 6,000 years ago in a chain that extends northwest from Makapuu Point and Koko Head at the southeastern end of the island (Hazlett and Hyndman, 1996). The subject property, prior to its dredging was likely composed of tidal wetlands and coral flats.

The U.S. Department of Agriculture's Natural Resources Conservation Service classifies the soils in the area as Fill Land Mixed. It has moderate infiltration rates, and is well drained. The distance to the water table is more than 80 inches.

2.4 HYDROLOGY AND HYDROGEOLOGY

The FEMA Flood Map for the project area is 15003C0353G (Federal Emergency Management Agency, 2015), and shows nearly the entire project site as being within Flood Zone AE with base elevations of 9 feet above mean sea level (ft MSL) and 10 ft MSL. Flood Zone AE is defined as a special flood hazard area subject to inundation by the 1% annual chance flood, with base flood elevations determined. The project site is also within the tsunami inundation zone (Department of Planning and Permitting, 2016).

HDOH has established an Underground Injection Control (UIC) line to serve as a boundary between drinking and non-drinking water portions of underlying aquifers. Areas above (mauka side of) the UIC line are within drinking-water portions of the aquifer, while areas below (makai side of) the UIC are within non-drinking water portions of the underlying aquifer (Mink and Lau, 1987).

The subject site is located below the UIC line and lies in a non-drinking-water area. According to the Mink & Lau Technical Report #179, published by the University of Hawaii, Water Resources Research Center, the subject site is located above the lower Kalihi aquifer system. (Mink and Lau, 1990) describe this aquifer system as shown in Table 1.

At the subject site, the groundwater is tidal and brackish, and not suitable as a drinking water source.

Table 1. Lower Honolulu Kalihi Aquifer Classification System Information

Aquifer Code	**30103116**
Island Code	3 – Oahu
Aquifer Sector	01 – Honolulu
Aquifer System	03 – Kalihi
Aquifer Type, hydrogeology	1 – Basal
Aquifer Condition	1 – Unconfined
Aquifer Type, geology	6 – Sedimentary
Status Code	**13321**
Development Stage	1 – Currently used
Utility	3 – None
Salinity (in mg/L Cl^-)	3 – Moderate (1000-5000)
Uniqueness	2 – Replaceable
Vulnerability to Contamination	1 – High

2.5 CURRENT USE OF THE SUBJECT PROPERTY

The subject property, the proposed fuel pipeline from the HFFC Sand Island Fuel Facility to Pier 42, is owned by the State of Hawaii and operated by the Hawaii Department of Transportation Airports, Harbors, and Highway Divisions. Parcels 020 and 021 are used for above ground fuel storage, and parcel 017 is vacant and secured. Parcel 017 is rented occasionally for filming or special events.

2.6 STRUCTURES, ROADS, AND OTHER IMPROVEMENTS

The subject property is accessed from Sand Island Access Road. There are electrical, communication, sewer, or water services available in the industrial area as well as marine transportation.

2.7 PAST USES OF THE SUBJECT PROPERTY

Information regarding past uses of the subject property was obtained from a review of tax records (City and County of Honolulu, 2016), historic topographic maps, publications, and aerial photographs, and interviews. According to the City and County of Honolulu Real Property Tax Office, the State of Hawaii owns the subject property, and has since the 1960s. Table 2 summarizes available information regarding the historical use and users of the subject property.

2.8 CURRENT AND PAST USES OF ADJOINING PROPERTIES

Information regarding past uses of the adjoining properties was obtained from review of tax records (City and County of Honolulu, 2016), historic topographic maps, publications, and aerial photographs (Environmental Data Resources, Inc., 2016). The property use information is summarized in Table 3.

Table 2. Users and Primary Uses of Subject Property

Period (approx.)	Owner/Lessee/Sub-Lessee	Area (acres)	Primary Use
TMK (1) 1-2-025:017; 3 Sand Island Access Road, Honolulu			
2015-Present	State of Hawaii	16.008	Vacant
2007-2015	State of Hawaii DOT Harbors Division University of Hawaii	16.008	UH Marine Center
2007	**0.06 acre to TMK (1) 1-2-025:089**		
1977-2007	State of Hawaii University of Hawaii	16.068	UH Marine Center
1977	**From 1977 and prior years was keyed as TMK (1) 1-5-041:069**		
1977	**1.0 acre to TMK (1) 1-5-041:009** **16.068 acres from TMK (1)1-5-041:009**		
1976-1977	State of Hawaii University of Hawaii	1.0	UH Marine Center
1972-1976	State of Hawaii Precision Wood of Hawaii	1.0	Manufacturing of wood products and storage
1971-1972	State of Hawaii Hawaiian Timber Products, Inc.	1.0	Manufacturing of wood products and storage
1971	**0.735 acre to TMK (1) 1-5-041:009**		
1970-1971	State of Hawaii Hawaiian Timber Products, Inc.	1.735	Manufacturing of wood products and storage
1970	**0.735 acre from TMK (1) 1-5-041:009**		
1969-1970	State of Hawaii Dawson Corporation	1.0	Manufacturing of wood products and storage
1966-1969	State of Hawaii Canadian Pacific Corporation	1.0	Manufacturing of wood products and storage
TMK (1) 1-2-025:020; 6 Sand Island Access Road, Honolulu			
2016-Present	State of Hawaii DOT Airport Division Hawaii Fueling Facilities Corporation	7.118	Fuel Tank Site
2016	**Area revised to 7.118 acres**		
2016	State of Hawaii DOT Airport Division	7.129	Fuel Tank Site
1992-2016	State of Hawaii DOT Airport Division Honolulu Fueling Facilities Corporation	7.129	Fuel Tank Site
1992	**3.139 acres from TMK (1) 1-2-025:021**		
1992	State of Hawaii Honolulu Fueling Facilities Corporation	3.989	Fuel Tank Site
1992	**0.010 acre to TMK (1) 1-2-025:027**		
1992	State of Hawaii	4.0	Fuel Tank Site
1981-1992	State of Hawaii Honolulu Fueling Facilities Corporation	4.0	Fuel Tank Site
1977-1981	State of Hawaii DOT Airport Division Texaco, Inc.	4.0	Fuel Tank Site
1977	**Previously keyed as TMK (1) 1-5-041:007**		

Period (approx.)	Owner/Lessee/Sub-Lessee	Area (acres)	Primary Use
1967-1977	State of Hawaii DOT Airport Division Texaco, Inc.	4.0	Fuel Tank Site
1967	**3.4 acres to TMK (1) 1-5-041:009** **4.0 acres from TMK (1) 1-5-041:009**		
120251211966-1967	State of Hawaii	3.4	Vacant
1966	**7.070 acres to TMK (1) 1-5-041:009** **3.4 acres from TMK (1) 1-5-041:009**		
1964-1966	State of Hawaii	7.07	Vacant
1964	**Area revised to 6.43 acres**		
Prior to 1964	Territory of Hawaii	6.43	Vacant
TMK (1) 1-2-025:121; 8 Sand Island Access Road, Honolulu			
2016-Present	State of Hawaii DOT Airport Division Hawaii Fueling Facilities Corporation	1.261	Fuel Tank Site
2016	State of Hawaii DOT Airport Division	1.261	Fuel Tank Site
1997-2016	State of Hawaii DOT Airport Division Hawaii Fueling Facilities Corporation	1.261	Fuel Tank Site
1992-1997	State of Hawaii Hawaiian Independent Refinery	1.261	Fuel Tank Site
1992	**3.14 acres to TMK (1) 1-2-025:020**		
1992	State of Hawaii Honolulu Fueling Facilities Corporation	4.401	Fuel Tank Site
1992	**0.021 acre from TMK (1) 1-2-025:022**		
1992	State of Hawaii	4.38	Fuel Tank Site
1977-1992	State of Hawaii Honolulu Fueling Facilities Corporation	4.38	Fuel Tank Site
1977	**From 1977 and prior years was keyed as TMK (1) 1-5-041:057**		
1966-1977	State of Hawaii DOT Airport Division Shell Oil Company	4.38	Fuel Tank Site
1966	**1.234 acres to TMK (1) 1-5-041:009** **4.38 acres from TMK (1) 1-5-041:009**		
1966	State of Hawaii	1.234	
Prior to 1966	**1.234 acres from TMK (1) 1-5-041:009**		

TMK - Tax Map Key

Table 3. Users and Primary Uses of Adjoining Properties

Period (approx.)	Owner/Lessee/Sub-Lessee	Area (acres)	Primary Use
TMK (1) 1-2-025:002; N. Nimitz Highway, Honolulu Adjoining Property to the North			
2015-Present	State of Hawaii DOT Airports Division	6.374	Warehouse
2013	**0.189 acre to TMK (1) 1-2-025:120 0.310 acre to TMK (1) 1-2-025:119 0.334 acre to TMK (1) 1-2-025:116**		
2013-2015	State of Hawaii DOT Airports Division	6.906	Warehouse
2011-2013	State of Hawaii DOT Harbors Division	7.740	Warehouse
2011	**1.190 acres from TMK (1) 1-2-025:079 0.206 acre to TMK (1) 1-2-025:110**		
2009-2011	State of Hawaii DOT Harbors Division	5.562	Warehouse
2009	**2.026 acres from TMK (1) 1-2-025:093**		
2008-2009	State of Hawaii DOT Harbors Division	6.756	Warehouse
2008	**0.230 acre from TMK (1) 1-2-025:107 0.230 acre to TMK (1) 1-2-025:107**		
2007-2008	State of Hawaii DOT Harbors Division	4.730	Warehouse
2007	**2.026 acres to TMK (1) 1-2-025:093**		
2004-2007	State of Hawaii DOT Harbors Division	6.756	Warehouse
2004	**0.160 acre to TMK (1) 1-2-025:083 1.190 acres to TMK (1) 1-2-025:079 0.057 acre to TMK (1) 1-2-025:075**		
2002-2004	State of Hawaii	8.348	Warehouse
2002	**0.057 acre to TMK (1) 1-2-025:075 0.172 acre to TMK (1) 1-2-025:075 0.229 acre to TMK (1) 1-2-025:074**		
2001-2002	State of Hawaii	8.348	Warehouse
2001	**0.812 acre to TMK (1) 1-2-025:073 0.320 acre to TMK (1) 1-2-025:069**		
1999-2001	United States of America, Kapalama Military Reservation (KMR)	9.496	U.S. Army storage and supply base
1999	**1.864 acres to TMK (1) 1-2-025:069**		
1993-1999	United States of America, KMR	11.360	U.S. Army storage and supply base
1993	**21.223 acres to TMK (1) 1-2-025:011**		
1990-1993	United States of America, KMR	32.583	U.S. Army storage and supply base
1990	**33.491 acres dropped into TMK (1) 1-2-025:011**		
1987-1990	United States of America, KMR	66.074	U.S. Army storage and supply base
1987	**9.768 acres dropped into TMK (1) 1-2-025:036**		
1986-1987	United States of America, KMR	75.542	U.S. Army storage and supply base
1986	**0.71 acre from TMK (1) 1-2-025:011**		

Period (approx.)	Owner/Lessee/Sub-Lessee	Area (acres)	Primary Use
1981-1986	United States of America, KMR	75.132	U.S. Army storage and supply base
1981	**0.78 acre to TMK (1) 1-2-025:011** **0.04 acre from TMK (1) 1-2-025:011**		
1978-1981	United States of America, KMR	75.872	U.S. Army storage and supply base
1978	**0.240 acre to TMK (1) 1-2-025:011** **12.911 acres from TMK (1) 1-2-025:001** **11.360 acres from TMK (1) 1-5-041:186**		
1976-1978	United States of America, KMR	51.841	U.S. Army storage and supply base
1976	**2.837 acres to TMK (1) 1-2-025:008**		
1970-1976	United States of America, KMR	54.678	U.S. Army storage and supply base
1970	**0.34 acre to TMK (1) 1-2-025:011**		
1958-1970	United States of America, KMR	55.018	U.S. Army storage and supply base
1958	**0.442 acre dropped into road**		
1941-1958	United States of America, KMR	55.460	U.S. Army storage and supply base
TMK (1) 1-2-025:011; Honolulu Harbor Adjoining Property to the North			
2013-Present	State of Hawaii DOT Airports Division	26.081	Warehouse
2013	**0.0115 acre to TMK (1) 1-2-025:118** **0.088 acre to TMK (1) 1-2-025:117**		
2012-2013	State of Hawaii DOT Harbors Division	26.180	Warehouse
2012	**0.142 acre to TMK (1) 1-2-025:115** **0.432 acre to TMK (1) 1-2-025:112**		
2009-2012	State of Hawaii DOT Harbors Division	26.502	Warehouse
2009	**0.252 acre from TMK (1) 1-2-025:102**		
2008-2009	State of Hawaii DOT Harbors Division	26.088	Warehouse
2008	**0.030 acre to TMK (1) 1-2-025:106** **0.271 acre to TMK (1) 1-2-025:105** **0.005 acre to TMK (1) 1-2-025:104** **0.103 acre to TMK (1) 1-2-025:103** **0.252 acre to TMK (1) 1-2-025:102** **0.106 acre to TMK (1) 1-2-025:101** **0.110 acre to TMK (1) 1-2-025:100** **0.416 acre from TMK (1) 1-2-025:090** **0.436 acre to TMK (1) 1-2-025:099** **0.296 acre to TMK (1) 1-2-025:098** **0.1607 acre from TMK (1) 1-2-025:083** **0.057 acre to TMK (1) 1-2-025:097**		
2007-2008	State of Hawaii DOT Harbors Division	27.203	Warehouse
2007	**0.048 acre to TMK (1) 1-2-025:096** **0.039 acre to TMK (1) 1-2-025:095** **0.051 acre to TMK (1) 1-2-025:094** **0.246 acre to TMK (1) 1-2-025:092** **0.049 acre to TMK (1) 1-2-025:091** **0.416 acre to TMK (1) 1-2-025:090**		

Period (approx.)	Owner/Lessee/Sub-Lessee	Area (acres)	Primary Use
2006-2007	State of Hawaii DOT Harbors Division	28.055	Warehouse
2006	**0.878 acre to TMK (1) 1-2-025:088** **0.035 acre from TMK (1) 1-2-025:070** **0.004 acre to TMK (1) 1-2-025:070**		
2005-2006	State of Hawaii DOT Harbors Division	28.579	Warehouse
2005	**0.1488 acre from TMK (1) 1-2-025:087**		
2004-2005	State of Hawaii DOT Harbors Division	28.446	Warehouse
2004	**0.1488 acre to TMK (1) 1-2-025:087** **0.1377 acre to TMK (1) 1-2-025:086** **0.991 acre to TMK (1) 1-2-025:084** **0.441 acre to TMK (1) 1-2-025:085** **0.004 acre to TMK (1) 1-2-025:081** **0.019 acre to TMK (1) 1-2-025:082** **0.140 acre to TMK (1) 1-2-025:080** **0.051 acre from TMK (1) 1-2-025:076** **0.344 acre to TMK (1) 1-2-025:076** **0.006 acre to TMK (1) 1-2-025:067**		
2002-2004	State of Hawaii	30.678	Warehouse
2002	**0.028 acre to TMK (1) 1-2-025:077** **0.014 acre to TMK (1) 1-2-025:078** **0.051 acre to TMK (1) 1-2-025:076**		
2001-2002	State of Hawaii	30.934	Warehouse
2001	**0.382 acre to TMK (1) 1-2-025:073** **0.114 acre to TMK (1) 1-2-025:069**		
2000-2001	State of Hawaii	31.430	Warehouse
2000	**0.005 acre to TMK (1) 1-2-025:072** **0.323 acre to TMK (1) 1-5-032:022**		
1999-2000	State of Hawaii	31.759	Warehouse
1999	**0.032 acre to TMK (1) 1-2-025:070** **0.023 acre to TMK (1) 1-2-025:068**		
1998-1999	State of Hawaii	31.813	Warehouse
1998	**0.009 acre to TMK (1) 1-5-041:067**		
1996-1998	State of Hawaii	31.822	Warehouse
1996	**0.632 acre from TMK (1) 1-2-025:012**		
1995-1996	State of Hawaii	31.464	Warehouse

Period (approx.)	Owner/Lessee/Sub-Lessee	Area (acres)	Primary Use
1995	**0.689 acre to TMK (1) 1-2-025:065 1.148 acres to TMK (1) 1-2-025:064 1.148 acres to TMK (1) 1-2-025:063 1.148 acres to TMK (1) 1-2-025:062 0.698 acre to TMK (1) 1-2-025:061 0.689 acre to TMK (1) 1-2-025:060 0.482 acre to TMK (1) 1-2-025:059 0.787 acre to TMK (1) 1-2-025:058 0.622 acre to TMK (1) 1-2-025:057 0.689 acre to TMK (1) 1-2-025:056 0.436 acre to TMK (1) 1-2-025:055 1.133 acres to TMK (1) 1-2-025:054 0.512 acre to TMK (1) 1-2-025:053 0.105 acre to TMK (1) 1-2-025:051 0.689 acre to TMK (1) 1-2-025:050**		
1994-1995	State of Hawaii	43.472	Warehouse
1994	**1.148 acres to TMK (1) 1-2-025:049 11.478 acres to TMK (1) 1-2-025:048 0.147 acre to TMK (1) 1-2-025:047 1.148 acres to TMK (1) 1-2-025:046 0.528 acre to TMK (1) 1-2-025:045**		
1993-1994	State of Hawaii	57.921	Warehouse
1993	**21.223 acres from TMK (1) 1-2-025:002**		
1992-1993	State of Hawaii	36.698	Warehouse
1992	**0.022 acre to TMK (1) 1-2-025:044**		
1991-1992	State of Hawaii	36.676	Warehouse
1991	**0.022 acre to TMK (1) 1-2-025:044**		
1990-1991	State of Hawaii	69.698	Warehouse
1990	**33.491 acres from TMK (1) 1-2-025:002 2.207 acres from TMK (1) 1-2-025:001**		
1984-1990	United States of America, KMR Honolulu Shipyard, Inc.	1.000	U.S. Army storage and base yard
1979-1984	United States of America Dillingham Shipyard	1.710	U.S. Army storage and base yard
1976-1979	United States of America, KMR Dillingham Corporation	0.580	U.S. Army storage and base yard
1971-1976	United States of America, KMR Hawaiian Dredging & Construction Co.	0.340	U.S. Army storage and base yard
1969-1971	United States of America, KMR Dillingham Corporation	0.340	U.S. Army storage and base yard
1969	**0.34 acre from TMK (1) 1-2-025:002**		
TMK (1) 1-2-025:012; 1399 N. Nimitz Highway, Honolulu Adjoining Property to the North			
2016-Present	State of Hawaii DOT Harbors Division	5.314	Warehouse

Period (approx.)	Owner/Lessee/Sub-Lessee	Area (acres)	Primary Use
1997-2016	State of Hawaii DOT Harbors Division Island Movers, Inc.	5.314	Warehouse
1997	**0.745 acre from TMK (1) 1-2-025:016**		
1996	**0.632 acre to TMK (1) 1-2-025:011** **0.745 acre to TMK (1) 1-2-025:016**		
1985-1996	State of Hawaii DOT Harbors Division Island Movers, Inc.	6.902	Warehouse
1985	**9.002 acres from TMK (1) 1-2-025:013** **2.10 acres to TMK (1) 1-2-025:016**		
1978-1985	State of Hawaii DOT Harbors Division Island Movers, Inc.	4.932	Warehouse
1978	**4.93 acres from TMK (1) 1-2-025:009**		
TMK (1) 1-2-025:016 Adjoining Property to the East			
2000-Present	State of Hawaii DOT Harbors Division	2.375	Industrial
2000	**0.045 acre to TMK (1) 1-2-025:071**		
1997-2000	State of Hawaii	1.847	Industrial
1997	**0.287 acre to TMK (1) 1-2-025:030**		
1996-1997	State of Hawaii	2.878	Industrial
1996	**0.745 acre from TMK (1) 1-2-25:012**		
1994-1996	State of Hawaii	2.134	Industrial
1994	**0.287 acre to TMK (1) 1-2-025:030** **0.340 acre from TMK (1) 1-2-025:040**		
1992-1994	State of Hawaii	2.080	Industrial
1992	**0.997 acre from TMK (1) 1-2-025:040** **0.276 acre to TMK (1) 1-2-025:042**		
1990-1992	State of Hawaii	1.359	Industrial
1990	**0.066 acre to TMK (1) 1-2-025:042**		
1986-1990	State of Hawaii	3.056	Industrial
1986	**0.9951 acre from TMK (1) 1-2-025:012**		
1985-1986	State of Hawaii	2.1	Industrial
1985	**3.042 acres to TMK (1) 1-2-025:012** **2.10 acres from TMK (1) 1-2-025:012**		
1984-1985	State of Hawaii	3.042	Industrial
1984	**0.009 acre from TMK (1) 1-2-025:034**		
1983-1984	State of Hawaii	3.033	Industrial
1983	**0.029 acre from TMK (1) 1-2-025:034** **0.004 acre to TMK (1) 1-2-025:034**		
1981-1983	State of Hawaii	3.043	Industrial
1981	**0.229 acre to TMK (1) 1-2-025:030** **0.023 acre to TMK (1) 1-2-025:029** **0.046 acre to TMK (1) 2-025:028**		

Period (approx.)	Owner/Lessee/Sub-Lessee	Area (acres)	Primary Use
1978-1981	State of Hawaii	3.341	Industrial
1978	**3.341 acres from TMK (1) 1-2-025:009**		
TMK (1) 1-2-025:018; 1 Sand Island Access Road, Honolulu Adjoining Property to the South			
1988-Present	State of Hawaii DOT Harbors Division	1.306	Unpaved access road
1977-1988	State of Hawaii	1.306	Unpaved access road
1977	**2.837 acres from TMK (1) 1-2-025:008 1 acre from TMK (1) 1-5-041:009 2 acres from TMK (1) 1-5-041:135 1.123 acres from TMK (1) 1-5-041:136 0.514 acre from TMK (1) 1-2-041:069 5.874 acres to TMK (1) 1-5-041:196**		
TMK (1) 1-2-025:019; 2 Sand Island Access Road, Honolulu Adjoining Property to the West			
1997-Present	State of Hawaii DOT Harbors Division BHP Petrol Americas	3.885	Bulk Fuel Tank Site
1978-1997	State of Hawaii Hawaiian Independent Refinery, Inc.	3.885	Bulk Fuel Tank Site
1978	**0.115 to TMK (1) 1-2-025:026**		
1977-1978	State of Hawaii Hawaiian Independent Refinery, Inc.	4.011	Bulk Fuel Tank Site
1977	**Previously keyed to TMK (1) 1-2-041:052**		
1974-1977	State of Hawaii Hawaiian Independent Refinery, Inc.	4.011	Bulk Fuel Tank Site
1977	**4.011 from TMK (1) 1-5-041:009**		
TMK (1) 1-2-025:086; Auiki Street, Honolulu Adjoining Property to the North			
2012-Present	State of Hawaii DOT Harbors Division	0.138	Vacant
2004-2012	State of Hawaii Harbors Division Hawaii Pacific Plumbing Supplies	0.138	Storage
2004	**0.138 acre from TMK (1) 1-2-025:011**		
TMK (1) 1-2-025:110; Honolulu Harbor, Honolulu Adjoining Property to the North			
2014-Present	State of Hawaii DOT Airports Division	0.207	Paved Yard Space
2013-2014	State of Hawaii DOT Airports Division Y Hata & Co. Ltd.	0.207	Paved Yard Space
2011-2013	State of Hawaii DOT Harbors Division Y Hata & Co. Ltd.	0.207	Paved Yard Space
2011	**0.207 acre from TMK (1) 1-2-025:002**		
TMK (1) 1-2-025:119; Honolulu Harbor, Honolulu			
2013-Present	State of Hawaii DOT Airports Division Honolulu Freight Service	0.309	Freight Storage
2013	**0.309 acre from TMK (1) 1-2-025:002**		

Period (approx.)	Owner/Lessee/Sub-Lessee	Area (acres)	Primary Use
TMK (1) 1-2-025:121; Honolulu Harbor, Honolulu			
2015-Present	State of Hawaii DOT Harbors Division	0.532	Automobile Storage
2014-2015	State of Hawaii DOT Harbors Division HTM Contractors, Inc.	0.532	Automobile Storage
2014	**0.222 acre from TMK (1) 1-2-025:002** **0.309 acre from TMK (1)**		

TMK - Tax Map Key

3.0 USER PROVIDED INFORMATION

User provided information was obtained by having a representative of HFFC, Jason Maga, complete a "User Questionnaire" administered by MNA. The information in the following sections was obtained from the questionnaire. Refer to Section 8.0 for findings.

3.1 ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS

Mr. Maga was unaware of any environmental cleanup liens or use limitations for the subject property.

3.2 SPECIALIZED KNOWLEDGE

Mr. Maga was aware of various historical releases on the HFFC's parcels. The HFFC's parcels contained a number of groundwater and petroleum product monitoring wells.

3.3 VALUATION REDUCTION

Mr. Maga stated that the lease price reasonably reflects the fair market value of the property.

3.4 REASON FOR PERFORMING THE PHASE I ESA

The purpose of this Phase I ESA is to identify any *recognized environmental conditions* for due diligence related to the land lease for a proposed fuel on/off-loading facility and fuel pipeline, from the new Pier 42 Kapalama Container Terminal to the HFFC Sand Island Fuel Facility.

4.0 RECORDS REVIEW

Under ASTM 1527-13, records are to be reviewed by the environmental professional who may help identify RECs in connection with the subject property.

4.1 STANDARD ENVIRONMENTAL RECORD SOURCES

MNA used Environmental Data Resources, Inc. (EDR), to search standard federal and state government databases for hazardous substance or petroleum product releases that could impact the subject property. A copy of the EDR report is provided in Appendix A.

ASTM E 1527-13 specifies a minimum search distance for specific environmental record sources. The following sources are specified for <u>incidents or sites within one mile of the subject property</u>:

- Federal National Priorities List (NPL) site list
- Federal RCRA CORRACTS TSD facilities list
- State Sites of Interest

The following sources are specified for incidents or sites within ½ mile of the subject property:

- Federal Delisted NPL site list
- Federal CERCLIS list
- Federal CERCLIS NFRAP site list
- Federal RCRA non-CORRACTS TSD facilities list
- State Brownfield Sites
- State Hazardous Waste Sites
- State landfill and/or solid waste disposal site list
- State leaking UST list
- State voluntary cleanup program sites

The following sources are for incidents on the subject and adjoining properties:

- Federal RCRA generators list
- State registered UST list

Finally, the following are for incidents for the subject property:

- Federal ERNS list
- Federal Institutional Controls (IC) and Engineering (EC) Registries
- State IC and EC Registries
- State releases list

The following subsections summarize the results of the EDR records review for the datasets listed above (Environmental Data Resources, Inc., 2016).

4.1.1 Federal National Priorities List

The NPL, maintained by the U.S. Environmental Protection Agency (EPA), is a list of highly contaminated sites that have been identified by Superfund Amendments and Reauthorization Act of 1986. There were no NPL sites identified within one mile of the subject property (Environmental Data Resources, Inc., 2016).

4.1.2 Federal RCRA CORRACTS TSD Facilities List

The RCRA CORRACTS TSD facilities list maintained by the EPA contains generators, transporters, treaters, storers, and disposers of hazardous waste that have reported violations and are subject to corrective actions. No RCRA CORRACTS TSD facilities were identified within one mile of the subject property (Environmental Data Resources, Inc., 2016).

4.1.3 Delisted NPL Site List

This site list, maintained by the EPA, contains delisted NPL sites. No delisted NPL sites were identified within ½ mile of the subject property (Environmental Data Resources, Inc., 2016).

4.1.4 Federal CERCLIS List

The CERCLIS list, maintained by the EPA, contains sites that are either proposed to be or are on the NPL list, as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. No federal CERCLIS sites were identified within ½ mile of the subject property (Environmental Data Resources, Inc., 2016).

4.1.5 Federal CERCLIS NFRAP Site List

The CERCLIS NFRAP list, maintained by the EPA, contains designated CERCLA sites that, to the best of the EPA's knowledge, assessment has been completed and has determined that no further steps will be taken to list the sites on the NPL. Three CERCLIS NFRAP sites were identified within ½ mile of the subject property (Environmental Data Resources, Inc., 2016). Refer to Section 8.2 for determination of impact of these sites on the subject property.

Table 4. CERCLIS NFRAP Sites

Name	Distance	Address (Honolulu, HI 96819)
Kapalama Military Reservation	0.21 NNW	5 Sand Island Access Road
TOWCO	0.34 SSE	16-1 Sand Island Parkway
Pahounui D P L L C Sand Island	0.45 NNW	120 Sand Island Access Road

4.1.6 Federal RCRA non-CORRACTS TSD Facilities List

The RCRA non-CORRACTS TSD facilities list, maintained by the EPA, contains RCRA permitted facilities that treat, store, or dispose of hazardous waste. No RCRA TSD facilities listed were identified within ½ mile of the subject property (Environmental Data Resources, Inc., 2016).

4.1.7 State Brownfield Sites

The State Brownfield Sites database, maintained by the HDOH Hazard Evaluation and Emergency Response (HEER) Office, is an inventory of state designated brownfield sites. Under the Small Business Liability Relief and Brownfields Revitalization Act, a brownfield is defined as "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." The EPA provides grants and loans to state and local governments for the assessment, cleanup, and redevelopment of these properties. Properties located on the state brownfield list may have received federal funding under this program or be designated a brownfield for state administration or funding purposes. No state brownfield sites were identified within ½ mile of the subject property (Environmental Data Resources, Inc., 2016).

4.1.8 State Hazardous Waste Sites

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 are identified along with sites where cleanup will be paid for by responsible parties. Nineteen state hazardous waste sites were identified within ½ mile and upgradient from the subject property (Environmental Data Resources, Inc., 2016). Refer to Section 8.0 for determination of impact of these sites on the subject property.

Table 5. State Hazardous Waste Sites

Name	Distance	Address (Honolulu, HI 96819)
University of Hawaii Marine Center	0	1 Sand Island Access Road
Hawaii Fueling Facilities Corp.	0	6 Sand Island Access Road
Keehi Small Boat Harbor	0.01 WNW	4 Sand Island Access Road
Honolulu Marine Sand Island	0.01 WNW	Sand Island Access Road
HIRI Harbor Terminal	0.02 SSW	2 Sand Island Access Road
Hawaii Fueling Facilities Corp.	0.10 NW	8 Sand Island Access Road
Kapalama Military Reservation	0.15 NNE	Sand Island Access Road
Kapalama Military Reservation	0.21 NNW	5 Sand Island Access Road
Kalihi and Kalaepaa Intersection	0.31 NE	Kalaepaa Drive and Kalihi Street
SERVCO-Vehicle Processing Center	0.31 NE	2101 Auiki Street
Kapalama Container Yard PCB Release	0.32 NNE	1845 Auiki Street
Hawaiian Miso and Soy Co., LTD.	0.37 NNE	1714 Mary Street
USPS Vehicle Maintenance Facility	0.38 NNW	89 Sand Island Access Road
McKesson Wine & Spirits Co.	0.41 NNW	80 Sand Island Access Road
Trans Hawaiian - Oahu, Inc.	0.44 N	124 Puuhale Road
Former Flynn Learner	0.45 NNW	120 Sand Island Access Road
State Poultry Processors Facility	0.46 N	2132 Kaliawa Street
HECO Pad-mounted transformer	0.50 NNW	2344 Pahounui Drive

4.1.9 State Landfill/Solid Waste Disposal Sites

The HDOH records contain an inventory of permitted landfills in the State of Hawaii. No permitted solid waste landfills, incinerators, or transfer stations were identified within ½ mile of the subject property (Environmental Data Resources, Inc., 2016).

4.1.10 State Leaking UST List

The state Leaking UST list, maintained by the HDOH Solid and Hazardous Waste Branch (SHWB), maintains an inventory of sites with Leaking USTs. EDR identified 18 Leaking UST facilities within ½ mile and hydrologically upgradient from the subject property (Environmental Data Resources, Inc., 2016). Refer to Section 8.2 for determination of impact of these sites on the subject property.

Table 6. State Leaking UST Sites

Name	Distance	Address (Honolulu 96819)	NOTES
Kapalama Military Reservation	0.19 NNW	Bldg. 942 Tank 942-1, 942-2 Schofield Barracks, HI 96786	Case Transferred to HEER
Hawaiian Masons & Plasters Union	0.33 N	1930 Auiki St.	Site Cleanup Completed (NFA) 2/28/1995
UNIQ Distributing Corp.	0.34 N	2020 Auiki St.	Site Cleanup Completed (NFA) 9/22/1998
Tommy of Hawaii, Inc.	0.34 NNE	1812 Auiki St.	Site Cleanup Completed (NFA) 7/6/1994
H. Hironaka Trucking Ltd.	0.36 N	2110-A Auiki St.	Site Cleanup Competed (NFA) 2/26/1996
Modern Macaroni Co., LTD	0.36 NNE	1708 Mary St.	Site Cleanup Completed (NFA) 5/1/1995

Name	Distance	Address (Honolulu 96819)	NOTES
Honolulu Body & Fender Shop	0.39 NNE	131 Mokauea St.	Site Cleanup Completed (NFA) 12/6/1999
McKesson Wine & Spirits Co.	0.41 NNW	80 Sand Island Access Rd.	Site Cleanup Completed (NFA) 12/22/1998
R&S Plumbing, Inc.	0.42 NNE	1744 Hoe St.	Site Cleanup Completed (NFA) 10/1/2001
D&N Auto Body and Painting Inc.	0.42 NE	1615 Silva St.	Site Cleanup Completed (NFA) 3/12/2002
Trans Hawaiian - Oahu, Inc.	0.44 N	124 Puuhale Rd.	Site Cleanup Completed (NFA) 9/13/07
Former Flynn Learner	0.45 NNW	120 Sand Island Access Rd.	Site Cleanup Completed (NFA) 10/2/2006
Associated Steel Workers, Ltd.	0.45 NNE	1714 Silva St.	Site Cleanup Completed with EHMP 4/16/2010
Security Armored Car Services	0.47 N	2140 Kaliawa St.	Site Cleanup Completed (NFA) 10/25/1996
Tagami Auto Service, Ltd.	0.48 NNE	1733 Kahai St.	Site Cleanup Completed (NFA) 2/11/2003
Browning-Ferris Industries of	0.49 N	207 Puuhald Rd.	Site Cleanup Completed (NFA) 10/18/2002
Sand Island 76 (#104)	0.49 N	165 Sand Island Access Rd.	Site Cleanup Completed (NFA) 2/8/2002 8/4/2003
Ameron - Sand Island	0.50 NNW	2344 Pahounui Dr.	Site Cleanup Completed (NFA) 1/8/2001 8/12/2002

4.1.11 State Voluntary Cleanup Sites

The state voluntary cleanup sites list, maintained by the HDOH HEER Office, contains sites participating in the state's Voluntary Response Program (VRP). One facility participating in the state VRP was identified within ½ mile of the subject property (Environmental Data Resources, Inc., 2016). The facility, Former Flynn Learner, located at 120 Sand Island Access Road, approximately 0.45 miles north northwest and upgradient from the subject property was the site of a Leaking UST. The owner entered into a VRP agreement involving engineering controls (capping), and institutional controls (signage and note on deed). The Letter of Completion – Restricted Use was issued on 09 December 2004. Refer to Section 8.2 for determination of impact of these sites on the subject property.

4.1.12 Federal RCRA Generators List

The RCRA Generators list, maintained by the EPA, contains small and large quantity generators of RCRA hazardous waste. The determination of generator size is used to establish the risk that the facility poses to public health and the environment and consequently, the amount of regulation and reporting required. Large Quantity Generators (LQG) are facilities that generate more than a 1,000 kg/month of hazardous waste and/or more than 1 kg/month of acute hazardous waste. Small Quantity Generators (SQG) are facilities that generate less than 1,000 kg/month but more than 100 kg/month of hazardous waste and/or less than 1 kg/month of acute hazardous waste.

Conditionally Exempt Small Quantity Generators (CESQG) are facilities that generate less than 100 kg/month of hazardous waste and/or less than 1 kg/month of acute hazardous waste. The EPA also maintains the RCRA NLR list. This list contains facilities that were once on the RCRA generators list, but are no longer in business, no longer in business at the listed address, or are no longer generating hazardous waste substances in quantities that require reporting. Three SQG, one LQG, two CESQG, and several non-generators (Non-Gen/NLR) were identified on the subject or adjoining properties (Environmental Data Resources, Inc., 2016).

Table 7. Federal RCRA Generators

Name	Distance	Address (Honolulu, HI 96819)	Type
NOAA Ship Townsend Cromwell	0	1 Sand Island Access Road	NonGen/NLR
Aircraft Service International Group	0	6 Sand Island Access Road	NonGen/NLR
Kapalama Military Reservation	0.01 NNW	5 Sand Island Access Road	LQG
Hawaii Dept. of Business Economic Development and Tourism	0.18 NW	10 Sand Island Access Road	NonGen/NLR
State of Hawaii DLNR DOBOR	0.01 WNW	4 Sand Island Access Road	CESQG
USCG I S C Honolulu	0.01 WNW	4 Sand Island Access Road	SQG
Hawaii Independent Energy	0.02 SSW	2 Sand Island Access Road	SQG
Royal Star Hawaii Motorcoach	0.21 NNW	5 Sand Island Access Road	SQG
PSC Industrial Outsourcing Honolulu	0.21 N	5 Sand Island Access Road	NonGen/NLR
Hawaii Dept. of Agriculture Annex No. 3	0.21 N	5 Sand Island Access Road	NonGen/NLR
Amazon Construction Bldg. 19	0.21 N	5 Sand Island Access Road	NonGen/NLR
Pacific Commercial Services Bldg. 931	0.21 N	5 Sand Island Access Road	NonGen/NLR
Trans Hawaiian Services, Inc.	0.21 NNW	5 Sand Island Access Road	CESQG

DOBOR – State of Hawaii Department of Boating and Ocean Recreation
DLNR – State of Hawaii Department of Land and Natural Resources
NOAA – National Oceanic and Atmospheric Administration
NonGen/NLR – RCRA Non-Generator
USCG – United States Coast Guard

4.1.13 State Registered UST List

The HDOH SHWB maintains a database of known UST. EDR identified four UST facilities within ½ mile and at equal gradient or upgradient from the subject property (Environmental Data Resources, Inc., 2016).

Table 8. State Registered USTs

Name	Distance	Address (Honolulu, 96819)	NOTES
UH Marine Center	0	1 Sand Island Access Road	3 Gasoline USTs, Permanently out of Use
HIRI Harbor Terminal	0.02 SSW	2 Sand Island Access Road	1 Mixture UST, Permanently Out of Use
Kapalama Military Reservation	0.15 NNE	Sand Island Access Road	1 Gasoline UST, Permanently Out of Use
Kapalama Military Reservation	0.19 NNW	Bldg. 942 Tank 942-1, 942-2 Schofield Barracks, HI 96786	1 Diesel UST, Permanently Out of Use 1 Gasoline UST, Permanently Out of Use 1 Kerosene UST, Permanently Out of Use

4.1.14 Federal ICs and ECs Registries

Federal ICs and ECs sites are federally listed sites that are required to implement institutional controls or engineering controls. Because the sites may continue to be impacted by past use, future use of the property may be restricted in order to protect human health and the environment. Land use controls can be either ICs or ECs. Institutional controls are limitations on how the property may be used such as limiting use to industrial activities. Engineering controls are physical structures or devices located on the property that contain or limit exposure to contamination. Engineering controls need to be maintained or protected to be effective. No Federal ICs or ECs were identified within one mile of the subject property (Environmental Data Resources, Inc., 2016).

4.1.15 State ICs and ECs Registries

These sites are state listed sites that have either state-required institutional controls or engineering controls in place. Because the sites may continue to be impacted by past use, future use of the property may be restricted in order to protect human health and the environment. Land Use Controls can be either ICs or ECs. ICs are limitations on how the property may be used such as limiting use to industrial activities. ECs are physical structures or devices located on the property that contain or limit exposure to contamination. ECs need to be maintained or protected to be effective. Three State IC/EC sites were identified within one mile and at equal gradient or upgradient from the subject property (Environmental Data Resources, Inc., 2016). Refer to Section 8.0 for determination of impact of these sites on the subject property.

Table 9. State IC and EC Registered Sites

Name	Distance	Address (Honolulu, HI 96819)	Type
Hawaii Fueling Facilities Corp.	0	8 Sand Island Access Road	IC
USPS Vehicle Maintenance Facility	0.38. NNW	89 Sand Island Access Road	IC/EC
Former Flynn Learner	0.45 NNW	120 Sand Island Access Road	IC/EC

4.1.16 Federal ERNS List

The ERNS list, maintained by the EPA, contains CERCLA hazardous substance releases or spills, as maintained at the National Response Center. No incidents were identified on the subject property (Environmental Data Resources, Inc., 2016).

4.1.17 State Releases List

The HDOH HEER Office maintains a database of known releases to the environment of hazardous material or petroleum products. One release incident was identified within ⅛ mile of the subject property (Environmental Data Resources, Inc., 2016). The UH Marine Center, located at 1 Sand Island Access Rd., reported a 20 gallon lubricating oil spill, a 2 gallon used oil spill, and a hydraulic oil spill. All were responded to immediately, and no further action was called for. Refer to Section 8.1 for determination of impact of these sites on the subject property.

4.1.18 U.S. Brownfields

U.S. Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence of a hazardous substance, pollutant, or contaminant. No U.S. Brownfields sites were identified within one mile of the subject property (Environmental Data Resources, Inc., 2016).

4.2 ADDITIONAL RECORD SOURCES

MNA requested records for review from the HDOH, Honolulu Fire Department (HFD), and Hawaiian Electric Company (HECO) on 19 January 2017. The HDOH HEER Office provided electronic files, HECO responded with transformer and non-PCB status, but HFD responded that the agency had no records on file for the subject property. Additional information sources were, but not limited to:

- Kapalama Container Terminal and Tenant Relocations, Final Environmental Impact Statement (State Department of Transportation, 2014)
- Site Characterization and Final Environmental Hazard Evaluation and Environmental Hazard Management Plan for the New Kapalama Container Terminal Yard Design at Honolulu Harbor, Oahu, Hawaii, Project H.C. 10502 (Element Environmental, 2015)
- Final Hazardous Materials Survey Report, The New Kapalama Container Terminal Yard Design at Honolulu Harbor, Oahu, Hawaii Project H.C. 10502 (Element Environmental, 2014)
- Environmental Assessment for Base Realignment Closure of Kapalama Military Reservation Phase III Portion, Honolulu, Hawaii (Department of the Army, 1991)

4.2.1 Subject Property

MNA reviewed electronic case files from the HDOH HEER Office and EPA website. Limited UH Marine Center information was provided by the UH Environmental Health and Safety Office and the HDOH online release database.

<u>Hawaii Fueling Facilities Corporation – 6 Sand Island Access Road (parcel 020)</u>

On 23 July 2008, trenching activities were conducted and free product was observed. Leaking underground drain lines are the presumed source of jet fuel contamination on Lot 3 and 3.5. A release number (#20080723-1500) was issued by HDOH. Recovery activities included exploratory trenching, a recovery sump, stilling wells, and piezometers.

On 22 December 2014, Tank #2 operated by HFFC released 42,000 gallons at 6 Sand Island Access Road. National Response Center, EPA, and HDOH HEER Office were notified. According to the information on EPA website (http://response.epa.gov/site/), this tank farm contains 16 aboveground storage tanks with a combined capacity to hold 44 million gallons of fuel. Tank #2 was modified with a large access door cut into the sidewall, and several extraction wells have been installed through the floor of the tank. Aggressive removal of the jet fuel was completed in 2016, and many of the exploratory boreholes have been converted to monitoring wells.

<u>UH Marine Center – 1 Sand Island Access Road (parcel 017)</u>

Flammable organic solvent waste and other non-regulated, radioactive, corrosive, and poisonous waste were inventoried and disposed of by a contractor, Pacific Commercial Services. A closeout survey was performed in September 2005 at MSB 620, 624, 625; Snug Lab, Van 23, Van 24, and

Snug beach trailer. A total of 63 swipes were taken; four swipes were found to be above the minimum detectable activity allowed, and a recommendation was made to clean contaminated areas as soon as possible.

The HDOH's online release database listed the UH Marine Center for four events, two substance releases (20010522-0700 and 20030523-0900) and two security breaches (20140528-0745 and 20140602-0746). In May 2001, 20 gallons of lubricating oil was released from a UH research vessel, and in May 2003, 2 gallons of used oil release was reported. The HEER Office issued No Further Actions for both oil releases. The two security breach listing in 2014 did not include details (http://eha-web.doh.hawaii.gov/eha-cma/Leaders/HEER/public-records).

4.2.2 Surrounding Properties

MNA reviewed publicly available information from the HDOH HEER Office.

Intersection of Keehi Lagoon Access Road and Sand Island Access Road (Parcel 027 access road between parcels 020 and 019.

In August and September 2014, Honolulu Marine and Royal Construction Company installed a water line along the Keehi Lagoon Access Road. When the excavation activities approached Sand Island Access Road, workers observed petroleum impacted soil and free product floating on the groundwater. Environmental Hazard Management Plan was prepared for construction work. Subsequently, investigation has been

Former Kapalama Military Reservation – Auiki Street to 1 Sand Island Access Road

Conceptualized in early 1941 as a U.S. Army storage and supply base with access to both land and ocean transportation, the KMR served the Army during the World War II from 1942 until the end of the war. The KMR remained operational during Korean and Vietnam Wars, continuing into the 1980s. In 1987, the Army began the process of dividing parcels to be sold (Fung Associates, 2007).

Keehi Harbor – 4 Sand Island Access Road

On 20 July 2008 a small boat sank and one half gallon of unleaded gasoline was released into the harbor. The U.S. Coast Guard reported that the sheen size was reported as 100 feet by 50 feet. State On-Scene Coordinator issued a No Further Action.

On 29 June 1990 propane leak was reported by a citizen. The propane was suspected to be from tank farm nearby. State On-Scene Coordinator issued a No Further Action.

4.3 HISTORICAL USE INFORMATION ON THE SUBJECT PROPERTY

MNA reviewed historical use information for the subject property, including aerial photographs and United States Geological Survey (USGS) topographic maps. No fire insurance maps were available.

4.3.1 Historical Aerial Photographs

Aerial photographs of the subject, adjoining, and surrounding properties were provided by EDR (Environmental Data Resources, Inc., 2016). Photographs from the years 1952, 1968, 1975, 1978, 1985, 1992, 2004, and 2008 were reviewed. Table 10 provides the details for those photos.

Table 10. Aerial Photograph Details

Date	Image Type	Approximate Scale
2008	C	1”:500’
2004	C	
1992	C	
1985	C	
1978	B/W	
1975	C	
1968	B/W	
1952	B/W	

B/W - Black and white photograph
C - Color

For the reviewed aerial photographs, the following observations were made:

1952: No building structures were visible on the subject property. Adjoining the subject property to the northeast was the Kapalama Military Reservation. Snug Harbor is visible to the east. Sand Island Access Road was visible along the parcel 017 western boundary.

1968: No building structures were visible on the subject property. Development was evident in the area. Four bulk fuel tanks were shown, and Keehi Harbor was visible further to the northwest.

1975: The bulk fuel facility appears to have expended to the north, totaling 9 tanks. Sand Island to the south is significantly more developed. No other changes from the 1968 photo.

1978: Additional structures are present in the west portion of parcel 017. Keehi Harbor has expanded to the north. No other changes from the 1975 photo.

1985: Another structure was constructed in the west corner of parcel 017. No changes from the 1978 photo.

1992: More bulk fuel tanks were visible, totaling 13 tanks. No other changes from the 1985 photo.

2004: Three more bulk fuel tanks were visible, totaling 16. More warehouses were visible to the east.

2008: No change from the 2004 photo.

4.3.2 Historical Topographic Maps

USGS topographic maps that cover the subject property and vicinity were reviewed. Maps were available for the years 1953, 1959, 1968-1969, 1983, 1998-1999, and 2013, (Environmental Data Resources, Inc., 2016). A copy of the historical topographic maps provided by EDR is included in Appendix A. The maps of the subject property and surrounding area depicted the following:

1953: No structures are depicted on the subject property. Sand Island Access Road was established as a secondary highway. Sand Island is depicted as a military reservation. The Kapalama Military Reservation was visible, and further northeast is depicted as a heavily built-up area, in red shade.

1959: No changes are shown in the subject or surrounding areas from the 1953 map.

1968-1969: Bulk fuel storage was visible to the west of the subject property, and Keehi Harbor further west. Sand Island is depicted as conservation and private land, including a Coast Guard Reservation.

1983: More bulk fuel storage was visible, totaling 9 tanks. Six tanks are visible on Sand Island as well. No other changes from the 1968-1969 map.

1998-1999: Several more bulk fuel storage containers were visible, totaling 13. No other changes from the 1983 map.

2013: Keehi Marina was visible to the west. The former Kapalama Military Reservation was labeled only as Pier Number 40. No other changes from the 1999 map.

4.3.3 Sanborn Fire Insurance Map

No Sanborn Fire Insurance maps were available for the subject property.

5.0 SITE RECONNAISSANCE

The site reconnaissance was conducted by Graham Knopp on 06 December 2016, and Myounghee Noh and Joanna Boyette on 27 January 2017. The site reconnaissance focused on identifying *recognized environmental conditions* with the ability to impact the subject property. A site map of the subject property is presented in Figure 3. Refer to Section 8.1 for findings related to observations made during the site reconnaissance.

5.1 METHODOLOGY AND LIMITING CONDITIONS

The site reconnaissance was conducted by visually inspecting the subject property (proposed fuel pipeline corridor) and adjoining areas on foot. MNA looked for a variety of environmental hazard indicators including, but not limited to, stained surface soil, dead or stressed vegetation, hazardous substances, aboveground and underground storage tanks, disposal areas, groundwater wells, drywells, and sumps. Inspection of wastewater system, other utilities, or building materials was not part of this assessment. Photographs from the site reconnaissance are presented in Appendix B.

5.2 GENERAL SITE SETTING

Honolulu Harbor is the largest and the most important of the State's commercial harbors, as the State's port-of-entry for nearly all imported goods. The subject property is a proposed fuel pipeline corridor from HFFC Sand Island Fuel Facility, parcels 020 and 021, to the proposed Kapalama Terminal, at the west end of the Honolulu Harbor (Photograph 1). The subject property is located approximately 3.5 miles from the Honolulu International Airport, and the HFFC Sand Island Fuel Facility is in between Keehi Lagoon Small Boat Harbor and Sand Island Access Road. The fuel pipeline corridor is proposed to be placed along the west and south boundaries of the parcel 017 (Photographs 2-3).

Parcel 017, former UH Marine Center, is currently vacant with four building structures but occasionally access is given to it for special events, such as filming or special events. The former Kapalama Military Reservation is immediately north of parcel 017; all KMR buildings have been

removed in recent years, and the lot is largely used for temporary storage of new commercial vehicles (Photograph 4). Adjoining the subject area to the south is the Kalihi Channel leading east to Honolulu Harbor. Also adjoining the subject area is Sand Island Access Road (Photographs 4-6).

5.3 EXTERIOR OBSERVATIONS

At the time of the site reconnaissance, there were no building structures observed on the subject fuel line corridor. Near the northwestern terminus of the project site, the aboveground tanks of the HFFC Sand Island Fuel Facility were observed (Photograph 1). An existing buried fuel line along the Sand Island Access Road was indicated on road-side signs in a grassy shoulder area along Sand Island Access Road (Photographs 4 and 6). Some utility boxes were observed along the grassy shoulder area. Near the eastern terminus of the project site, a small pier, known as Snug Harbor, was observed.

The largest adjoining property to the proposed fuel pipeline is the former UH Marine Center (parcel 017). Four building structures, parking lots, utility boxes, and storm drains were observed. The entire area was paved with asphalt or concrete. Some oil stains were observed on the asphalt pavement. Shoreline erosion was evident along the harbor side of the parcel; some trash was seen along the shore and in the vegetated area outside of the fence. No hazardous substance was observed; however, some oil stains were observed in parking lots, and one of the buildings' roof was damaged, releasing roofing material onto the ground (Photograph 10). The same building also had an insulated room, and a "Hazardous Waste Storage" sign was observed on the exterior of the door; the room was empty at the time of the site reconnaissance (Photograph 24).

5.4 INTERIOR OBSERVATIONS

There were no building structures on the subject fuel pipeline corridor. Four buildings located on parcel 017 were vacant with some evidence of vandalism, such as broken walls, cut pipe, and open roof. No hazardous substances were observed; however, some instructions posted to a laboratory hood in the L-shaped building suggested previous use of radioisotopes. The Hazardous Waste Storage room, mentioned in Section 5.3, and this laboratory and hood were empty (Photographs 24 and 26).

An oil stain was observed on the concrete floor inside the Machine Shop on parcel 017 (Photograph 28). The integrity of the concrete floor is uncertain, and there is a potential for petroleum hydrocarbons, and possibly polychlorinated biphenyls contamination of the concrete and soil.

5.5 HAZARDOUS SUBSTANCES AND PETROLEUM PRODUCTS

No signs of hazardous substances were observed on the subject pipeline corridor. Small amounts of trash were observed in the vegetated area and along the shoreline. However, at the eastern terminus of the project area, distressed vegetation and an approximately 10 ft x 20 ft oil stain were observed on bare soil. This area is the former Sandblast and Paint area at the east end of parcel 017. Also observed were industrial solid waste along the shore line of the former Sandblast and Paint area, similar to the image shown in Photograph 18.

5.6 ABOVE GROUND AND UNDERGROUND STORAGE TANKS

MNA observed roadside signs for the existing fuel lines along Sand Island Access Road (Photographs 4 and 6). HFFC's large aboveground fuel tanks were observed in parcels 020 and 021, and the AST No. 19 on parcel 020 appeared drained (Photographs 10-12).

6.0 INTERVIEWS

MNA conducted interviews with two faculty members of the UH, which leased the parcel 017 from the HDOT Harbors Division.

6.1 Alexander "Sandy" Shor, UH

MNA reached Dr. Shor by phone (808-956-5749). Dr. Shor is the Associate Dean of Research at the School of Ocean and Earth Science and Technology (SOEST), University of Hawaii at Manoa.

According to Dr. Shor, the UH Oceanography Department within SOEST used the site since the 1970s with research ships, each with 20 to 30 crew members. The site usage was largely operations and maintenance of research ships and machines, storage of science equipment, and bio-geochemistry laboratories, all in support of the marine research being conducted. When asked about hazardous material use, he indicated small amounts of materials, such as oil stored in drums. Occasionally the research ships were fueled from the pier onsite. There is a sewer line/pump station, and Dr. Shor recalled one incident of sewer overflow.

Dr. Shor indicated that there were approximately 120 shipping containers used for storage purposes. When the facility moved to a new location, there were modest amounts of hazardous materials which were disposed of. He stated that after the relocation, there was illegal dumping and vandalism, and UH installed the wire-fence. Dr. Shor indicated that in 2016, an electrical component was stolen and transformer oil was released inside of the Machine Shop.

6.2 Ross Barnes, UH

MNA conducted a personal interview with Mr. Ross Barnes, the Port Operations Manager, at his office on Pier 35, 965 N. Nimitz Highway, Honolulu. Mr. Barnes is a SOEST faculty who is originally from the State of Virginia and has been working for the UH Marine Center since 1979. He moved to Hawaii in 1999 and has been in this position since 2010.

Mr. Barnes stated that the UH Marine Center site was largely parking, storage, and warehouses. The research ships are equipped for research personnel and equipment for ocean mapping, bottom sampling, water sampling, etc. For each research ship, supplies were loaded for 45-day trips. When asked about fuel storage onsite, Mr. Barnes indicated that there were no underground storage tanks, but there was a 700-gallon gasoline above ground tank which was closed in the 1990s; it was used to fuel state vehicles, such as trucks and mini-vans. Mr. Barnes stated that there was occasional fueling of ships.

Mr. Barnes indicated that the open area on the east end of the lot was previously used for sandblasting and painting from the 1970s to early 1990s. After the operation ceased, UH performed a remediation at the former sandblasting site. A lot of soil was dug up during cleanup. He states that no regulatory agency was involved in this cleanup, except for the DOT's visual inspection after the cleanup. This open area became a storage facility for unwanted materials and equipment.

According to Mr. Barnes, there was a fuel leak from a ship, which released approximately 7,000 gallons of fuel through the breached gray water tank on the ship; the gray water was being transferred to the 9,000-gallon sewer holding tank onsite at the time of the release. Some of this fuel reached water. Investigation and cleanup were conducted.

Mr. Barnes stated that the Machine Shop in the middle of the lot was recently vandalized.

Mr. Barnes indicated that the large buildings on the west end of the site were the Main Office and L-shaped Warehouse, where some offices and laboratories were also housed. The narrow building north of the Main Office was initially designed to have science rooms, but it ended up as a storage building, in addition to the shipping containers in the yard. He stated that there was heavy erosion at the shoreline over the years. It was formerly approximately 20 feet outside of the current fence line.

According to Mr. Barnes, there were several storm water drains, and one of the storm water samples exceeded the permitted limits; the drainage was close to a neighboring warehouse, and Mr. Barnes indicated the neighbor's vehicle wash water influenced this exceedance.

7.0 DATA GAPS AND DEVIATIONS

There were no deviations from the ASTM method. MNA encountered no limitations or data gaps.

8.0 KEY FINDINGS AND OPINION

This section evaluates the key findings of this assessment and makes a determination as to the presence of RECs, if any.

8.1 Subject Property - REC

The Kapalama industrial area was established in the early 1940s. The land area was expanded by filling two fish ponds, the 12-acre Auiki Pond and the 52-acre Ananoho Pond, with harbor dredge and the City and County of Honolulu landfill materials.

The U.S. Army established the Kapalama Military reservation in 1941, and buildings were constructed on approximately 80-acres of land during 1943-1945 to accommodate activities, such as administration, warehousing, painting, fumigation, storage, mortuary, equipment repairs and maintenance, and in 1965 for office buildings and the Central Identification Laboratory. Various portions of KMR have been transferred to the State since the late 1970s, and the final transfer began in 1985 as part of the Base Closure program.

The EPA designated KMR as a CERCLIS No Further Remedial Action Planned site (Section 4.1.5); however, there are known release areas today, as depicted in Figure 3. The HDOH listed the former UH Marine Center and the HFFC Sand Island Fuel Facility on its hazardous waste sites database (Section 4.18) and KMR on its leaking underground storage tank database (Section 4.1.10).

Based on the historical use of landfill materials as fill, former land use of industrial activities, and reported material releases, the proposed fuel pipeline corridor from HFFC Sand Island Fuel Facility to Pier 42 may encounter soil and/or groundwater contaminated with petroleum, heavy metals, and other industrial hazardous materials (Sections 3.0, 4.1, 4.2, and 6.2). The northwestern terminus (tank farm), Sand Island Access Road, and the entire KMR and the former UH Marine

Center sites have been "capped" by asphalt or concrete pavement, except for the eastern terminus where sandblasting and painting was conducted. When the surface and subsurface soils are disturbed, engineering controls and Best Management Practices must be implemented to protect human health and to prevent runoff and further environmental degradation. The subject site from the tank farm to Sand Island Access Road and to Pier 42 is determined a *REC*.

8.2 Surrounding Area - REC

As the subject property is a narrow fuel pipeline corridor, its adjoining properties are the same parcels, 017, 020, and 020.

According to the User Questionnaire, interviews conducted, and research into available regulatory records, soil and groundwater are anticipated to be contaminated with petroleum, heavy metals, and other industrial hazardous materials at the former KMR and the UH Marine Center. The known and anticipated contamination on the adjoining properties is determined a *REC*.

EDR identified 19 State Hazardous Waste Sites, 18 Leaking UST sites, and three sites listed on the State IC/EC registries within ½ mile and upgradient from the subject property. Due to the distance and hydrologic proximity of these sites to the parcels 017, 020, and 021, the present and former contamination at these sites likely contribute to the area-wide impact and are therefore considered a *REC*.

One State VRP site, Former Flynn Learner, was located at 120 Sand Island Access Road, approximately 0.45 miles north/northwest and upgradient from the site. Engineering and institutional controls are in place to manage the contamination present onsite. Due to the distance of this site from the project area, it is considered a non-REC.

9.0 CONCLUSION

MNA performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM E 1527-13 of the subject property, a fuel pipeline corridor from the HFFC Sand Island Fuel Facility to Pier 42, Honolulu Harbor, Oahu. Any exceptions to, or deletions from, this practice are described in Section 7.0 of this report. This assessment has revealed no evidence of *recognized environmental conditions* except for the following:

- Based on the historical use of landfill materials as fill, former land use for industrial activities, and reported material releases, the proposed fuel pipeline corridor from HFFC Sand Island Fuel Facility to Pier 42 may encounter soil and/or groundwater contaminated with petroleum, heavy metals, and other industrial hazardous materials. This is considered a *REC*.

- EDR identified 19 State Hazardous Waste Sites, 18 Leaking UST sites, and three sites listed on the State IC/EC registries within ½ mile and upgradient from the subject property. Due to the short distance and hydrologic proximity of these sites to the parcels 017, 020, and 021, the present and former impact at these sites likely contribute to the area-wide contamination and are therefore considered a *REC*.

Legend and Notes

- Parcels containing Subject Property
- Grossly Contaminated Concrete Slab
- Grossly Contaminated Soil
- Underground Storage Tank
- Former Sandblast site. Staining observed on bare soil.
- Gross Contamination Hazard
- Aquatic Ecotoxicity Hazard

Scale
300 feet

Myounghee Noh & Associates, L.L.C.

Figure 3. Site Map
Phase I Environmental Site Assessment
TMK (1)-1-025:017, :020, :021
Kapalama, Island of Oahu

REFERENCES

ASTM International. (2013). *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.* West Conshohocken: ASTM International.

City and County of Honolulu. (2016). Real ProperyAssessment Division. Retrieved December 14, 2016, from online property record search: http://www.qpublic.net/hi/honolulu/search.html.

Department of Planning and Permitting. (2016, February 28). *Maps of Oahu*. Retrieved from honolulugis.org.

Department of the Army. (1991). *Environmental Assessment for Base Realignment Closure of Kapalama Military Reservation Phase III Portion, Honolulu, Hawaii*. Retrieved from http://oeqc.doh.hawaii.gov.

Element Environmental. (2014). *Final Hazardous Materials Survey Report, The New Kapalama Container Terminal Yard Design at Honolulu Harbor, Oahu, Hawaii, Project H.C. 10502.* Honolulu, HI.

Element Environmental. (2015). *Site Characterization and Final Environmental Hazard Evaluation and Environmental Hazard Management Plan for The New Kapalama Container Terminal Yard Design at Honolulu Harbor, Oahu, Hawaii, Project H.C. 10502.* Honolulu, HI.

Environmental Data Resources, Inc. (2016). *FirstSearch Report for HFFC Kapalama Fuel Line and Terminal.* Shelton: Environmental Data Resources, Inc., from Web Soil Survey: http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm

Federal Emergency Management Agency. (1988, 09 16). *FEMA Flood Map Service Center*. Retrieved June 3, 2016, from https://msc.fema.gov/portal/

Federal Emergency Management Agency. (2015). *Flood Map Service Center.* FEMA's National Flood Hazard Layer (Official)

Fung Associates. (2007). Historic Architectural Survey of Former Kapalama Military Reservation and Hawaiian Dredging Sites (Final Report)

Hawaii Department of Health Safe Drinking Water Branch. (2014, November). *UIC Map of Oahu.* Retrieved May 19, 2016, from Underground Injection Control (UIC) Program: http://hawaii.gov/health/environmental/water/sdwb/uic/pdf/oahuic.pdf

Hawaii Department of Transportation Harbors Division. (2016). The New Kapalama Container Terminal Yard Design at Honolulu Harbor, Hawaii. H.C. 10502.

Hawaii Department of Transportation Harbors Division. (2014). *Kapalama Container Terminal and Tenant Relocations, Final Environmental Impact Statement.* Honolulu, HI.

Hazlett, R. W., & Hyndman, D. W. (1996). *Roadside Geology of Hawai'i.* Missoula, Montana: Montana Press Pubishing Company.

MacDonald, G. A., & Abott, A. T. (1996). *Volcanoes in the Sea.* Honolulu: Univeristy of Hawaii Press.

Mink and Lau. (1990). *Aquifer Identification and Classification for O'ahu: Groundwater Protection Strategy for Hawai'i.* University of Hawaii, Water Resources Research Center.

Morgan, J. (1996). *Hawai'i: A Unique Geography.* Honolulu: The Bess Press, Inc.

Stearns, H. T. (1985). *Geology of the State of Hawai'i.* Palo Alto: Pacific Books.

United States Department of Agriculture. (2016). *Natural Resources Conservation Service.* Retrieved May 19, 2016, from Web Soil Survey: http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm

APPENDIX A. Environmental Data Resources Report and Maps

HFFC Kapalama Fuel Line and Terminal
NA
Honolulu, HI 96819

Inquiry Number: 4811271.2s
December 20, 2016

FirstSearch Report

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

Search Summary Report

TARGET SITE **NA**
HONOLULU, HI 96819

Category	Sel	Site	1/8	1/4	1/2	> 1/2	ZIP	TOTALS
NPL	Y	0	0	0	0	0	0	0
NPL Delisted	Y	0	0	0	0	0	0	0
CERCLIS	Y	0	0	0	0	-	0	0
NFRAP	Y	0	0	1	2	-	0	3
RCRA COR ACT	Y	0	0	0	0	0	0	0
RCRA TSD	Y	0	0	0	0	-	0	0
RCRA GEN	Y	0	4	3	-	-	0	7
Federal IC / EC	Y	0	0	0	0	-	0	0
ERNS	Y	0	-	-	-	-	0	0
State/Tribal CERCLIS	Y	0	7	2	10	47	8	74
State/Tribal SWL	Y	0	0	0	0	-	0	0
State/Tribal LTANKS	Y	0	0	1	17	-	0	18
State/Tribal Tanks	Y	0	2	2	-	-	0	4
State/Tribal IC / EC	Y	0	1	0	4	-	0	5
State/Tribal VCP	Y	0	0	0	1	-	0	1
ST/Tribal Brownfields	Y	0	0	0	0	-	0	0
US Brownfields	Y	0	0	0	0	-	0	0
Other Haz Sites	Y	0	-	-	-	-	0	0
Spills	Y	0	1	-	-	-	0	1
Other	Y	0	3	8	-	-	0	11
	- Totals --	0	18	17	34	47	8	124

Disclaimer - Copyright and Trademark Notice

This Report contains certain information obtained from a variety of public and other sources reasonably available to Environmental Data Resources, Inc. It cannot be concluded from this Report that coverage information for the target and surrounding properties does not exist from other sources. **NO WARRANTY EXPRESSED OR IMPLIED, IS MADE WHATSOEVER IN CONNECTION WITH THIS REPORT. ENVIRONMENTAL DATA RESOURCES, INC. SPECIFICALLY DISCLAIMS THE MAKING OF ANY SUCH WARRANTIES, INCLUDING WITHOUT LIMITATION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR USE OR PURPOSE. ALL RISK IS ASSUMED BY THE USER. IN NO EVENT SHALL ENVIRONMENTAL DATA RESOURCES, INC. BE LIABLE TO ANYONE, WHETHER ARISING OUT OF ERRORS OR OMISSIONS, NEGLIGENCE, ACCIDENT OR ANY OTHER CAUSE, FOR ANY LOSS OF DAMAGE, INCLUDING, WITHOUT LIMITATION, SPECIAL, INCIDENTAL, CONSEQUENTIAL, OR EXEMPLARY DAMAGES. ANY LIABILITY ON THE PART OF ENVIRONMENTAL DATA RESOURCES, INC. IS STRICTLY LIMITED TO A REFUND OF THE AMOUNT PAID FOR THIS REPORT.** Purchaser accepts this Report "AS IS". Any analyses, estimates, ratings, environmental risk levels or risk codes provided in this Report are provided for illustrative purposes only, and are not intended to provide, nor should they be interpreted as providing any facts regarding, or prediction or forecast of, any environmental risk for any property. Only a Phase I Environmental Site Assessment performed by an environmental professional can provide information regarding the environmental risk for any property. Additionally, the information provided in this Report is not to be construed as legal advice.

Copyright 2014 by Environmental Data Resources, Inc. All rights reserved. Reproduction in any media or format, in whole or in part, of any report or map of Environmental Data Resources, Inc., or its affiliates, is prohibited without prior written permission.

EDR and its logos (including Sanborn and Sanborn Map) are trademarks of Environmental Data Resources, Inc. or its affiliates. All other trademarks used herein are the property of their respective owners.

Search Summary Report

TARGET SITE: **NA**
HONOLULU, HI 96819

Category	Database	Update	Radius	Site	1/8	1/4	1/2	> 1/2	ZIP	TOTALS
NPL	NPL	03/07/2016	1.000	0	0	0	0	0	0	0
	Proposed NPL	03/07/2016	1.000	0	0	0	0	0	0	0
NPL Delisted	Delisted NPL	03/07/2016	1.000	0	0	0	0	0	0	0
CERCLIS	SEMS	03/07/2016	0.500	0	0	0	0	-	0	0
NFRAP	SEMS-ARCHIVE	03/07/2016	0.500	0	0	1	2	-	0	3
RCRA COR ACT	CORRACTS	06/27/2016	1.000	0	0	0	0	0	0	0
RCRA TSD	RCRA-TSDF	06/21/2016	0.500	0	0	0	0	-	0	0
RCRA GEN	RCRA-LQG	06/21/2016	0.250	0	0	1	-	-	0	1
	RCRA-SQG	06/21/2016	0.250	0	3	1	-	-	0	4
	RCRA-CESQG	06/21/2016	0.250	0	1	1	-	-	0	2
Federal IC / EC	US ENG CONTROLS	05/09/2016	0.500	0	0	0	0	-	0	0
	US INST CONTROL	05/09/2016	0.500	0	0	0	0	-	0	0
ERNS	ERNS	09/26/2016	TP	0	-	-	-	-	0	0
State/Tribal CERCLIS	SHWS	05/06/2016	1.000	0	7	2	10	47	8	74
State/Tribal SWL	SWF/LF	09/17/2012	0.500	0	0	0	0	-	0	0
State/Tribal LTANKS	LUST	09/12/2016	0.500	0	0	1	17	-	0	18
	INDIAN LUST	10/27/2015	0.500	0	0	0	0	-	0	0
State/Tribal Tanks	UST	09/12/2016	0.250	0	2	2	-	-	0	4
	INDIAN UST	10/20/2015	0.250	0	0	0	-	-	0	0
State/Tribal IC / EC	ENG CONTROLS	05/06/2016	0.500	0	0	0	2	-	0	2
	INST CONTROL	05/06/2016	0.500	0	1	0	2	-	0	3
State/Tribal VCP	VCP	05/06/2016	0.500	0	0	0	1	-	0	1
ST/Tribal Brownfields	BROWNFIELDS	05/06/2016	0.500	0	0	0	0	-	0	0
US Brownfields	US BROWNFIELDS	09/20/2016	0.500	0	0	0	0	-	0	0

Search Summary Report

TARGET SITE: **NA**
HONOLULU, HI 96819

Category	Database	Update	Radius	Site	1/8	1/4	1/2	> 1/2	ZIP	TOTALS
Other Haz Sites	US CDL	08/30/2016	TP	0	-	-	-	-	0	0
Spills	HMIRS	06/27/2016	TP	0	-	-	-	-	0	0
	SPILLS	01/14/2016	TP	0	1	-	-	-	0	1
	SPILLS 90	03/10/2012	TP	0	-	-	-	-	0	0
Other	RCRA NonGen / NLR	06/21/2016	0.250	0	2	8	-	-	0	10
	TSCA	12/31/2012	TP	0	-	-	-	-	0	0
	TRIS	12/31/2014	TP	0	-	-	-	-	0	0
	SSTS	12/31/2009	TP	0	-	-	-	-	0	0
	RAATS	04/17/1995	TP	0	-	-	-	-	0	0
	PRP	10/25/2013	TP	0	-	-	-	-	0	0
	PADS	01/20/2016	TP	0	-	-	-	-	0	0
	ICIS	07/27/2016	TP	0	-	-	-	-	0	0
	FTTS	04/09/2009	TP	0	-	-	-	-	0	0
	MLTS	08/30/2016	TP	0	-	-	-	-	0	0
	RADINFO	10/03/2016	TP	0	-	-	-	-	0	0
	INDIAN RESERV	12/31/2005	1.000	0	0	0	0	0	0	0
	US AIRS	06/30/2016	TP	0	-	-	-	-	0	0
	FINDS	07/15/2016	TP	0	1	-	-	-	0	1
	- Totals --			0	18	17	34	47	8	124

Site Information Report

Request Date:	DECEMBER 20, 2016	**Search Type:**	COORD
Request Name:	JESSICA WALSH	**Job Number:**	NA

Target Site: NA
HONOLULU, HI 96819

Site Location

	Degrees (Decimal)	Degrees (Min/Sec)		UTMs
Longitude:	157.888772	157.8887720 - 157° 53' 19.57''	Easting:	615250.7
Latitude:	21.316341	21.3163410 - 21° 18' 58.82''	Northing:	2357426.0
Elevation:	3 ft. above sea level		Zone:	Zone 4

Demographics

Sites: 117 **Non-Geocoded:** 8 **Population:** N/A

RADON

Federal EPA Radon Zone for HONOLULU 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: 96819

Number of sites tested: 4

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	-0.475 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	0.050 pCi/L	100%	0%	0%

Federal Area Radon Information for HONOLULU COUNTY, HI

Number of sites tested: 209

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.015 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.125 pCi/L	100%	0%	0%
Basement	0.415 pCi/L	96%	4%	0%

Target Site Summary Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

TOTAL: 125 GEOCODED: 117 NON GEOCODED: 8

Map ID	DB Type --ID/Status	Site Name	Address	Dist/Dir	ElevDiff	Page No.

No sites found for target address

Sites Summary Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

TOTAL: 125 GEOCODED: 117 NON GEOCODED: 8

Map ID	DB Type --ID/Status	Site Name	Address	Dist/Dir	ElevDiff	Page No.
A1	UST --Permanently Out of Use --02/27/1992 --06/10/1993 --9-201058	UH MARINE CENTER	1 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.00	- 1	1
A2	FINDS --110064408252 --110005722897	USDOC NOAA SHIP TOWNSEND CROMW	1 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.00	- 1	2
A2	RCRA-SQG --HIR000138008	USDOC NOAA SHIP TOWNSEND CROMW	1 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.00	- 1	3
A3	SPILLS	UNIVERSITY OF HAWAII, MARINE C	1 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.00	- 1	8
A3	SHWS	UNIVERSITY OF HAWAII, MARINE C	1 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.00	- 1	12
A4	HAZNET --HI6130090065	USDOC NOAA SHIP TOWNSEND CROMW	1 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.00	- 1	13
A4	RCRA NonGen / NLR --HI6130090065	USDOC NOAA SHIP TOWNSEND CROMW	1 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.00	- 1	14
B5	SHWS	HAWAII FUELING FACILITIES CORP	6 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.00	+ 0	16
B6	RCRA NonGen / NLR --HIP000059022	AIRCRAFT SERVICE INTERNATIONAL	6 SAND ISLAND ACCESS ROAD HONOLULU, HI 96819	0.00	+ 0	17
B7	SHWS	KEEHI SMALL BOAT HARBOR	4 SAND ISLAND RD HONOLULU, HI 96819	0.01 WNW	+ 0	19
B8	RCRA-CESQG --HIR000000240	STATE OF HAWAII DLNR DBOR	4 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.01 WNW	+ 0	20
B9	RCRA-SQG --HI8690390036	USCG I S C HONOLULU	4 SAND ISLAND ACCESS ROAD HONOLULU, HI 96819	0.01 WNW	+ 0	22
B10	SHWS	HONOLULU MARINE SAND ISLAND	SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.01 WNW	+ 0	32

Sites Summary Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

TOTAL: 125 GEOCODED: 117 NON GEOCODED: 8

Map ID	DB Type --ID/Status	Site Name	Address	Dist/Dir	ElevDiff	Page No.
A11	UST --Permanently Out of Use --08/01/1997 --9-100062	HIRI HARBOR TERMINAL (PMID 010	2 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.02 SSW	+ 0	33
A11	SHWS	HIRI HARBOR TERMINAL (PMID 010	2 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.02 SSW	+ 0	34
A12	RCRA-SQG --HIR000040535	HAWAII INDEPENDENT ENERGY - SA	2 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.02 SSW	+ 0	35
B13	SHWS	HAWAII FUELING FACILITIES CORP	6 & 8 SAND ISLAND ACCESS HONOLULU, HI 96819	0.03 WNW	+ 0	37
14	INST CONTROL	HAWAII FUELING FACILITIES CORP	8 SAND ISLAND ACCESS RD HONOLULU, HI	0.10 NW	+ 0	38
14	SHWS	HAWAII FUELING FACILITIES CORP	8 SAND ISLAND ACCESS RD HONOLULU, HI	0.10 NW	+ 0	39
15	UST --Permanently Out of Use --01/06/1997 --9-100051	KAPALAMA MILITARY RESERVATION	SAND ISLAND ACCESS RD, BL HONOLULU, HI 96819	0.15 NNE	+ 0	41
15	SHWS	KAPALAMA MILITARY RESERVATION	SAND ISLAND ACCESS RD, BL HONOLULU, HI 96819	0.15 NNE	+ 0	42
C16	RCRA NonGen / NLR --HI0000953406	DEPT OF BUISNESS ECON DEVL AND	10 SAND ISLAND ACCESS RD HONOLULU, HI 96813	0.18 NNW	+ 0	43
C17	UST --Permanently Out of Use --05/01/1987 --01/01/1989 --9-201507	KAPALAMA MILITARY RESERVATION	BLDG 942 TANK 942-1, 942- SCHOFIELD BARRACKS, HI 96786	0.19 NNW	+ 0	45
C17	LUST --Case Transferred to HEER (regulated) --890030 --9-201507	KAPALAMA MILITARY RESERVATION	BLDG 942 TANK 942-1, 942- SCHOFIELD BARRACKS, HI 96786	0.19 NNW	+ 0	46
C18	RCRA NonGen / NLR --HIR000097717	PSC INDUSTRIAL OUTSOURCING --	5 SAND ISLAND ACCESS ROAD HONOLULU, HI 96819	0.21 NNW	+ 0	47

Sites Summary Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

TOTAL: 125 GEOCODED: 117 NON GEOCODED: 8

Map ID	DB Type --ID/Status	Site Name	Address	Dist/Dir	ElevDiff	Page No.
C19	RCRA-LQG --HI7214522214	KAPALAMA MILITARY RESERVATION	5 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.21 NNW	+ 0	51
C19	SEMS-ARCHIVE --0904469 --HI7214522214	KAPALAMA MILITARY RESERVATION	5 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.21 NNW	+ 0	55
C20	SHWS	KAPALAMA MILITARY RESERVATION	5 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.21 NNW	+ 0	56
C21	RCRA NonGen / NLR --HIP000111955	DEPT OF AGRICULTURE ANNEX NO 3	5 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.21 NNW	+ 0	57
C22	RCRA-SQG --HIR000139964	ROYAL STAR HAWAII MOTORCOACH T	5 SAND ISLAND ACCESS ROAD HONOLULU, HI 96819	0.21 NNW	+ 0	59
C23	RCRA NonGen / NLR --HIR000058883	CHEM MET GOVERNMENT SERVICES	5 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.21 NNW	+ 0	62
C24	RCRA NonGen / NLR --HIP000053710	HAWAII COMMUNITY DEVELOPMENT A	5 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.21 NNW	+ 0	65
C25	RCRA NonGen / NLR --HIP000139147	KAPALAMA MILITARY RESERVATION	5 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.21 NNW	+ 0	67
C26	RCRA NonGen / NLR --HIR000088385	AMAZON CONSTRUCTION INC	5 SAND ISLAND RD- BLDG 19 HONOLULU, HI 96819	0.21 NNW	+ 0	70
C27	RCRA NonGen / NLR --HIR000097824	PACIFIC COMMERCIAL SERVICES LL	5 SAND ISLAND ACCESS ROAD HONOLULU, HI 96819	0.21 NNW	+ 0	72
C28	RCRA-CESQG --HIR000090027	TRANS HAWAIIAN SERVICES INC	5 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.21 NNW	+ 0	77
29	SHWS	KALIHI AND KALAEPAA INTERSECTI	KALAEPAA DR AND KALIHI ST HONOLULU, HI	0.31 NE	+ 0	79
D30	SHWS	SERVCO - VEHICLE PROCESSING CE	2101 AUIKI ST HONOLULU, HI 96819	0.31 North	+ 0	80

Sites Summary Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

TOTAL: 125 GEOCODED: 117 NON GEOCODED: 8

Map ID	DB Type --ID/Status	Site Name	Address	Dist/Dir	ElevDiff	Page No.
31	SHWS	KAPALAMA CONTAINER YARD PCB RE	1845 AUIKI ST HONOLULU, HI 96819	0.32 NNE	+ 0	81
D32	LUST --Site Cleanup Completed (NFA) --930102 --9-102738	HAWAIIAN MASON & PLASTERS UNIO	1930 AUIKI ST HONOLULU, HI 96819	0.33 North	+ 0	82
D33	LUST --Site Cleanup Completed (NFA) --920170 --9-102676	UNIQ DISTRIBUTING CORP	2020 AUIKI ST HONOLULU, HI 96819	0.34 North	+ 0	83
34	SEMS-ARCHIVE --0904530 --HID984468645	TOWCO	16-1 SAND ISLAND PARKWAY HONOLULU, HI 96819	0.34 SSE	+ 0	84
E35	LUST --Site Cleanup Completed (NFA) --930119 --9-100664	TOMMY OF HAWAII, INC	1812 AUIKI ST HONOLULU, HI 96819	0.34 NNE	+ 0	85
36	LUST --Site Cleanup Completed (NFA) --940191 --9-100906	H. HIRONAKA TRUCKING LTD.	2110-A AUIKI ST HONOLULU, HI 96819	0.36 North	+ 0	86
E37	LUST --Site Cleanup Completed (NFA) --940162 --9-102957	MODERN MACARONI CO, LTD	1708 MARY ST HONOLULU, HI 96819	0.36 NNE	+ 0	87
E38	SHWS	HAWAIIAN MISO AND SOY CO., LTD	1714 MARY ST HONOLULU, HI 96819	0.37 NNE	+ 0	88
F39	INST CONTROL	USPS VEHICLE MAINTENANCE FACIL	89 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.38 NNW	+ 0	89
F39	ENG CONTROLS	USPS VEHICLE MAINTENANCE FACIL	89 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.38 NNW	+ 0	90
F39	SHWS	USPS VEHICLE MAINTENANCE FACIL	89 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.38 NNW	+ 0	91
E40	LUST --Site Cleanup Completed (NFA) --930134 --9-101544	HONOLULU BODY & FENDER SHOP	131 MOKAUEA ST HONOLULU, HI 96819	0.39 NNE	+ 0	92

Sites Summary Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

TOTAL: 125 GEOCODED: 117 NON GEOCODED: 8

Map ID	DB Type --ID/Status	Site Name	Address	Dist/Dir	ElevDiff	Page No.
F41	LUST --Site Cleanup Completed (NFA) --970139 --9-100277	MCKESSON WINE & SPIRITS CO.	80 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.41 NNW	+ 0	93
F41	SHWS	MCKESSON WINE & SPIRITS CO.	80 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.41 NNW	+ 0	94
G42	LUST --Site Cleanup Completed (NFA) --010035 --9-103716	R&S PLUMBING INC	1744 HOE ST HONOLULU, HI 96819	0.42 NNE	+ 1	95
43	LUST --Site Cleanup Completed (NFA) --020017 --9-103736	D&N AUTO BODY AND PAINTING INC	1615 SILVA ST HONOLULU, HI 96819	0.42 NE	+ 0	96
H44	LUST --Site Cleanup Completed (NFA) --930019 --990140 --9-100804	TRANS HAWAIIAN - OAHU, INC.	124 PUUHALE RD HONOLULU, HI 96819	0.44 North	+ 0	97
H44	SHWS	TRANS HAWAIIAN - OAHU, INC.	124 PUUHALE RD HONOLULU, HI 96819	0.44 North	+ 0	98
I45	VCP	FORMER FLYNN LEARNER	120 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.45 NNW	+ 0	99
I45	INST CONTROL	FORMER FLYNN LEARNER	120 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.45 NNW	+ 0	100
I45	ENG CONTROLS	FORMER FLYNN LEARNER	120 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.45 NNW	+ 0	101
I45	LUST --Site Cleanup Completed (NFA) --960059 --9-100209	FORMER FLYNN LEARNER	120 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.45 NNW	+ 0	102
I45	SHWS	FORMER FLYNN LEARNER	120 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.45 NNW	+ 0	103
I46	SEMS-ARCHIVE --0904482 --HID984468363	PAHOUNUI D P L L C SAND ISLAND	120 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.45 NNW	+ 0	104

Sites Summary Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

TOTAL: 125 GEOCODED: 117 NON GEOCODED: 8

Map ID	DB Type --ID/Status	Site Name	Address	Dist/Dir	ElevDiff	Page No.
G47	LUST --Site Cleanup Completed with EHMP --010003 --9-100163	ASSOCIATED STEEL WORKERS, LTD.	1714 SILVA ST HONOLULU, HI 96819	0.45 NNE	+ 4	105
H48	SHWS	STATE POULTRY PROCESSORS FACIL	2132 KALIAWA ST HONOLULU, HI 96813	0.46 North	+ 0	106
J49	LUST --Site Cleanup Completed (NFA) --960051 --9-103176	SECURITY ARMORED CAR SERVICES	2140 KALIAWA ST HONOLULU, HI 96819	0.47 North	+ 0	107
50	LUST --Site Cleanup Completed (NFA) --000073 --9-100321	TAGAMI AUTO SERVICE, LTD.	1733 KAHAI ST HONOLULU, HI 96819	0.48 NNE	+ 4	108
51	LUST --Site Cleanup Completed (NFA) --930017 --9-101719	BROWNING-FERRIS INDUSTRIES OF	207 PUUHALE RD HONOLULU, HI 96819	0.49 North	+ 0	109
J52	LUST --Site Cleanup Completed (NFA) --020011 --960081 --9-100023	SAND ISLAND 76 (#104)	165 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.49 North	+ 0	110
K53	SHWS	HECO PAD-MOUNTED TRANSFORMER #	2344 PAHOUNUI DR HONOLULU, HI 96819	0.50 NNW	+ 0	111
K54	LUST --Site Cleanup Completed (NFA) --990138 --020026 --9-100171	AMERON - SAND ISLAND	2344 PAHOUNUI DR. HONOLULU, HI 96819	0.50 NNW	+ 0	112
55	SHWS	158 SAND ISLAND ACCESS RD	158 SAND ISLAND ACCESS RD HONOLULU, HI	0.51 NNW	+ 0	113
K56	SHWS	AIR ENGINEERING	2308 PAHOUNUI DR HONOLULU, HI 96819	0.54 NNW	+ 0	114
57	SHWS	CITIZENS ENERGY SERVICES PIER	NIMITZ HWY HONOLULU, HI	0.54 East	+ 0	115

Sites Summary Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

TOTAL: 125 GEOCODED: 117 NON GEOCODED: 8

Map ID	DB Type --ID/Status	Site Name	Address	Dist/Dir	ElevDiff	Page No.
L58	SHWS	180 SAND ISLAND ACCESS RD	180 SAND ISLAND ACCESS RD HONOLULU, HI	0.55 North	+ 0	116
L59	SHWS	2135 AUIKI ST	2135 AUIKI ST HONOLULU, HI	0.57 North	+ 0	117
60	SHWS	2250 PAHOUNUI DRIVE	2250 PAHOUNUI DR HONOLULU, HI	0.61 NNW	+ 0	118
M61	SHWS	1950 HOMERULE STREET	1950 HOMERULE ST HONOLULU, HI 96819	0.62 NNE	+ 7	119
62	SHWS	DOMESTIC COMMERCIAL FISHING VI	1133 N NIMITZ HWY HONOLULU, HI 96817	0.63 ENE	+ 0	120
63	SHWS	YOUNG BROTHERS, LTD. PIERS 39,	1331 N NIMITZ HWY HONOLULU, HI 96817	0.63 ENE	+ 0	121
64	SHWS	218 MOHONUA PLACE	218 MOHONUA PL HONOLULU, HI	0.64 North	+ 0	122
65	SHWS	HAWAIIAN BITUMULS & PAVING	248 SAND ISLAND ACCESS RD HONOLULU, HI 96819	0.64 North	+ 0	123
M66	SHWS	YUE-FUNG KWAN CONSTRUCTION SIT	2004-2008 REPUBLICAN ST HONOLULU, HI 96819	0.67 NNE	+ 8	124
67	SHWS	PACIFIC POULTRY	1804 KANAKANUI ST HONOLULU, HI 96819	0.69 NNE	+ 10	125
68	SHWS	1305 HART STREET	1305 HART ST HONOLULU, HI 96814	0.69 ENE	+ 0	126
69	SHWS	SAND ISLAND WWTP	1350 SAND ISLAND PKWY HONOLULU, HI 96819	0.71 SE	+ 0	127
N70	SHWS	CHEVRON KAPALAMA TERMINAL	1105 N NIMITZ HWY HONOLULU, HI 96817	0.73 East	+ 0	130
N71	SHWS	HART STREET WWPS	1031 N NIMITZ HWY HONOLULU, HI 96817	0.74 East	+ 0	134
O72	SHWS	LONGS DRUG STORES WAREHOUSE	2270 HOONEE PL HONOLULU, HI 96819	0.75 North	+ 0	135
N73	SHWS	MCCABE, HAMILTON, & RENNY COMP	1130 N NIMITZ HWY HONOLULU, HI 96817	0.75 East	+ 0	136
N74	SHWS	GTE HAWAIIAN TEL - CONTAMINATE	ALAKAWA ST & NIMITZ HWY HONOLULU, HI 96817	0.76 East	+ 0	137
P75	SHWS	HAWAII STEVEDORES	965 N NIMITZ HWY HONOLULU, HI 96817	0.77 East	+ 0	138
P76	SHWS	CHEVRON HONOLULU TRANSPORTATIO	933 N NIMITZ HWY HONOLULU, HI 96817	0.78 East	+ 0	140

Sites Summary Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

TOTAL: 125 GEOCODED: 117 NON GEOCODED: 8

Map ID	DB Type --ID/Status	Site Name	Address	Dist/Dir	ElevDiff	Page No.
O77	SHWS	HAGADONE PRINTING COMPANY SAND	2278 HOONEE PL HONOLULU, HI 96819	0.78 North	+ 0	141
Q78	SHWS	GENERAL TIRE	505 WAIAKAMILO RD HONOLULU, HI 96817	0.80 ENE	+ 7	142
79	SHWS	WEYERHAEUSER	900 N NIMITZ HWY HONOLULU, HI 96817	0.81 East	+ 0	143
Q80	SHWS	1385 COLBURN STREET	1385 COLBURN ST HONOLULU, HI	0.84 ENE	+ 7	144
R81	SHWS	861-869 NORTH NIMITZ HIGHWAY	861-869 N NIMITZ HWY HONOLULU, HI 96817	0.84 East	+ 0	145
R82	SHWS	HAWAIIAN ELECTRIC COMPANY (HEC	855 N NIMITZ HWY HONOLULU, HI 96818	0.85 East	+ 0	146
S83	SHWS	EQUILON ENTERPRISES LLC HONOLU	789 N NIMITZ HWY HONOLULU, HI 96817	0.86 ESE	+ 0	147
84	SHWS	1122 MAKEPONO STREET	1122 MAKEPONO ST HONOLULU, HI 96819	0.87 SE	+ 0	148
S85	SHWS	PAULEY PETROLEUM	795 N NIMITZ HWY HONOLULU, HI 96817	0.88 East	+ 0	149
86	SHWS	HOME DEPOT	421 ALAKAWA ST HONOLULU, HI 96817	0.90 East	+ 0	150
87	SHWS	DILLINGHAM BOULEVARD & MOKAUEA	DILLINGHAM BLVD & MOKAUEA HONOLULU, HI 96819	0.91 NNE	+ 20	151
S88	SHWS	CHEVRON HONOLULU TERMINAL MARI	777 N NIMITZ HWY HONOLULU, HI 96817	0.91 ESE	+ 0	152
89	SHWS	KAMEHAMEHA SCHOOLS - 1336 DILL	1336 DILLINGHAM BLVD HONOLULU, HI 96813	0.93 ENE	+ 6	153
T90	SHWS	775 NORTH NIMITZ HIGHWAY	775 N NIMITZ HWY HONOLULU, HI	0.94 East	+ 0	154
91	SHWS	COSTCO GAS STATION	520 ALAKAWA ST HONOLULU, HI 96817	0.94 East	+ 0	155
T92	SHWS	755 N NIMITZ HWY	755 N NIMITZ HWY HONOLULU, HI	0.94 East	+ 0	156
U93	SHWS	HONOLULU TERMINAL TANK 4284	411 PACIFIC STREET HONOLULU, HI 96817	0.96 East	+ 0	157
94	SHWS	CLASSIC BOWL	1190 DILLINGHAM BLVD HONOLULU, HI	0.97 ENE	+ 0	158
95	SHWS	BHP GASCO BENZENE SITE	616 IWILEI RD HONOLULU, HI 96817	0.97 East	+ 0	159

Sites Summary Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

TOTAL: 125 GEOCODED: 117 NON GEOCODED: 8

Map ID	DB Type --ID/Status	Site Name	Address	Dist/Dir	ElevDiff	Page No.
96	SHWS	HAWAII DAIRY HOLDINGS, INC DBA	2277 KAMEHAMEHA HWY HONOLULU, HI 96819	0.98 North	+ 4	160
U97	SHWS	356 PACIFIC STREET BWS TRENCHI	356 PACIFIC ST HONOLULU, HI	0.98 East	+ 0	161
U98	SHWS	BREWER ENVIRONMENTAL INDUSTRIE	311 PACIFIC ST HONOLULU, HI 96817	0.98 East	+ 0	162
T99	SHWS	BHP PIER 29	739 N NIMITZ HWY HONOLULU, HI 96817	0.99 ESE	+ 0	163
T100	SHWS	ALOHA PETROLEUM TERMINAL	739 N NIMITZ HWY HONOLULU, HI 96817	0.99 ESE	+ 0	164
T101	SHWS	HAWAIIAN GRAIN CORPORATION	701 N NIMITZ HWY HONOLULU, HI 96817	0.99 ESE	+ 0	165

Sites Summary Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

TOTAL: 125 GEOCODED: 117 NON GEOCODED: 8

Map ID	DB Type --ID/Status	Site Name	Address	Dist/Dir	ElevDiff	Page No.
	SHWS	BEST BUY	ALAKAWA ST & NIMITZ HWY HONOLULU, HI 96817	NON GC	N/A	N/A
	SHWS	KALANI, HART, MOKUAEA STREET,	HART ST & KALANI ST & MOK HONOLULU, HI	NON GC	N/A	N/A
	SHWS	KEEHI LAGOON CANOE FACILITY, I	HOONEE PL HONOLULU, HI 96819	NON GC	N/A	N/A
	SHWS	ABC DISPOSAL COMPANY	2760 KAMEHAMEHA HWY HONOLULU, HI 96819	NON GC	N/A	N/A
	SHWS	FORMER KAPALAMA MILITARY RESER	N NIMITZ HWY HONOLULU, HI	NON GC	N/A	N/A
	SHWS	NIMITZ HIGHWAY WATER IMPROVEME	N NIMITZ HWY HONOLULU, HI 96817	NON GC	N/A	N/A
	SHWS	SAND ISLAND HOUSING FIRST PROJ	SAND ISLAND ACCESS RD HONOLULU, HI	NON GC	N/A	N/A
	SHWS	KOKUA KALIHI VALLEY ACTIVE LIV	UPPER KALIHI ST HONOLULU, HI	NON GC	N/A	N/A

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

UST

EDR ID: U003222010 **DIST/DIR:** 0.000 **ELEVATION:** 2 **MAP ID:** A1

NAME: UH MARINE CENTER

ADDRESS: 1 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

Rev: 09/12/2016
ID/Status: Permanently Out of Use
ID/Status: 02/27/1992
ID/Status: 06/10/1993
ID/Status: 9-201058

UST:
Facility ID: 9-201058
Owner: STATE U.H. - MARINE CENTER
Owner Address: 1 SAND ISLAND ACCESS RD
Owner City,St,Zip: Honolulu, 96819 96819
Latitude: Not reported
Longitude: Not reported
Horizontal Reference Datum Name: Not reported
Horizontal Collection Method Name: Not reported

Tank ID: R-1
Date Installed: 04/09/1977
Tank Status: Permanently Out of Use
Date Closed: 06/10/1993
Tank Capacity: 1000
Substance: Gasoline

Tank ID: R-2
Date Installed: 04/09/1977
Tank Status: Permanently Out of Use
Date Closed: 02/27/1992
Tank Capacity: 5000
Substance: Gasoline

Tank ID: R-3
Date Installed: 04/09/1977
Tank Status: Permanently Out of Use
Date Closed: 02/27/1992
Tank Capacity: 500
Substance: Gasoline

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

FINDS

EDR ID: 1010316477 **DIST/DIR:** 0.000 **ELEVATION:** 2 **MAP ID:** A2

NAME: USDOC NOAA SHIP TOWNSEND CROMWELL
ADDRESS: 1 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU
SOURCE: US EPA

Rev: 07/15/2016
ID/Status: 110064408252
ID/Status: 110005722897

FINDS:

Registry ID: 110064408252

Environmental Interest/Information System
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.

STATE MASTER

Registry ID: 110005722897

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.

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-SQG

EDR ID: 1010316477 **DIST/DIR:** 0.000 **ELEVATION:** 2 **MAP ID:** A2

NAME: USDOC NOAA SHIP TOWNSEND CROMWELL
ADDRESS: 1 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HIR000138008

RCRA-SQG:
Date form received by agency: 09/08/2006
Facility name: UNIVERSITY OF HAWAII MARINE CENTER
Facility address: 1 SAND ISLAND ACCESS RD
UNIVERSITY OF HAWAII
HONOLULU, HI 96819
EPA ID: HIR000138008
Contact: STAN WINSLOW
Contact address: 1 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
Contact country: US
Contact telephone: 808-847-2662
Contact email: SWINSLOW@SOEST.HAWAII.EDU
EPA Region: 09
Land type: State
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: UNIVERSITY OF HAWAII
Owner/operator address: Not reported
Not reported
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: State
Owner/Operator Type: Operator
Owner/Op start date: 02/23/1973
Owner/Op end date: Not reported

Owner/operator name: STATE OF HAWAII
Owner/operator address: 1151 PUNCHBOWL ST
HONOLULU, HI 96813
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: State
Owner/Operator Type: Owner
Owner/Op start date: 07/01/1964
Owner/Op end date: Not reported

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-SQG

EDR ID: 1010316477 **DIST/DIR:** 0.000 **ELEVATION:** 2 **MAP ID:** A2

NAME: USDOC NOAA SHIP TOWNSEND CROMWELL
ADDRESS: 1 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HIR000138008

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

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D018
. Waste name: BENZENE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-SQG

EDR ID: 1010316477 **DIST/DIR:** 0.000 **ELEVATION:** 2 **MAP ID:** A2

NAME: USDOC NOAA SHIP TOWNSEND CROMWELL
ADDRESS: 1 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HIR000138008

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, 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 SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED 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 NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED 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 NONHALOGENATED 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 NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: U112
. Waste name: ACETIC ACID, ETHYL ESTER (I) (OR) ETHYL ACETATE (I)

. Waste code: U154
. Waste name: METHANOL (I) (OR) METHYL ALCOHOL (I)

. Waste code: U220
. Waste name: BENZENE, METHYL- (OR) TOLUENE

. Waste code: U239
. Waste name: BENZENE, DIMETHYL- (I,T) (OR) XYLENE (I)

Facility Has Received Notices of Violations:

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-SQG

EDR ID: 1010316477 **DIST/DIR:** 0.000 **ELEVATION:** 2 **MAP ID:** A2

NAME: USDOC NOAA SHIP TOWNSEND CROMWELL
ADDRESS: 1 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HIR000138008

Regulation violated: Not reported
Area of violation: Generators - Pre-transport
Date violation determined: 10/10/2014
Date achieved compliance: 12/15/2014
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/20/2014
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 10/10/2014
Date achieved compliance: 12/15/2014
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 10/20/2014
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 08/08/2006
Date achieved compliance: 04/18/2007
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 08/08/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 09/05/2014

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-SQG

EDR ID: 1010316477 **DIST/DIR:** 0.000 **ELEVATION:** 2 **MAP ID:** A2

NAME: USDOC NOAA SHIP TOWNSEND CROMWELL

ADDRESS: 1 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU

SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HIR000138008

Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Pre-transport
Date achieved compliance: 12/15/2014
Evaluation lead agency: State

Evaluation date: 09/05/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 12/15/2014
Evaluation lead agency: State

Evaluation date: 08/08/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 04/18/2007
Evaluation lead agency: State

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SPILLS

EDR ID: S106820725 **DIST/DIR:** 0.000 **ELEVATION:** 2 **MAP ID:** A3

NAME: UNIVERSITY OF HAWAII, MARINE CENTER **Rev:** 01/14/2016

ADDRESS: 1 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

HI SPILLS:
Island: Oahu
Supplemental Loc. Text: Not reported
Case Number: 20010522-0700
HID Number: Not reported
Facility Registry Id: 110013772694
Lead and Program: HEER EP&R
ER: Not reported
Units: UH Research vessel oil release
Substances: Lubricating Oil
Less Or Greater Than: Not reported
Numerical Quantity: 20
Units: Gallons
Activity Type: Response
Activity Lead: Mike Cripps
Assignment End Date: Not reported
Result: SOSC NFA
File Under: State of Hawaii, University of Hawaii
Latitude: 21.352151
Longitude: -157.874246

Island: Oahu
Supplemental Loc. Text: Not reported
Case Number: 20030523-0900
HID Number: Not reported
Facility Registry Id: 110013772694
Lead and Program: HEER EP&R
ER: No
Units: Used Oil Spill Release
Substances: Oil
Less Or Greater Than: Not reported
Numerical Quantity: 2
Units: Gallons
Activity Type: Response
Activity Lead: Liz Galvez
Assignment End Date: Not reported
Result: SOSC NFA
File Under: State of Hawaii, University of Hawaii
Latitude: 21.352151
Longitude: -157.874246

Island: Oahu
Supplemental Loc. Text: Not reported
Case Number: 20040705-1005

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SPILLS

EDR ID: S106820725 **DIST/DIR:** 0.000 **ELEVATION:** 2 **MAP ID:** A3

NAME: UNIVERSITY OF HAWAII, MARINE CENTER **Rev:** 01/14/2016

ADDRESS: 1 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

HID Number: Not reported
Facility Registry Id: Not reported
Lead and Program: HEER EP&R
ER: No
Units: Hydraulic Oil Spill on Deck
Substances: Hydraulic Oil
Less Or Greater Than: Not reported
Numerical Quantity: Not reported
Units: Not reported
Activity Type: Response
Activity Lead: Paul Chong
Assignment End Date: 2004-07-05 00:00:00
Result: SOSC NFA
File Under: Not reported
Latitude: Not reported
Longitude: Not reported

Island: Oahu
Supplemental Loc. Text: Not reported
Case Number: 20140528-0745
HID Number: Not reported
Facility Registry Id: 110013772694
Lead and Program: HEER EP&R
ER: None
Units: Security Breach at UH Marine Center 5/26
Substances: Unknown
Less Or Greater Than: Not reported
Numerical Quantity: 0
Units: Not reported
Activity Type: Response
Activity Lead: Adam Teekell
Assignment End Date: 2014-05-28 00:00:00
Result: SOSC NFA
File Under: State of Hawaii, University of Hawaii
Latitude: 21.352151
Longitude: -157.874246

Island: Oahu
Supplemental Loc. Text: Not reported
Case Number: 20140530-0858
HID Number: Not reported
Facility Registry Id: Not reported
Lead and Program: HEER EP&R
ER: None
Units: Security Breach at UH Marine Center

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SPILLS

EDR ID: S106820725 **DIST/DIR:** 0.000 **ELEVATION:** 2 **MAP ID:** A3

NAME: UNIVERSITY OF HAWAII, MARINE CENTER **Rev:** 01/14/2016

ADDRESS: 1 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

Substances: Unknown
Less Or Greater Than: Not reported
Numerical Quantity: 0
Units: Not reported
Activity Type: Response
Activity Lead: Adam Teekell
Assignment End Date: 2014-05-30 00:00:00
Result: SOSC NFA
File Under: Not reported
Latitude: Not reported
Longitude: Not reported

Island: Oahu
Supplemental Loc. Text: Not reported
Case Number: 20140602-0745
HID Number: Not reported
Facility Registry Id: Not reported
Lead and Program: HEER EP&R
ER: None
Units: Security Breach at UH Marine Center Again
Substances: Unknown
Less Or Greater Than: Not reported
Numerical Quantity: 0
Units: Not reported
Activity Type: Response
Activity Lead: Adam Teekell
Assignment End Date: 2014-05-31 00:00:00
Result: SOSC NFA
File Under: Not reported
Latitude: Not reported
Longitude: Not reported

Island: Oahu
Supplemental Loc. Text: Not reported
Case Number: 20140602-0746
HID Number: Not reported
Facility Registry Id: 110013772694
Lead and Program: HEER EP&R
ER: None
Units: Security Breach at UH Marine Center 2
Substances: Not reported
Less Or Greater Than: Not reported
Numerical Quantity: Not reported
Units: Not reported
Activity Type: Response

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SPILLS

EDR ID: S106820725 **DIST/DIR:** 0.000 **ELEVATION:** 2 **MAP ID:** A3

NAME: UNIVERSITY OF HAWAII, MARINE CENTER **Rev:** 01/14/2016

ADDRESS: 1 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

Activity Lead: Adam Teekell
Assignment End Date: 2014-06-02 00:00:00
Result: Refer to USCG
File Under: State of Hawaii, University of Hawaii
Latitude: 21.352151
Longitude: -157.874246

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S106820725 **DIST/DIR:** 0.000 **ELEVATION:** 2 **MAP ID:** A3

NAME: UNIVERSITY OF HAWAII, MARINE CENTER **Rev:** 05/06/2016

ADDRESS: 1 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: University of Hawaii, Marine Center
HID Number: Not reported
Facility Registry Identifier: 110013772694
Lead Agency: HEER
Program: State
Project Manager: Ukris Wongse-Ont
Hazard Priority: NFA
Potential Hazards And Controls: No Hazard
Island: Oahu
SDAR Environmental Interest Name: University of Hawaii, Marine Center
HID Number: Not reported
Facility Registry Identifier: 110013772694
Lead Agency: HEER
Potential Hazard And Controls: No Hazard
Priority: NFA
Assessment: Response Not Necessary
Response: Response Complete
Nature of Contamination: Not reported
Nature of Residual Contamination: Oil/diesel range organic, PCB Aroclor 1260 below Tier I Action Levels.
Use Restrictions: No Hazard Present For Unrestricted Residential Use
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Kapalama Unit
Site Closure Type: No Further Action Letter - Unrestricted Residential Use
Document Date: 12/10/2004
Document Number: 2004-502-UW
Document Subject: NFA letter for Release ID 20030523-0009
Project Manager: Ukris Wongse-Ont
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

HAZNET

EDR ID: 1000143213 **DIST/DIR:** 0.000 **ELEVATION:** 2 **MAP ID:** A4

NAME: USDOC NOAA SHIP TOWNSEND CROMWELL
ADDRESS: 1 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU
SOURCE: CA California Environmental Protection Agency

Rev: 12/31/2015
ID/Status: HI6130090065

HAZNET:
envid: 1000143213
Year: 2003
GEPAID: HI6130090065
Contact: ENVIRONMENTAL MANAGER
Telephone: 8085411311
Mailing Name: Not reported
Mailing Address: 1 SAND ISLAND ACCESS RD
Mailing City,St,Zip: HONOLULU, HI 96819
Gen County: Not reported
TSD EPA ID: CAD059494310
TSD County: Not reported
Waste Category: Unspecified aqueous solution
Disposal Method: Treatment, Tank
Tons: 0.27
Cat Decode: Not reported
Method Decode: Not reported
Facility County: 99

envid: 1000143213
Year: 2003
GEPAID: HI6130090065
Contact: ENVIRONMENTAL MANAGER
Telephone: 8085411311
Mailing Name: Not reported
Mailing Address: 1 SAND ISLAND ACCESS RD
Mailing City,St,Zip: HONOLULU, HI 96819
Gen County: Not reported
TSD EPA ID: CAD059494310
TSD County: Not reported
Waste Category: Paint sludge
Disposal Method: Disposal, Other
Tons: 0.02
Cat Decode: Not reported
Method Decode: Not reported
Facility County: 99

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1000143213 **DIST/DIR:** 0.000 **ELEVATION:** 2 **MAP ID:** A4

NAME: USDOC NOAA SHIP TOWNSEND CROMWELL
ADDRESS: 1 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HI6130090065

RCRA NonGen / NLR:
Date form received by agency: 09/30/1993
Facility name: USDOC NOAA SHIP TOWNSEND CROMWELL
Facility address: 1 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
EPA ID: HI6130090065
Mailing address: SAND ISLAND ACCESS RD
HONOLULU, HI 96819
Contact: ENVIRONMENTAL MANAGER
Contact address: 1 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
Contact country: US
Contact telephone: (808) 541-1311
Contact email: Not reported
EPA Region: 09
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: Federal
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: DEPT COMMERCE NOAA
Owner/operator address: NOT REQUIRED
NOT REQUIRED, ME 99999
Owner/operator country: Not reported
Owner/operator telephone: (415) 555-1212
Legal status: Federal
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

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1000143213 **DIST/DIR:** 0.000 **ELEVATION:** 2 **MAP ID:** A4

NAME: USDOC NOAA SHIP TOWNSEND CROMWELL

Rev: 06/21/2016
ID/Status: HI6130090065

ADDRESS: 1 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU

SOURCE: US Environmental Protection Agency

Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S106817347 **DIST/DIR:** 0.001 **ELEVATION:** 3 **MAP ID:** B5

NAME: HAWAII FUELING FACILITIES CORPORATION-SAND ISLAND SLURRY WAL **Rev:** 05/06/2016

ADDRESS: 6 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Hawaii Fueling Facilities Sand Island
Island: Oahu
Environmental Interest: Hawaii Fueling Facilities Corporation-Sand Island Slurry Wall Trenching Activity
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Kelton Otsuka
Hazard Priority: Medium
Potential Hazards And Controls: Hazard Present
Island: Oahu
SDAR Environmental Interest Name: Hawaii Fueling Facilities Corporation-Sand Island Slurry Wall Trenching Activity
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: Hazard Present
Priority: Medium
Assessment: Assessment Ongoing
Response: Response Ongoing
Nature of Contamination: Presumed: Jet fuel contamination in soil and groundwater
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Kelton Otsuka
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1012178151 **DIST/DIR:** 0.001 **ELEVATION:** 3 **MAP ID:** B6

NAME: AIRCRAFT SERVICE INTERNATIONAL GROUP SAND ISLAND TERMINAL **Rev:** 06/21/2016
ID/Status: HIP000059022

ADDRESS: 6 SAND ISLAND ACCESS ROAD
HONOLULU, HI 96819
HONOLULU

SOURCE: US Environmental Protection Agency

RCRA NonGen / NLR:
Date form received by agency: 08/28/2009
Facility name: ROBINSON PREZIOSO INC
Facility address: 6 SAND ISLAND ACCESS RD
HONOLULU, HI 96812
EPA ID: HIP000059022
Mailing address: P O BOX 2448
SANTA FE SPRINGS, CA 90670
Contact: DENNIS LYNCH
Contact address: 9705 HWY 267 STE 6
TRUCKEE, CA 96161
Contact country: US
Contact telephone: (530) 587-3000
Contact email: Not reported
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: ROBINSON PREZIOSO INC
Owner/operator address: P O BOX 2448
SANTA FE SPRINGS, CA 90670
Owner/operator country: Not reported
Owner/operator telephone: (562) 906-9002
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
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1012178151 **DIST/DIR:** 0.001 **ELEVATION:** 3 **MAP ID:** B6

NAME: AIRCRAFT SERVICE INTERNATIONAL GROUP SAND ISLAND TERMINAL **Rev:** 06/21/2016
ID/Status: HIP000059022

ADDRESS: 6 SAND ISLAND ACCESS ROAD
HONOLULU, HI 96819
HONOLULU

SOURCE: US Environmental Protection Agency

Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 11/12/1999
Site name: ROBINSON PREZIOSO INC
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED 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 NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED 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 NONHALOGENATED 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 NONHALOGENATED 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

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: 1006819167 **DIST/DIR:** 0.015 WNW **ELEVATION:** 3 **MAP ID:** B7

NAME: KEEHI SMALL BOAT HARBOR **Rev:** 05/06/2016

ADDRESS: 4 SAND ISLAND RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Keehi Lagoon
Island: Oahu
Environmental Interest: Honolulu Marine Small Boat Shipyard at Keehi Lagoon
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Paul Chong
Hazard Priority: Low
Potential Hazards And Controls: Hazard Undetermined
Island: Oahu
SDAR Environmental Interest Name: Honolulu Marine Small Boat Shipyard at Keehi Lagoon
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: Hazard Undetermined
Priority: Low
Assessment: Assessment Ongoing
Response: Not reported
Nature of Contamination: Not reported
Nature of Residual Contamination: Not reported
Use Restrictions: Undetermined
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Paul Chong
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-CESQG

EDR ID: 1004688939 **DIST/DIR:** 0.015 WNW **ELEVATION:** 3 **MAP ID:** B8

NAME: STATE OF HAWAII DLNR DBOR

ADDRESS: 4 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU

SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HIR000000240

RCRA-CESQG:
Date form received by agency: 08/12/1999
Facility name: STATE OF HAWAII DLNR DBOR
Facility address: 4 SAND ISLAND ACCESS RD
KEEHI BOAT HARBOR
HONOLULU, HI 96819
EPA ID: HIR000000240
Contact: WESLEY CHOI
Contact address: 4 SAND ISLAND ACCESS RD KEEHI BOAT HARBOR
HONOLULU, HI 96819
Contact country: US
Contact telephone: (808) 832-3464
Contact email: Not reported
EPA Region: 09
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: STATE OF HAWAII DLNR DBOR
Owner/operator address: 333 QUEEN ST
HONOLULU, HI 96813
Owner/operator country: Not reported
Owner/operator telephone: (808) 587-1973
Legal status: State
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

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-CESQG

EDR ID: 1004688939 **DIST/DIR:** 0.015 WNW **ELEVATION:** 3 **MAP ID:** B8

NAME: STATE OF HAWAII DLNR DBOR

ADDRESS: 4 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU

SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HIR000000240

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

Violation Status: No violations found

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-SQG

EDR ID: 1000455802 **DIST/DIR:** 0.015 WNW **ELEVATION:** 3 **MAP ID:** B9

NAME: USCG I S C HONOLULU
ADDRESS: 4 SAND ISLAND ACCESS ROAD
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HI8690390036

RCRA-SQG:
Date form received by agency: 01/18/1999
Facility name: USCG I S C HONOLULU
Facility address: 4 SAND ISLAND ACCESS ROAD
USCG
HONOLULU, HI 968191117
EPA ID: HI8690390036
Contact: STEVEN PITTS
Contact address: 4 SAND ISLAND ACCESS ROAD USCG
HONOLULU, HI 968191117
Contact country: US
Contact telephone: (808) 832-3280
Contact email: Not reported
EPA Region: 09
Land type: Federal
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: UNITED STATES COAST GUARD
Owner/operator address: 4 SAND ISLAND ACCESS ROAD USCG
HONOLULU, HI 96819
Owner/operator country: Not reported
Owner/operator telephone: (808) 541-2490
Legal status: Federal
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: Federal
Owner/Operator Type: Operator
Owner/Op start date: Not reported
Owner/Op end date: Not reported

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-SQG

EDR ID: 1000455802 **DIST/DIR:** 0.015 WNW **ELEVATION:** 3 **MAP ID:** B9

NAME: USCG I S C HONOLULU
ADDRESS: 4 SAND ISLAND ACCESS ROAD
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HI8690390036

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

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D003
. Waste name: REACTIVE WASTE

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, METHYLENE CHLORIDE,

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-SQG

EDR ID: 1000455802 **DIST/DIR:** 0.015 WNW **ELEVATION:** 3 **MAP ID:** B9

NAME: USCG I S C HONOLULU
ADDRESS: 4 SAND ISLAND ACCESS ROAD
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HI8690390036

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 SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED 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 NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED 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 NONHALOGENATED 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 NONHALOGENATED SOLVENTS OR THOSE SOLVENTS LISTED IN F001, F002, OR F004; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

Historical Generators:
Date form received by agency: 10/14/1998
Site name: USCG ISC HONOLULU
Classification: Large Quantity Generator

Date form received by agency: 02/22/1996
Site name: USCG BASE HONOLULU
Classification: Large Quantity Generator

Date form received by agency: 03/01/1994
Site name: COAST GUARD BASE HONOLULU
Classification: Large Quantity Generator

Date form received by agency: 03/11/1992
Site name: U.S. COAST GUARD BASE HONOLULU
Classification: Large Quantity Generator

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-SQG

EDR ID: 1000455802 **DIST/DIR:** 0.015 WNW **ELEVATION:** 3 **MAP ID:** B9

NAME: USCG I S C HONOLULU
ADDRESS: 4 SAND ISLAND ACCESS ROAD
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HI8690390036

Facility Has Received Notices of Violations:
Regulation violated: S - 262.10-12.A
Area of violation: Generators - General
Date violation determined: 05/16/2000
Date achieved compliance: 12/20/2000
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 09/11/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 9500
Final penalty amount: 7600
Paid penalty amount: Not reported

Regulation violated: S - 262.10-12.A
Area of violation: Generators - General
Date violation determined: 05/16/2000
Date achieved compliance: 12/20/2000
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 12/20/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 7600
Paid penalty amount: Not reported

Regulation violated: S - 279.20-24
Area of violation: Used Oil - Generators
Date violation determined: 05/16/2000
Date achieved compliance: 12/20/2000
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 12/20/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 7600
Paid penalty amount: Not reported

Regulation violated: S - 262.20-23.B

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-SQG

EDR ID: 1000455802 **DIST/DIR:** 0.015 WNW **ELEVATION:** 3 **MAP ID:** B9

NAME: USCG I S C HONOLULU
ADDRESS: 4 SAND ISLAND ACCESS ROAD
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HI8690390036

Area of violation: Generators - General
Date violation determined: 05/16/2000
Date achieved compliance: 12/20/2000
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 12/20/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 7600
Paid penalty amount: Not reported

Regulation violated: S - 262.20-23.B
Area of violation: Generators - General
Date violation determined: 05/16/2000
Date achieved compliance: 12/20/2000
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 09/11/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 9500
Final penalty amount: 7600
Paid penalty amount: Not reported

Regulation violated: S - 262.30-34.C
Area of violation: Generators - General
Date violation determined: 05/16/2000
Date achieved compliance: 12/20/2000
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 12/20/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 7600
Paid penalty amount: Not reported

Regulation violated: S - 279.20-24
Area of violation: Used Oil - Generators
Date violation determined: 05/16/2000
Date achieved compliance: 12/20/2000

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-SQG

EDR ID: 1000455802 **DIST/DIR:** 0.015 WNW **ELEVATION:** 3 **MAP ID:** B9

NAME: USCG I S C HONOLULU

ADDRESS: 4 SAND ISLAND ACCESS ROAD
HONOLULU, HI 96819
HONOLULU

SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HI8690390036

Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 09/11/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 9500
Final penalty amount: 7600
Paid penalty amount: Not reported

Regulation violated: S - 262.30-34.C
Area of violation: Generators - General
Date violation determined: 05/16/2000
Date achieved compliance: 12/20/2000
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 09/11/2000
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 9500
Final penalty amount: 7600
Paid penalty amount: Not reported

Regulation violated: FR - 262.30-34.C
Area of violation: Generators - General
Date violation determined: 01/14/1997
Date achieved compliance: 02/11/1997
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/14/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.50-60
Area of violation: Generators - General
Date violation determined: 01/14/1997
Date achieved compliance: 02/11/1997
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/14/1997

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-SQG

EDR ID: 1000455802 **DIST/DIR:** 0.015 WNW **ELEVATION:** 3 **MAP ID:** B9

NAME: USCG I S C HONOLULU
ADDRESS: 4 SAND ISLAND ACCESS ROAD
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HI8690390036

Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 268.7
Area of violation: LDR - General
Date violation determined: 01/14/1997
Date achieved compliance: 02/11/1997
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/14/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.50-60
Area of violation: Generators - General
Date violation determined: 01/09/1997
Date achieved compliance: 02/11/1997
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/14/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 268.7
Area of violation: LDR - General
Date violation determined: 01/09/1997
Date achieved compliance: 02/24/2000
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/14/1997
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-SQG

EDR ID: 1000455802 **DIST/DIR:** 0.015 WNW **ELEVATION:** 3 **MAP ID:** B9

NAME: USCG I S C HONOLULU
ADDRESS: 4 SAND ISLAND ACCESS ROAD
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HI8690390036

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

Regulation violated: FR - 262.10-12.A
Area of violation: Generators - General
Date violation determined: 04/04/1994
Date achieved compliance: 07/30/1994
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/01/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.50-60
Area of violation: Generators - General
Date violation determined: 04/04/1994
Date achieved compliance: 07/30/1994
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/01/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: FR - 262.20-23.B
Area of violation: Generators - General
Date violation determined: 04/04/1994
Date achieved compliance: 07/30/1994
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/01/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-SQG

EDR ID: 1000455802 **DIST/DIR:** 0.015 WNW **ELEVATION:** 3 **MAP ID:** B9

NAME: USCG I S C HONOLULU
ADDRESS: 4 SAND ISLAND ACCESS ROAD
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HI8690390036

Regulation violated: FR - 262.40-43.D
Area of violation: Generators - General
Date violation determined: 04/04/1994
Date achieved compliance: 07/30/1994
Violation lead agency: EPA
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 07/01/1994
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: EPA
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 04/09/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/20/2000
Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/11/2000
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 02/24/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Used Oil - Generators
Date achieved compliance: 12/20/2000
Evaluation lead agency: State

Evaluation date: 02/24/2000
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 12/20/2000
Evaluation lead agency: State

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-SQG

EDR ID: 1000455802 **DIST/DIR:** 0.015 WNW **ELEVATION:** 3 **MAP ID:** B9

NAME: USCG I S C HONOLULU

ADDRESS: 4 SAND ISLAND ACCESS ROAD
HONOLULU, HI 96819
HONOLULU

SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HI8690390036

Evaluation date: 09/11/1996
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: LDR - General
Date achieved compliance: 02/24/2000
Evaluation lead agency: EPA

Evaluation date: 09/11/1996
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: LDR - General
Date achieved compliance: 02/11/1997
Evaluation lead agency: EPA

Evaluation date: 09/11/1996
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 02/11/1997
Evaluation lead agency: EPA

Evaluation date: 07/30/1994
Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 04/04/1994
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 04/04/1994
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 07/30/1994
Evaluation lead agency: EPA

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S117391805 **DIST/DIR:** 0.015 WNW **ELEVATION:** 3 **MAP ID:** B10

NAME: HONOLULU MARINE SAND ISLAND **Rev:** 05/06/2016

ADDRESS: SAND ISLAND ACCESS RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Honolulu Marine
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Eric Sadoyama
Hazard Priority: Not reported
Potential Hazards And Controls: Hazard Undetermined
Island: Oahu
SDAR Environmental Interest Name: Honolulu Marine
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: Hazard Undetermined
Priority: Not reported
Assessment: Not reported
Response: Not reported
Nature of Contamination: Not reported
Nature of Residual Contamination: Not reported
Use Restrictions: Undetermined
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Eric Sadoyama
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

UST

EDR ID: U003221560 **DIST/DIR:** 0.022 SSW **ELEVATION:** 3 **MAP ID:** A11

NAME: HIRI HARBOR TERMINAL (PMID 010103)

ADDRESS: 2 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

Rev: 09/12/2016
ID/Status: Permanently Out of Use
ID/Status: 08/01/1997
ID/Status: 9-100062

SOURCE: HI Department of Health

UST:
Facility ID: 9-100062
Owner: BHP HAWAII INC.
Owner Address: P.O. BOX 3379
Owner City,St,Zip: Honolulu, 96819 96819
Latitude: 21.315695
Longitude: -157.888859
Horizontal Reference Datum Name: NAD83
Horizontal Collection Method Name: GPS

Tank ID: R-UGT-1
Date Installed: 01/13/1976
Tank Status: Permanently Out of Use
Date Closed: 08/01/1997
Tank Capacity: 5000
Substance: Mixture

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: U003221560 **DIST/DIR:** 0.022 SSW **ELEVATION:** 3 **MAP ID:** A11

NAME: HIRI HARBOR TERMINAL (PMID 010103) **Rev:** 05/06/2016

ADDRESS: 2 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Tesoro Hawaii Corporation, Terminal Department-Sand Island
HID Number: Not reported
Facility Registry Identifier: 110001412472
Lead Agency: HEER
Program: State
Project Manager: Eric Sadoyama
Hazard Priority: Medium
Potential Hazards And Controls: Hazard Present
Island: Oahu
SDAR Environmental Interest Name: Tesoro Hawaii Corporation, Terminal Department-Sand Island
HID Number: Not reported
Facility Registry Identifier: 110001412472
Lead Agency: HEER
Potential Hazard And Controls: Hazard Present
Priority: Medium
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: Petroleum in soil and ground water
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Kapalama Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Eric Sadoyama
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-SQG

EDR ID: 1001218500 **DIST/DIR:** 0.022 SSW **ELEVATION:** 3 **MAP ID:** A12

NAME: HAWAII INDEPENDENT ENERGY - SAND ISLAND
ADDRESS: 2 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HIR000040535

RCRA-SQG:
Date form received by agency: 09/04/2014
Facility name: HAWAII INDEPENDENT ENERGY - SAND ISLAND
Facility address: 2 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
EPA ID: HIR000040535
Mailing address: KOMOHANA STREET
KAPOLEI, HI 96707-1713
Contact: ROSE I CHU
Contact address: KOMOHANA STREET
KAPOLEI, HI 96707-1713
Contact country: US
Contact telephone: (808) 547-3817
Contact email: ROSE.I.CHU@PPETROL.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: PAR PETROLEUM CORPORATION
Owner/operator address: GESSNER ROAD
HOUSTON, 77024
Owner/operator country: US
Owner/operator telephone: (281) 899-4847
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 09/25/2013
Owner/Op end date: Not reported

Owner/operator name: PAR PETROLEUM CORPORATION
Owner/operator address: GESSNER ROAD
HOUSTON, 77024
Owner/operator country: US
Owner/operator telephone: (281) 899-4847
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: 09/25/2013
Owner/Op end date: Not reported

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-SQG

EDR ID: 1001218500 **DIST/DIR:** 0.022 SSW **ELEVATION:** 3 **MAP ID:** A12

NAME: HAWAII INDEPENDENT ENERGY - SAND ISLAND
ADDRESS: 2 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HIR000040535

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

. Waste code: D018
. Waste name: BENZENE

Historical Generators:
Date form received by agency: 06/08/1998
Site name: TESORO HAWAII SAND ISLAND TERM
Classification: Small Quantity Generator

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D018
. Waste name: BENZENE

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 02/12/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S111677227 **DIST/DIR:** 0.029 WNW **ELEVATION:** 3 **MAP ID:** B13

NAME: HAWAII FUELING FACILITIES CORPORATION-SAND ISLAND ACCESS ROA **Rev:** 05/06/2016

ADDRESS: 6 & 8 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Hawaii Fueling Facilities Sand Island
Island: Oahu
Environmental Interest: Hawaii Fueling Facilities Corporation-Sand Island Access Road
HID Number: Not reported
Facility Registry Identifier: 110013789668
Lead Agency: HEER
Program: State
Project Manager: Eric Sadoyama
Hazard Priority: Low
Potential Hazards And Controls: Hazard Undetermined
Island: Oahu
SDAR Environmental Interest Name: Hawaii Fueling Facilities Corporation-Sand Island Access Road
HID Number: Not reported
Facility Registry Identifier: 110013789668
Lead Agency: HEER
Potential Hazard And Controls: Hazard Undetermined
Priority: Low
Assessment: Assessment Ongoing
Response: Not reported
Nature of Contamination: Not reported
Nature of Residual Contamination: Not reported
Use Restrictions: Undetermined
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Kapalama Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Eric Sadoyama
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

INST CONTROL

EDR ID: S111677229 **DIST/DIR:** 0.098 NW **ELEVATION:** 3 **MAP ID:** 14

NAME: HAWAII FUELING FACILITIES CORPORATION-SAND ISLAND TANK 4 REL **Rev** 05/06/2016

ADDRESS: 8 SAND ISLAND ACCESS RD
HONOLULU, HI

SOURCE: HI Department of Health

INST CONTROL:
Potential hazards and controls: Hazard Managed With Controls
Supplemental Location: Hawaii Fueling Facilities Sand Island
Zip Suffix: Not reported
Island: Oahu
Institutional Control: Government - Hawaii Dept. of Health Letter Issued

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S111677229 **DIST/DIR:** 0.098 NW **ELEVATION:** 3 **MAP ID:** 14

NAME: HAWAII FUELING FACILITIES CORPORATION-SAND ISLAND TANK 4 REL **Rev** 05/06/2016

ADDRESS: 8 SAND ISLAND ACCESS RD
HONOLULU, HI

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Hawaii Fueling Facilities Sand Island
Island: Oahu
Environmental Interest: Hawaii Fueling Facilities Corporation-Sand Island Oil/Water Drain Line Release
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Kelton Otsuka
Hazard Priority: Low
Potential Hazards And Controls: Hazard Present
Island: Oahu
SDAR Environmental Interest Name: Hawaii Fueling Facilities Corporation-Sand Island Oil/Water Drain Line Release
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: Hazard Present
Priority: Low
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Not reported
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Kelton Otsuka
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Organization: Not reported
Supplemental Location: Hawaii Fueling Facilities Sand Island
Island: Oahu
Environmental Interest: Hawaii Fueling Facilities Corporation-Sand Island Tank 4 Release
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Kelton Otsuka

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S111677229 **DIST/DIR:** 0.098 NW **ELEVATION:** 3 **MAP ID:** 14

NAME: HAWAII FUELING FACILITIES CORPORATION-SAND ISLAND TANK 4 REL **Rev** 05/06/2016

ADDRESS: 8 SAND ISLAND ACCESS RD
HONOLULU, HI

SOURCE: HI Department of Health

Hazard Priority: Low
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: Hawaii Fueling Facilities Corporation-Sand Island Tank 4 Release
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: Low
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Found: Contamination still currently on-site from another release (Release #20080110-1448). Old Release from 1996 has been given an NFA. Site is still active.
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Not reported
Site Closure Type: No Further Action Letter - Restricted Use
Document Date: 01/22/2010
Document Number: 2010-053-KO
Document Subject: No Further Action Determination for Hawaii Fueling Facilities Corporation-Sand Island Tank 4 Release (Release #19960501-0810)
Project Manager: Kelton Otsuka
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

UST

EDR ID: U003221556 **DIST/DIR:** 0.152 NNE **ELEVATION:** 3 **MAP ID:** 15

NAME: KAPALAMA MILITARY RESERVATION

ADDRESS: SAND ISLAND ACCESS RD, BLDG 935
HONOLULU, HI 96819

Rev: 09/12/2016
ID/Status: Permanently Out of Use
ID/Status: 01/06/1997
ID/Status: 9-100051

SOURCE: HI Department of Health

UST:
Facility ID: 9-100051
Owner: VERIZON HAWAII
Owner Address: 1177 BISHOP ST.P.O. BOX 2200 Hon.HI 96841
Owner City,St,Zip: Honolulu, 96819 96819
Latitude: Not reported
Longitude: Not reported
Horizontal Reference Datum Name: Not reported
Horizontal Collection Method Name: Not reported

Tank ID: R-001
Date Installed: 03/20/1987
Tank Status: Permanently Out of Use
Date Closed: 01/06/1997
Tank Capacity: 550
Substance: Gasoline

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: U003221556 **DIST/DIR:** 0.152 NNE **ELEVATION:** 3 **MAP ID:** 15

NAME: KAPALAMA MILITARY RESERVATION **Rev:** 05/06/2016

ADDRESS: SAND ISLAND ACCESS RD, BLDG 935
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Kapalama Military Reservation
Island: Oahu
Environmental Interest: Kapalama Military Reservation South Oahu Location
HID Number: HI7214522214
Facility Registry Identifier: 110013770348
Lead Agency: HEER
Program: Army
Project Manager: Unassigned
Hazard Priority: Not reported
Potential Hazards And Controls: Hazard Undetermined
Island: Oahu
SDAR Environmental Interest Name: Kapalama Military Reservation South Oahu Location
HID Number: HI7214522214
Facility Registry Identifier: 110013770348
Lead Agency: HEER
Potential Hazard And Controls: Hazard Undetermined
Priority: Not reported
Assessment: Assessment Ongoing
Response: Not reported
Nature of Contamination: Not reported
Nature of Residual Contamination: Not reported
Use Restrictions: Undetermined
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Unassigned
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1000978848 **DIST/DIR:** 0.180 NNW **ELEVATION:** 3 **MAP ID:** C16

NAME: DEPT OF BUISNESS ECON DEVL AND TOURISM
ADDRESS: 10 SAND ISLAND ACCESS RD
HONOLULU, HI 96813
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HI0000953406

RCRA NonGen / NLR:
Date form received by agency: 12/01/1994
Facility name: DEPT OF BUISNESS ECON DEVL AND TOURISM
Facility address: 10 SAND ISLAND ACCESS RD
HONOLULU, HI 96813
EPA ID: HI0000953406
Mailing address: PO BOX 2359
HONOLULU, HI 96804
Contact: CHRIS CHUNG
Contact address: PO BOX 2359
HONOLULU, HI 96804
Contact country: US
Contact telephone: (805) 586-2534
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: STATE OF HAWAII
Owner/operator address: PO BOX 2359
HONOLULU, HI 96804
Owner/operator country: Not reported
Owner/operator telephone: (808) 586-2534
Legal status: State
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
User oil refiner: No
Used oil fuel marketer to burner: No

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1000978848 **DIST/DIR:** 0.180 NNW **ELEVATION:** 3 **MAP ID:** C16

NAME: DEPT OF BUISNESS ECON DEVL AND TOURISM
ADDRESS: 10 SAND ISLAND ACCESS RD
HONOLULU, HI 96813
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HI0000953406

Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 04/12/1996
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

UST

EDR ID: U001236360 **DIST/DIR:** 0.188 NNW **ELEVATION:** 3 **MAP ID:** C17

NAME: KAPALAMA MILITARY RESERVATION

ADDRESS: BLDG 942 TANK 942-1, 942-2, 942-3
SCHOFIELD BARRACKS, HI 96786

SOURCE: HI Department of Health

Rev: 09/12/2016
ID/Status: Permanently Out of Use
ID/Status: 05/01/1987
ID/Status: 01/01/1989
ID/Status: 9-201507

UST:
Facility ID: 9-201507
Owner: U.S. ARMY SUPPORT COMMAND, HAWAII DPW
Owner Address: BLDG 105, WHEELER ARMY AIRFIELD
Owner City,St,Zip: Schofield Barracks, 96786 96786
Latitude: 21.319982
Longitude: -157.889777
Horizontal Reference Datum Name: NAD83
Horizontal Collection Method Name: Map

Tank ID: R-942-1
Date Installed: Not reported
Tank Status: Permanently Out of Use
Date Closed: 01/01/1989
Tank Capacity: 2000
Substance: Diesel

Tank ID: R-942-2
Date Installed: Not reported
Tank Status: Permanently Out of Use
Date Closed: 01/01/1989
Tank Capacity: 3000
Substance: Gasoline

Tank ID: R-942-3
Date Installed: Not reported
Tank Status: Permanently Out of Use
Date Closed: 05/01/1987
Tank Capacity: 3800
Substance: Kerosene

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

LUST

EDR ID: U001236360 **DIST/DIR:** 0.188 NNW **ELEVATION:** 3 **MAP ID:** C17

NAME: KAPALAMA MILITARY RESERVATION

ADDRESS: BLDG 942 TANK 942-1, 942-2, 942-3
SCHOFIELD BARRACKS, HI 96786

SOURCE: HI Department of Health

Rev: 09/12/2016
ID/Status: Case Transferred to HEER (regulated)
ID/Status: 890030
ID/Status: 9-201507

LUST:
Facility ID: 9-201507
Facility Status: Case Transferred to HEER (regulated)
Facility Status Date: 05/20/2008
Release ID: 890030
Project Officer: To Heer

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1004689042 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C18

NAME: PSC INDUSTRIAL OUTSOURCING -- HONOLULU
ADDRESS: 5 SAND ISLAND ACCESS ROAD, BUILDING
HONOLULU, HI 96819

Rev: 06/21/2016
ID/Status: HIR000097717

SOURCE: US Environmental Protection Agency

RCRA NonGen / NLR:
Date form received by agency: 02/13/2014
Facility name: BURLINGTON ENVIRONMENTAL LLC HONOLULU
Facility address: 5 SAND ISLAND ACCESS RD
BUILDING 929 UNIT F
HONOLULU, HI 96819
EPA ID: HIR000097717
Mailing address: 5 SAND ISLAND ACCESS ROAD
KMR BLDG 929
HONOLULU, HI 96819
Contact: OTTO AUDIRSCH
Contact address: 5 SAND ISLAND ACCESS RD. KMR BLDG 929
HONOLULU, HI 96819
Contact country: US
Contact telephone: (808) 845-0032
Contact email: OTTO.AUDRISCH@PSCNOW.COM
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: BURLINGTON ENVIRONMENTAL LLC
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: 04/01/2008
Owner/Op end date: Not reported

Owner/operator name: STATE OF HAWAII DEPT OF TRANSPORTATION
Owner/operator address: 79 S NIMITZ HWY
HONOLULU, HI 96813
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: State
Owner/Operator Type: Owner
Owner/Op start date: 04/20/1993
Owner/Op end date: Not reported

Handler Activities Summary:

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1004689042 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C18

NAME: PSC INDUSTRIAL OUTSOURCING -- HONOLULU
ADDRESS: 5 SAND ISLAND ACCESS ROAD, BUILDING
HONOLULU, HI 96819

Rev: 06/21/2016
ID/Status: HIR000097717

SOURCE: US Environmental Protection Agency

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

Historical Generators:
Date form received by agency: 04/22/2008
Site name: BURLINGTON ENVIRONMENTAL LLC HONOLULU
Classification: Not a generator, verified

Date form received by agency: 07/24/2001
Site name: PHILIP SERVICES HAWAII
Classification: Not a generator, verified

Facility Has Received Notices of Violations:
Regulation violated: SR - HAR 11-263-20(D)
Area of violation: Transporters - Manifest and Recordkeeping
Date violation determined: 02/02/2006
Date achieved compliance: 06/17/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/13/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - HAR 11-263-20(A)
Area of violation: Transporters - General
Date violation determined: 02/02/2006
Date achieved compliance: 06/17/2008

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1004689042 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C18

NAME: PSC INDUSTRIAL OUTSOURCING -- HONOLULU
ADDRESS: 5 SAND ISLAND ACCESS ROAD, BUILDING
HONOLULU, HI 96819

Rev: 06/21/2016
ID/Status: HIR000097717

SOURCE: US Environmental Protection Agency

Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/13/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - HAR 11-263-12
Area of violation: Transporters - General
Date violation determined: 02/02/2006
Date achieved compliance: 06/17/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/13/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - HAR 11-263-22(A)
Area of violation: Transporters - Manifest and Recordkeeping
Date violation determined: 02/02/2006
Date achieved compliance: 06/17/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/13/2006
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: SR - HAR 11-270-1(C)
Area of violation: Transporters - General
Date violation determined: 02/02/2006
Date achieved compliance: 06/17/2008
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 02/13/2006

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1004689042 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C18

NAME: PSC INDUSTRIAL OUTSOURCING -- HONOLULU
ADDRESS: 5 SAND ISLAND ACCESS ROAD, BUILDING
HONOLULU, HI 96819

Rev: 06/21/2016
ID/Status: HIR000097717

SOURCE: US Environmental Protection Agency

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

Evaluation Action Summary:
Evaluation date: 08/30/2012
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 06/17/2008
Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 09/01/2005
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Transporters - General
Date achieved compliance: 06/17/2008
Evaluation lead agency: State

Evaluation date: 09/01/2005
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Transporters - Manifest and Recordkeeping
Date achieved compliance: 06/17/2008
Evaluation lead agency: State

Evaluation date: 09/01/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Transporters - General
Date achieved compliance: 06/17/2008
Evaluation lead agency: State

Evaluation date: 09/01/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Transporters - Manifest and Recordkeeping
Date achieved compliance: 06/17/2008
Evaluation lead agency: State

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-LQG

EDR ID: 1015733375 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C19

NAME: KAPALAMA MILITARY RESERVATION
ADDRESS: 5 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HI7214522214

RCRA-LQG:
Date form received by agency: 06/06/2014
Facility name: KAPALAMA MILITARY RESERVATION
Facility address: 5 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
EPA ID: HI7214522214
Mailing address: S. NIMITZ HIGHWAY
HONOLULU, HI 96813
Contact: BERT TOBA
Contact address: S. NIMITZ HIGHWAY
HONOLULU, HI 96813
Contact country: US
Contact telephone: (808) 586-2455
Contact email: BERT.R.TOBA@HAWAII.GOV
EPA Region: 09
Land type: State
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: HI DOT HARBORS DIVISION
Owner/operator address: Not reported
96813
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: State
Owner/Operator Type: Operator
Owner/Op start date: 09/24/2002
Owner/Op end date: Not reported

Owner/operator name: STATE OF HI DEPT OF TRANSPORTATION
Owner/operator address: 79 S NIMITZ HWY
HONOLULU, 96813

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-LQG

EDR ID: 1015733375 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C19

NAME: KAPALAMA MILITARY RESERVATION

ADDRESS: 5 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU

SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HI7214522214

Owner/operator country: US
Owner/operator telephone: (808) 587-1944
Legal status: State
Owner/Operator Type: Owner
Owner/Op start date: 09/24/2002
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
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

. Waste code: D011
. Waste name: SILVER

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-LQG

EDR ID: 1015733375 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C19

NAME: KAPALAMA MILITARY RESERVATION
ADDRESS: 5 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HI7214522214

Historical Generators:
Date form received by agency: 01/24/2007
Site name: KAPALAMA MILITARY RESERVATION
Classification: Conditionally Exempt Small Quantity Generator

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

Date form received by agency: 08/30/2001
Site name: KAPALAMA MILITARY RESERVATION
Classification: Large Quantity Generator

. Waste code: D000
. Waste name: Not Defined

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

Date form received by agency: 03/26/1994
Site name: KAPALAMA MILITARY RESERVATION
Classification: Large Quantity Generator

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Generators - General
Date violation determined: 01/29/2007
Date achieved compliance: 09/15/2009
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 01/29/2007
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-LQG

EDR ID: 1015733375 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C19

NAME: KAPALAMA MILITARY RESERVATION

ADDRESS: 5 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU

SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HI7214522214

Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 08/05/2014
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 11/28/2006
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - General
Date achieved compliance: 09/15/2009
Evaluation lead agency: State

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SEMS-ARCHIVE

EDR ID: 1015733375 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C19

NAME: KAPALAMA MILITARY RESERVATION
ADDRESS: 5 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU
SOURCE: US EPA

Rev: 03/07/2016
ID/Status: 0904469
ID/Status: HI7214522214

SEMS-ARCHIVE:
Site ID: 904469
EPA ID: HI7214522214
Federal Facility: Y
NPL: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

Following information was gathered from the prior CERCLIS update completed in 10/2013: :
Site ID: 0904469
Federal Facility: Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Contact Details:
Contact Sequence ID: 13037201.00000
Person ID: 9000059.00000

CERCLIS-NFRAP Site Alias Name(s):
Alias Name: KAPALAMA MILITARY RESERVATION
Alias Address: SAND ISLAND ACCESS ROAD
OAHU ISLAND, HI 94550

CERCLIS-NFRAP Assessment History:
Action: DISCOVERY
Date Started: / /
Date Completed: 02/01/85
Priority Level: Not reported

Action: ARCHIVE SITE
Date Started: / /
Date Completed: 04/22/92
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: / /
Date Completed: 04/22/92
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S107026173 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C20

NAME: KAPALAMA MILITARY RESERVATION **Rev:** 05/06/2016

ADDRESS: 5 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Kapalama Military Reservation
Island: Oahu
Environmental Interest: Kapalama Container Yard Project
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Steve Mow
Hazard Priority: Not reported
Potential Hazards And Controls: Hazard Present
Island: Oahu
SDAR Environmental Interest Name: Kapalama Container Yard Project
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: Hazard Present
Priority: Not reported
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Not reported
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Steve Mow
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1012178188 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C21

NAME: DEPT OF AGRICULTURE ANNEX NO 3
ADDRESS: 5 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HIP000111955

RCRA NonGen / NLR:
Date form received by agency: 06/24/2009
Facility name: DEPT OF AGRICULTURE ANNEX NO 3
Facility address: 5 SAND ISLAND ACCESS RD
ANNEX NO 3
HONOLULU, HI 96819
EPA ID: HIP000111955
Mailing address: 1151 PUNCHBOWL ST NO 426
HONOLULU, HI 96813
Contact: ROY PARIS JR
Contact address: P O BOX 29177
HONOLULU, HI 96820
Contact country: US
Contact telephone: (808) 831-3076
Contact email: Not reported
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: STATE OF H I DIV OF PUB WORK
Owner/operator address: 1151 PUNCHBOWL ST NO 426
HONOLULU, HI 96813
Owner/operator country: Not reported
Owner/operator telephone: (808) 586-0518
Legal status: State
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
User oil refiner: No
Used oil fuel marketer to burner: No

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1012178188 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C21

NAME: DEPT OF AGRICULTURE ANNEX NO 3

ADDRESS: 5 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU

SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HIP000111955

Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 01/30/2002
Site name: DEPT OF AGRICULTURE ANNEX NO 3
Classification: Conditionally Exempt Small Quantity Generator

. Waste code: D000
. Waste name: Not Defined

. Waste code: D008
. Waste name: LEAD

Violation Status: No violations found

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-SQG

EDR ID: 1014389650 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C22

NAME: ROYAL STAR HAWAII MOTORCOACH TOURS & DESTINATION SERVICES **Rev:** 06/21/2016
ID/Status: HIR000139964

ADDRESS: 5 SAND ISLAND ACCESS ROAD
HONOLULU, HI 96819
HONOLULU

SOURCE: US Environmental Protection Agency

RCRA-SQG:
Date form received by agency: 11/18/2010
Facility name: INDUSTRIAL CHEMICALS AND LUBRICANTS, INC.
Facility address: 5 SAND ISLAND ACCESS RD
BLDG 930-B
HONOLULU, HI 96819
EPA ID: HIR000139964
Mailing address: PO BOX 30173
HONOLULU, HI 96820
Contact: PATTI SHINSATO
Contact address: 5 SAND ISLAND ACCESS RD BLDG 930-B
HONOLULU, HI 96819
Contact country: US
Contact telephone: (808) 842-4116
Contact email: ICL@CLEARWIRE.NET
EPA Region: 09
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: STATE OF HAWAII
Owner/operator address: 79 S NIMITZ HWY
HONOLULU, HI 96813
Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: State
Owner/Operator Type: Owner
Owner/Op start date: 11/18/2010
Owner/Op end date: Not reported

Owner/operator name: INDUSTRIAL CHEMICALS AND LUBRICANTS, INC
Owner/operator address: 5 SAND ISLAND ACCESS RD BLDG 930-B
HONOLULU, HI 96819
Owner/operator country: US
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

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-SQG

EDR ID: 1014389650 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C22

NAME: ROYAL STAR HAWAII MOTORCOACH TOURS & DESTINATION SERVICES **Rev:** 06/21/2016
ID/Status: HIR000139964

ADDRESS: 5 SAND ISLAND ACCESS ROAD
HONOLULU, HI 96819
HONOLULU

SOURCE: US Environmental Protection Agency

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

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: D004
. Waste name: ARSENIC

. Waste code: D005
. Waste name: BARIUM

. Waste code: D006
. Waste name: CADMIUM

. Waste code: D007
. Waste name: CHROMIUM

. Waste code: D008
. Waste name: LEAD

. Waste code: D009
. Waste name: MERCURY

. Waste code: D010
. Waste name: SELENIUM

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-SQG

EDR ID: 1014389650 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C22

NAME: ROYAL STAR HAWAII MOTORCOACH TOURS & DESTINATION SERVICES **Rev:** 06/21/2016
ID/Status: HIR000139964

ADDRESS: 5 SAND ISLAND ACCESS ROAD
HONOLULU, HI 96819
HONOLULU

SOURCE: US Environmental Protection Agency

. Waste code: D011
. Waste name: SILVER

. Waste code: D018
. Waste name: BENZENE

. Waste code: D035
. Waste name: METHYL ETHYL KETONE

Violation Status: No violations found

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1001816094 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C23

NAME: CHEM MET GOVERNMENT SERVICES
ADDRESS: 5 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HIR000058883

RCRA NonGen / NLR:
Date form received by agency: 12/18/2015
Facility name: CHEM MET GOVERNMENT SERVICES
Facility address: 5 SAND ISLAND ACCESS RD
BLDG 928 UNIT A2
HONOLULU, HI 96819
EPA ID: HIR000058883
Mailing address: 3375 KOAPAKA ST STE F220 10
HONOLULU, HI 96819
Contact: JINGBO CHANG
Contact address: 3375 KOAPAKA ST STE F220 10
HONOLULU, HI 96819
Contact country: US
Contact telephone: (808) 478-8930
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: CHEM MET GOVERNMENT SERVICES
Owner/operator address: 19145 ALLEN RD STE 107
BROWSTOWN, MI 48183
Owner/operator country: Not reported
Owner/operator telephone: (888) 873-2550
Legal status: State
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
User oil refiner: No

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1001816094 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C23

NAME: CHEM MET GOVERNMENT SERVICES
ADDRESS: 5 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HIR000058883

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: 04/28/2000
Site name: CHEM MET GOVERNMENT SERVICES
Classification: Not a generator, verified

Facility Has Received Notices of Violations:
Regulation violated: S - 263
Area of violation: Transporters - General
Date violation determined: 09/28/1999
Date achieved compliance: 03/06/2000
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 12/10/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 4500
Final penalty amount: 3500
Paid penalty amount: Not reported

Regulation violated: S - 270
Area of violation: TSD - General
Date violation determined: 09/28/1999
Date achieved compliance: 03/06/2000
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 12/10/1999
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 4500
Final penalty amount: 3500
Paid penalty amount: Not reported

Evaluation Action Summary:
Evaluation date: 12/08/2005
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1001816094 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C23

NAME: CHEM MET GOVERNMENT SERVICES
ADDRESS: 5 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HIR000058883

Date achieved compliance: Not reported
Evaluation lead agency: EPA

Evaluation date: 04/04/2000
Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/13/1999
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 07/12/1999
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: TSD - General
Date achieved compliance: 03/06/2000
Evaluation lead agency: State

Evaluation date: 07/12/1999
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Transporters - General
Date achieved compliance: 03/06/2000
Evaluation lead agency: State

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1012178142 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C24

NAME: HAWAII COMMUNITY DEVELOPMENT AUTHORITY
ADDRESS: 5 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HIP000053710

RCRA NonGen / NLR:
Date form received by agency: 06/24/2009
Facility name: HAWAII COMMUNITY DEVELOPMENT AUTHORITY
Facility address: 5 SAND ISLAND ACCESS RD
BLDG 924
HONOLULU, HI 96819
EPA ID: HIP000053710
Mailing address: 677 ALA MOANA BLVD STE 1001
HONOLULU, HI 96813
Contact: MARK TIWANAK
Contact address: 677 ALA MOANA BLVD STE 1001
HONOLULU, HI 96813
Contact country: US
Contact telephone: (808) 587-2870
Contact email: Not reported
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: HAWAII COMM DEV AUTHORITY
Owner/operator address: 677 ALA MOANA BLVD STE 1001
HONOLULU, HI 96813
Owner/operator country: Not reported
Owner/operator telephone: (808) 587-2870
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
User oil refiner: No
Used oil fuel marketer to burner: No

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1012178142 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C24

NAME: HAWAII COMMUNITY DEVELOPMENT AUTHORITY

ADDRESS: 5 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU

SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HIP000053710

Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 06/25/1999
Site name: HAWAII COMMUNITY DEVELOPMENT AUTHORITY
Classification: Conditionally Exempt Small Quantity Generator

Violation Status: No violations found

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1012178226 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C25

NAME: KAPALAMA MILITARY RESERVATION REEF DEVELOPMENT OF HAWAII INC **Rev:** 06/21/2016
ID/Status: HIP000139147

ADDRESS: 5 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU

SOURCE: US Environmental Protection Agency

RCRA NonGen / NLR:
Date form received by agency: 06/04/2009
Facility name: KAPALAMA MILITARY RESERVATION REEF DEVELOPMENT OF HAWAII INC.
Facility address: 5 SAND ISLAND ACCESS RD
BLDG 927
HONOLULU, HI 96819
EPA ID: HIP000139147
Contact: CLARENCE NISHI
Contact address: 5 SAND ISLAND ACCESS RD BLDG 927
HONOLULU, HI 96819
Contact country: US
Contact telephone: (808) 842-4852
Contact email: FRANK@REEFDEVELOPMENT.COM
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: STATE OF HAWAII DEPT OF TRANSPORTATION
Owner/operator address: 79 S NIMITZ HWY
HONOLULU, HI 96813
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: State
Owner/Operator Type: Owner
Owner/Op start date: 03/03/2009
Owner/Op end date: Not reported

Owner/operator name: REEF DEVELOPMENT OF HAWAII INC.
Owner/operator address: 5 SAND ISLAND ACCESS RD BLDG 927
HONOLULU, HI 96819
Owner/operator country: Not reported
Owner/operator telephone: Not reported
Legal status: Private
Owner/Operator Type: Operator
Owner/Op start date: 10/02/1995
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

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1012178226 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C25

NAME: KAPALAMA MILITARY RESERVATION REEF DEVELOPMENT OF HAWAII INC **Rev:** 06/21/2016
ID/Status: HIP000139147

ADDRESS: 5 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU

SOURCE: US Environmental Protection Agency

Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

Historical Generators:
Date form received by agency: 03/03/2009
Site name: KAPALAMA MILITARY RESERVATION REEF DEVELOPMENT OF HAWAII INC.
Classification: Small Quantity Generator

. Waste code: D001
. Waste name: IGNITABLE WASTE

. Waste code: D002
. Waste name: CORROSIVE WASTE

. Waste code: F001
. Waste name: THE FOLLOWING SPENT HALOGENATED SOLVENTS USED IN DEGREASING: TETRACHLOROETHYLENE, TRICHLORETHYLENE, 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 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 SOLVENTS LISTED IN F001, F004, AND F005; AND STILL BOTTOMS FROM THE RECOVERY OF THESE SPENT SOLVENTS AND SPENT SOLVENT MIXTURES.

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1012178226 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C25

NAME: KAPALAMA MILITARY RESERVATION REEF DEVELOPMENT OF HAWAII INC **Rev:** 06/21/2016
ID/Status: HIP000139147

ADDRESS: 5 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU

SOURCE: US Environmental Protection Agency

. Waste code: F003
. Waste name: THE FOLLOWING SPENT NONHALOGENATED 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 NONHALOGENATED SOLVENTS; AND ALL SPENT SOLVENT MIXTURES/BLENDS CONTAINING, BEFORE USE, ONE OR MORE OF THE ABOVE NONHALOGENATED 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.

Violation Status: No violations found

Evaluation Action Summary:
Evaluation date: 02/12/2009
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1004689021 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C26

NAME: AMAZON CONSTRUCTION INC
ADDRESS: 5 SAND ISLAND RD- BLDG 19
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HIR000088385

RCRA NonGen / NLR:
Date form received by agency: 12/13/2000
Facility name: AMAZON CONSTRUCTION CO INC
Facility address: 5 SAND ISLAND RD BLDG 920-139
HONOLULU, HI 96819
EPA ID: HIR000088385
Contact: DUSTON ONAGA
Contact address: 5 SAND ISLAND RD BLDG 920-139
HONOLULU, HI 96819
Contact country: US
Contact telephone: (808) 841-6595
Contact email: Not reported
EPA Region: 09
Classification: Non-Generator
Description: Handler: Non-Generators do not presently generate hazardous waste

Owner/Operator Summary:
Owner/operator name: JANE K ONAGA
Owner/operator address: 5 SAND ISLAND RD BLDG 920-139
HONOLULU, HI 96819
Owner/operator country: Not reported
Owner/operator telephone: (808) 841-6595
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: 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: No

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1004689021 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C26

NAME: AMAZON CONSTRUCTION INC

ADDRESS: 5 SAND ISLAND RD- BLDG 19
HONOLULU, HI 96819
HONOLULU

SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HIR000088385

Violation Status: No violations found

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1004689043 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C27

NAME: PACIFIC COMMERCIAL SERVICES LLC
ADDRESS: 5 SAND ISLAND ACCESS ROAD, BUILDIN
HONOLULU, HI 96819

Rev: 06/21/2016
ID/Status: HIR000097824

SOURCE: US Environmental Protection Agency

RCRA NonGen / NLR:
Date form received by agency: 12/16/2015
Facility name: PACIFIC COMMERCIAL SERVICES LLC
Facility address: 5 SAND ISLAND ACCESS RD
BLDG 931 BOX 115 KAPALAMA
HONOLULU, HI 96819
EPA ID: HIR000097824
Mailing address: PO BOX 235117
HONOLULU, HI 96823 3501
Contact: JINGBO CHANG
Contact address: PO BOX 235117
HONOLULU, HI 96823 3501
Contact country: US
Contact telephone: 808-545-4599
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: PACIFIC COMMERCIAL SERVICES LLC
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: 01/01/2005
Owner/Op end date: Not reported

Owner/operator name: PACIFIC COMMERCIAL SVCS L L C
Owner/operator address: P O BOX 235117
HONOLULU, HI 96823
Owner/operator country: Not reported
Owner/operator telephone: (808) 478-8930
Legal status: Private
Owner/Operator Type: Owner
Owner/Op start date: Not reported
Owner/Op end date: Not reported

Owner/operator name: STATE OF HAWAII
Owner/operator address: Not reported
Not reported

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1004689043 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C27

NAME: PACIFIC COMMERCIAL SERVICES LLC
ADDRESS: 5 SAND ISLAND ACCESS ROAD, BUILDIN
HONOLULU, HI 96819

Rev: 06/21/2016
ID/Status: HIR000097824

SOURCE: US Environmental Protection Agency

Owner/operator country: US
Owner/operator telephone: Not reported
Legal status: State
Owner/Operator Type: Owner
Owner/Op start date: 02/25/1992
Owner/Op end date: Not reported

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

Historical Generators:
Date form received by agency: 09/09/2005
Site name: PACIFIC COMMERCIAL SERVICES LLC
Classification: Not a generator, verified

Date form received by agency: 06/16/2003
Site name: PACIFIC COMMERCIAL SERVICES L L C
Classification: Not a generator, verified

Date form received by agency: 06/04/2001
Site name: PACIFIC COMMERCIAL SERVICES L L C
Classification: Not a generator, verified

Facility Has Received Notices of Violations:
Regulation violated: Not reported
Area of violation: Generators - Manifest
Date violation determined: 10/20/2010
Date achieved compliance: 07/19/2013
Violation lead agency: State

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1004689043 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C27

NAME: PACIFIC COMMERCIAL SERVICES LLC
ADDRESS: 5 SAND ISLAND ACCESS ROAD, BUILDIN
HONOLULU, HI 96819

Rev: 06/21/2016
ID/Status: HIR000097824

SOURCE: US Environmental Protection Agency

Enforcement action: WRITTEN INFORMAL
Enforcement action date: 09/27/2012
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Permit Condition or Requirement
Date violation determined: 05/14/2009
Date achieved compliance: 06/26/2009
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/14/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Transporters - Manifest and Recordkeeping
Date violation determined: 05/14/2009
Date achieved compliance: 06/26/2009
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/14/2009
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: Not reported
Paid penalty amount: Not reported

Regulation violated: Not reported
Area of violation: Used Oil - Transporter and Transfer Facility
Date violation determined: 05/14/2009
Date achieved compliance: 06/26/2009
Violation lead agency: State
Enforcement action: WRITTEN INFORMAL
Enforcement action date: 05/14/2009
Enf. disposition status: Not reported

- Continued on next page -

RCRA NonGen / NLR

EDR ID: 1004689043 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C27

NAME: PACIFIC COMMERCIAL SERVICES LLC
ADDRESS: 5 SAND ISLAND ACCESS ROAD, BUILDIN
HONOLULU, HI 96819

Rev: 06/21/2016
ID/Status: HIR000097824

SOURCE: US Environmental Protection Agency

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

Regulation violated: SS - HRS 342J
Area of violation: Used Oil - Processors and Re-refiners
Date violation determined: 12/08/2003
Date achieved compliance: 10/31/2007
Violation lead agency: State
Enforcement action: INITIAL 3008(A) COMPLIANCE
Enforcement action date: 09/15/2004
Enf. disposition status: Not reported
Enf. disp. status date: Not reported
Enforcement lead agency: State
Proposed penalty amount: 10000
Final penalty amount: 3000
Paid penalty amount: 3000

Regulation violated: SS - HRS 342J
Area of violation: Used Oil - Processors and Re-refiners
Date violation determined: 12/08/2003
Date achieved compliance: 10/31/2007
Violation lead agency: State
Enforcement action: FINAL 3008(A) COMPLIANCE ORDER
Enforcement action date: 10/26/2007
Enf. disposition status: Action Satisfied (Case Closed)
Enf. disp. status date: 10/31/2007
Enforcement lead agency: State
Proposed penalty amount: Not reported
Final penalty amount: 3000
Paid penalty amount: 3000

Evaluation Action Summary:
Evaluation date: 10/20/2010
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Generators - Manifest
Date achieved compliance: 07/19/2013
Evaluation lead agency: State

Evaluation date: 12/18/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Transporters - Manifest and Recordkeeping

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA NonGen / NLR

EDR ID: 1004689043 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C27

NAME: PACIFIC COMMERCIAL SERVICES LLC
ADDRESS: 5 SAND ISLAND ACCESS ROAD, BUILDIN
HONOLULU, HI 96819

Rev: 06/21/2016
ID/Status: HIR000097824

SOURCE: US Environmental Protection Agency

Date achieved compliance: 06/26/2009
Evaluation lead agency: State

Evaluation date: 12/18/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Permit Condition or Requirement
Date achieved compliance: 06/26/2009
Evaluation lead agency: State

Evaluation date: 12/18/2008
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Used Oil - Transporter and Transfer Facility
Date achieved compliance: 06/26/2009
Evaluation lead agency: State

Evaluation date: 10/26/2007
Evaluation: NOT A SIGNIFICANT NON-COMPLIER
Area of violation: Not reported
Date achieved compliance: Not reported
Evaluation lead agency: State

Evaluation date: 12/08/2003
Evaluation: SIGNIFICANT NON-COMPLIER
Area of violation: Used Oil - Processors and Re-refiners
Date achieved compliance: 10/31/2007
Evaluation lead agency: State

Evaluation date: 12/08/2003
Evaluation: COMPLIANCE EVALUATION INSPECTION ON-SITE
Area of violation: Used Oil - Processors and Re-refiners
Date achieved compliance: 10/31/2007
Evaluation lead agency: State

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-CESQG

EDR ID: 1004689023 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C28

NAME: TRANS HAWAIIAN SERVICES INC
ADDRESS: 5 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU
SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HIR000090027

RCRA-CESQG:
Date form received by agency: 01/12/2001
Facility name: TRANS HAWAIIAN SERVICES INC
Facility address: 5 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
EPA ID: HIR000090027
Contact: ROLAND TAKARA
Contact address: 5 SAND ISLAND ACCESS RD
HONLULU, HI 96819
Contact country: US
Contact telephone: (808) 843-0353
Contact email: Not reported
EPA Region: 09
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: TRANS HAWAIIAN SERVICES INC
Owner/operator address: 720 IWILEI RD STE 101
HONOLULU, HI 96817
Owner/operator country: Not reported
Owner/operator telephone: (808) 566-7000
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

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

RCRA-CESQG

EDR ID: 1004689023 **DIST/DIR:** 0.210 NNW **ELEVATION:** 3 **MAP ID:** C28

NAME: TRANS HAWAIIAN SERVICES INC

ADDRESS: 5 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU

SOURCE: US Environmental Protection Agency

Rev: 06/21/2016
ID/Status: HIR000090027

Recycler of hazardous waste: No
Transporter of hazardous waste: No
Treater, storer or disposer of HW: No
Underground injection activity: No
On-site burner exemption: No
Furnace exemption: No
Used oil fuel burner: No
Used oil processor: No
User oil refiner: No
Used oil fuel marketer to burner: No
Used oil Specification marketer: No
Used oil transfer facility: No
Used oil transporter: No

. Waste code: D008
. Waste name: LEAD

Violation Status: No violations found

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S115488703 **DIST/DIR:** 0.310 NE **ELEVATION:** 3 **MAP ID:** 29

NAME: KALIHI AND KALAEPAA INTERSECTION **Rev:** 05/06/2016

ADDRESS: KALAEPAA DR AND KALIHI ST
HONOLULU, HI

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Kalihi and Kalaepaa Intersection
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: Site Discovery
Project Manager: Cal Miyahara
Hazard Priority: Low
Potential Hazards And Controls: No Hazard
Island: Oahu
SDAR Environmental Interest Name: Kalihi and Kalaepaa Intersection
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: No Hazard
Priority: Low
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Found: TPH-O in soil.
Nature of Residual Contamination: Removal action complete. Residual TPH-O remaining at 500 mg/kg at outfall area.
Use Restrictions: No Hazard Present For Unrestricted Residential Use
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: No Further Action Letter - Unrestricted Residential Use
Document Date: 05/02/2013
Document Number: 2013-239-CMM
Document Subject: NFA letter for the SS-1 Asphalt Emulsion Release, Grace Pacific Road Improvement, Intersection of Kalihi St and Kalaepaa Dr, Honolulu HI 96819, HEER Release ID 20120724-1402
Project Manager: Cal Miyahara
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: U003541752 **DIST/DIR:** 0.311 North **ELEVATION:** 3 **MAP ID:** D30

NAME: SERVCO - VEHICLE PROCESSING CENTER **Rev:** 05/06/2016

ADDRESS: 2101 AUIKI ST
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Servco Pacific, Inc. Kalihi
HID Number: Not reported
Facility Registry Identifier: 110013778992
Lead Agency: HEER
Program: State
Project Manager: Unassigned
Hazard Priority: Low
Potential Hazards And Controls: Hazard Undetermined
Island: Oahu
SDAR Environmental Interest Name: Servco Pacific, Inc. Kalihi
HID Number: Not reported
Facility Registry Identifier: 110013778992
Lead Agency: HEER
Potential Hazard And Controls: Hazard Undetermined
Priority: Low
Assessment: Assessment Ongoing
Response: Not reported
Nature of Contamination: Not reported
Nature of Residual Contamination: Not reported
Use Restrictions: Undetermined
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Kapalama Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Unassigned
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S105264496 **DIST/DIR:** 0.318 NNE **ELEVATION:** 3 **MAP ID:** 31

NAME: KAPALAMA CONTAINER YARD PCB RELEASE **Rev:** 05/06/2016

ADDRESS: 1845 AUIKI ST
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Kapalama Military Reservation
Island: Oahu
Environmental Interest: Kapalama Container Yard PCB Release
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Iris van der Zander
Hazard Priority: Medium
Potential Hazards And Controls: No Hazard
Island: Oahu
SDAR Environmental Interest Name: Kapalama Container Yard PCB Release
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: No Hazard
Priority: Medium
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: PCBs in Soil
Nature of Residual Contamination: Not reported
Use Restrictions: No Hazard Present For Unrestricted Residential Use
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Iris van der Zander
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

LUST

EDR ID: U003154613 **DIST/DIR:** 0.328 North **ELEVATION:** 3 **MAP ID:** D32

NAME: HAWAIIAN MASON & PLASTERS UNION

ADDRESS: 1930 AUIKI ST
HONOLULU, HI 96819

Rev: 09/12/2016
ID/Status: Site Cleanup Completed (NFA)
ID/Status: 930102
ID/Status: 9-102738

SOURCE: HI Department of Health

LUST:
Facility ID: 9-102738
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 02/28/1995
Release ID: 930102
Project Officer: Raymond Seid

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

LUST

EDR ID: U001236010 **DIST/DIR:** 0.338 North **ELEVATION:** 3 **MAP ID:** D33

NAME: UNIQ DISTRIBUTING CORP

ADDRESS: 2020 AUIKI ST
HONOLULU, HI 96819

Rev: 09/12/2016
ID/Status: Site Cleanup Completed (NFA)
ID/Status: 920170
ID/Status: 9-102676

SOURCE: HI Department of Health

LUST:
Facility ID: 9-102676
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 09/22/1998
Release ID: 920170
Project Officer: Lene Ichinotsubo

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SEMS-ARCHIVE

EDR ID: 1003879701 **DIST/DIR:** 0.338 SSE **ELEVATION:** 3 **MAP ID:** 34

NAME: TOWCO

ADDRESS: 16-1 SAND ISLAND PARKWAY ROAD
HONOLULU, HI 96819
HONOLULU

SOURCE: US EPA

Rev: 03/07/2016
ID/Status: 0904530
ID/Status: HID984468645

SEMS-ARCHIVE:
Site ID: 904530
EPA ID: HID984468645
Federal Facility: N
NPL: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

Following information was gathered from the prior CERCLIS update completed in 10/2013: :
Site ID: 0904530
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Contact Details:
Contact Sequence ID: 13037514.00000
Person ID: 9000059.00000

CERCLIS-NFRAP Assessment History:
Action: PRELIMINARY ASSESSMENT
Date Started: / /
Date Completed: 10/15/92
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: ARCHIVE SITE
Date Started: / /
Date Completed: 10/15/92
Priority Level: Not reported

Action: DISCOVERY
Date Started: / /
Date Completed: 07/23/92
Priority Level: Not reported

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

LUST

EDR ID: U003154474 **DIST/DIR:** 0.344 NNE **ELEVATION:** 3 **MAP ID:** E35

NAME: TOMMY OF HAWAII, INC

ADDRESS: 1812 AUIKI ST
HONOLULU, HI 96819

SOURCE: HI Department of Health

Rev: 09/12/2016
ID/Status: Site Cleanup Completed (NFA)
ID/Status: 930119
ID/Status: 9-100664

LUST:
Facility ID: 9-100664
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 07/06/1994
Release ID: 930119
Project Officer: Eric Sadoyama

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

LUST

EDR ID: U003541717 **DIST/DIR:** 0.358 North **ELEVATION:** 3 **MAP ID:** 36

NAME: H. HIRONAKA TRUCKING LTD.

ADDRESS: 2110-A AUIKI ST
HONOLULU, HI 96819

Rev: 09/12/2016
ID/Status: Site Cleanup Completed (NFA)
ID/Status: 940191
ID/Status: 9-100906

SOURCE: HI Department of Health

LUST:
Facility ID: 9-100906
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 02/26/1996
Release ID: 940191
Project Officer: Not Assigned

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

LUST

EDR ID: 1006843774 **DIST/DIR:** 0.362 NNE **ELEVATION:** 3 **MAP ID:** E37

NAME: MODERN MACARONI CO, LTD

ADDRESS: 1708 MARY ST
HONOLULU, HI 96819

Rev: 09/12/2016
ID/Status: Site Cleanup Completed (NFA)
ID/Status: 940162
ID/Status: 9-102957

SOURCE: HI Department of Health

LUST:
Facility ID: 9-102957
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 05/01/1995
Release ID: 940162
Project Officer: Roger Brewer

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: 1006821063 **DIST/DIR:** 0.367 NNE **ELEVATION:** 3 **MAP ID:** E38

NAME: HAWAIIAN MISO AND SOY CO., LTD **Rev:** 05/06/2016

ADDRESS: 1714 MARY ST
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Hawaiian Miso and Soy Co., Ltd
HID Number: Not reported
Facility Registry Identifier: 110013791049
Lead Agency: HEER
Program: State
Project Manager: Diane England
Hazard Priority: NFA
Potential Hazards And Controls: No Hazard
Island: Oahu
SDAR Environmental Interest Name: Hawaiian Miso and Soy Co., Ltd
HID Number: Not reported
Facility Registry Identifier: 110013791049
Lead Agency: HEER
Potential Hazard And Controls: No Hazard
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Found: Petroleum in soil and groundwater
Nature of Residual Contamination: No (petroleum in soil and groundwater) contamination left on site is above EALs.
Use Restrictions: No Hazard Present For Unrestricted Residential Use
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: No Further Action Letter - Unrestricted Residential Use
Document Date: 11/14/2005
Document Number: 2005-579-DE
Document Subject: No Further Action Determination for Release ID 19920722-4
Project Manager: Diane England
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

INST CONTROL

EDR ID: S103290180 **DIST/DIR:** 0.384 NNW **ELEVATION:** 3 **MAP ID:** F39

NAME: USPS VEHICLE MAINTENANCE FACILITY **Rev:** 05/06/2016

ADDRESS: 89 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

INST CONTROL:
Potential hazards and controls: Hazard Managed With Controls
Supplemental Location: Not reported
Zip Suffix: Not reported
Island: Oahu
Institutional Control: Government - Hawaii Dept. of Health Letter Issued

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

ENG CONTROLS

EDR ID: S103290180 **DIST/DIR:** 0.384 NNW **ELEVATION:** 3 **MAP ID:** F39

NAME: USPS VEHICLE MAINTENANCE FACILITY **Rev:** 05/06/2016

ADDRESS: 89 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

ENG CONTROLS:
Supplemental Location Text: Not reported
Zip Suffix: Not reported
Island: Oahu
Potential Hazards And Controls: Hazard Managed With Controls
Engineering Control: Engineering Control Required

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S103290180 **DIST/DIR:** 0.384 NNW **ELEVATION:** 3 **MAP ID:** F39

NAME: USPS VEHICLE MAINTENANCE FACILITY **Rev:** 05/06/2016

ADDRESS: 89 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: USPS Vehicle Maintenance Facility Hydraulic Fluid Spill
HID Number: Not reported
Facility Registry Identifier: 110014044630
Lead Agency: HEER
Program: State
Project Manager: Jordan Nakayama
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: USPS Vehicle Maintenance Facility Hydraulic Fluid Spill
HID Number: Not reported
Facility Registry Identifier: 110014044630
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: NFA
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: Free product remains at capillary fringe
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: Not reported
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Honolulu Harbor Kapalama Unit
Site Closure Type: No Further Action Letter - Restricted Use
Document Date: 09/02/2015
Document Number: 2015-528-JQN
Document Subject: No Further Action with Institutional Controls determination for USPS Vehicle Maintenance Facility based upon review of the document listed below
Project Manager: Jordan Nakayama
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

LUST

EDR ID: U001235542 **DIST/DIR:** 0.389 NNE **ELEVATION:** 3 **MAP ID:** E40

NAME: HONOLULU BODY & FENDER SHOP

ADDRESS: 131 MOKAUEA ST
HONOLULU, HI 96819

Rev: 09/12/2016
ID/Status: Site Cleanup Completed (NFA)
ID/Status: 930134
ID/Status: 9-101544

SOURCE: HI Department of Health

LUST:
Facility ID: 9-101544
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 12/06/1999
Release ID: 930134
Project Officer: Richard Takaba

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

LUST

EDR ID: U003221591 **DIST/DIR:** 0.410 NNW **ELEVATION:** 3 **MAP ID:** F41

NAME: MCKESSON WINE & SPIRITS CO.

ADDRESS: 80 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

Rev: 09/12/2016
ID/Status: Site Cleanup Completed (NFA)
ID/Status: 970139
ID/Status: 9-100277

SOURCE: HI Department of Health

LUST:
Facility ID: 9-100277
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 12/22/1998
Release ID: 970139
Project Officer: Mark Sutterfield

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: U003221591 **DIST/DIR:** 0.410 NNW **ELEVATION:** 3 **MAP ID:** F41

NAME: MCKESSON WINE & SPIRITS CO. **Rev:** 05/06/2016

ADDRESS: 80 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: McKesson Drug Company/Sealmasters
HID Number: Not reported
Facility Registry Identifier: 110013358384
Lead Agency: HEER
Program: State
Project Manager: Clarence Callahan
Hazard Priority: NFA
Potential Hazards And Controls: No Hazard
Island: Oahu
SDAR Environmental Interest Name: McKesson Drug Company/Sealmasters
HID Number: Not reported
Facility Registry Identifier: 110013358384
Lead Agency: HEER
Potential Hazard And Controls: No Hazard
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Not reported
Nature of Residual Contamination: very low levels of benzo[a]pyrene and Fluoranthene in groundwater
Use Restrictions: No Hazard Present For Unrestricted Residential Use
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: No Further Action Letter - Unrestricted Residential Use
Document Date: 11/03/2003
Document Number: 2003-359-CAC
Document Subject: NFA Letter based on confirmed changes to document
Project Manager: Clarence Callahan
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

LUST

EDR ID: U003790348 **DIST/DIR:** 0.417 NNE **ELEVATION:** 4 **MAP ID:** G42

NAME: R&S PLUMBING INC

ADDRESS: 1744 HOE ST
HONOLULU, HI 96819

Rev: 09/12/2016
ID/Status: Site Cleanup Completed (NFA)
ID/Status: 010035
ID/Status: 9-103716

SOURCE: HI Department of Health

LUST:
Facility ID: 9-103716
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 10/01/2001
Release ID: 010035
Project Officer: Jose Ruiz

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

LUST

EDR ID: U003832857 **DIST/DIR:** 0.424 NE **ELEVATION:** 3 **MAP ID:** 43

NAME: D&N AUTO BODY AND PAINTING INC

ADDRESS: 1615 SILVA ST
HONOLULU, HI 96819

Rev: 09/12/2016
ID/Status: Site Cleanup Completed (NFA)
ID/Status: 020017
ID/Status: 9-103736

SOURCE: HI Department of Health

LUST:
Facility ID: 9-103736
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 03/12/2002
Release ID: 020017
Project Officer: Richard Takaba

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

LUST

EDR ID: U003221615 **DIST/DIR:** 0.442 North **ELEVATION:** 3 **MAP ID:** H44

NAME: TRANS HAWAIIAN - OAHU, INC.

ADDRESS: 124 PUUHALE RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

Rev: 09/12/2016
ID/Status: Site Cleanup Completed (NFA)
ID/Status: 930019
ID/Status: 990140
ID/Status: 9-100804

LUST:
Facility ID: 9-100804
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 09/13/2007
Release ID: 930019
Project Officer: Richard Takaba

Facility ID: 9-100804
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 09/13/2007
Release ID: 990140
Project Officer: Richard Takaba

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: U003221615 **DIST/DIR:** 0.442 North **ELEVATION:** 3 **MAP ID:** H44

NAME: TRANS HAWAIIAN - OAHU, INC. **Rev:** 05/06/2016

ADDRESS: 124 PUUHALE RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Trans Hawaiian Site
HID Number: Not reported
Facility Registry Identifier: 110013774433
Lead Agency: SHWB
Program: State
Project Manager: Eric Sadoyama
Hazard Priority: NFA
Potential Hazards And Controls: No Hazard
Island: Oahu
SDAR Environmental Interest Name: Trans Hawaiian Site
HID Number: Not reported
Facility Registry Identifier: 110013774433
Lead Agency: SHWB
Potential Hazard And Controls: No Hazard
Priority: NFA
Assessment: Assessment Ongoing
Response: Not reported
Nature of Contamination: Not reported
Nature of Residual Contamination: Not reported
Use Restrictions: No Hazard Present for Unrestricted Residential Use
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: No HEER Environmental Interest
Document Date: 11/08/2001
Document Number: Not reported
Document Subject: Groundwater Investigation Report, Former Trans Hawaiian Site, TMK 1-2-022-009; Fac ID 9-100804; Prepared for: Mrs. Jan Schuck Bond & HI DOH Underground Storage Tank Section
Project Manager: Eric Sadoyama
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

VCP

EDR ID: U003221583 **DIST/DIR:** 0.451 NNW **ELEVATION:** 3 **MAP ID:** I45

NAME: FORMER FLYNN LEARNER **Rev:** 05/06/2016

ADDRESS: 120 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

VCP:
Program: Voluntary Response Program
Zip Suffix: Not reported
Supplemental Location: Not reported
Island: Oahu

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

INST CONTROL

EDR ID: U003221583 **DIST/DIR:** 0.451 NNW **ELEVATION:** 3 **MAP ID:** I45

NAME: FORMER FLYNN LEARNER **Rev:** 05/06/2016

ADDRESS: 120 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

INST CONTROL:
Potential hazards and controls: Hazard Managed With Controls
Supplemental Location: Not reported
Zip Suffix: Not reported
Island: Oahu
Institutional Control: Government - Hawaii Dept. of Health Letter Issued

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

ENG CONTROLS

EDR ID: U003221583 **DIST/DIR:** 0.451 NNW **ELEVATION:** 3 **MAP ID:** I45

NAME: FORMER FLYNN LEARNER **Rev:** 05/06/2016

ADDRESS: 120 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

ENG CONTROLS:
Supplemental Location Text: Not reported
Zip Suffix: Not reported
Island: Oahu
Potential Hazards And Controls: Hazard Managed With Controls
Engineering Control: Engineering Control Required

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

LUST

EDR ID: U003221583 **DIST/DIR:** 0.451 NNW **ELEVATION:** 3 **MAP ID:** I45

NAME: FORMER FLYNN LEARNER

ADDRESS: 120 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

Rev: 09/12/2016
ID/Status: Site Cleanup Completed (NFA)
ID/Status: 960059
ID/Status: 9-100209

SOURCE: HI Department of Health

LUST:
Facility ID: 9-100209
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 10/02/2006
Release ID: 960059
Project Officer: Darren Park

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: U003221583 **DIST/DIR:** 0.451 NNW **ELEVATION:** 3 **MAP ID:** I45

NAME: FORMER FLYNN LEARNER **Rev:** 05/06/2016

ADDRESS: 120 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Former Flynn-Learner Property
HID Number: HID984468363
Facility Registry Identifier: 110005727963
Lead Agency: HEER
Program: Voluntary Response Program
Project Manager: Eric Sadoyama
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: Former Flynn-Learner Property
HID Number: HID984468363
Facility Registry Identifier: 110005727963
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Not reported
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: Prohibit Any Activity That May Disturb the Integrity of the Capping System
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Not reported
Site Closure Type: Letter of Completion - Restricted Use
Document Date: 07/21/2004
Document Number: Not reported
Document Subject: Letter of Completion (LOC)
Project Manager: Eric Sadoyama
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SEMS-ARCHIVE

EDR ID: 1000823220 **DIST/DIR:** 0.451 NNW **ELEVATION:** 3 **MAP ID:** I46

NAME: PAHOUNUI D P L L C SAND ISLAND
ADDRESS: 120 SAND ISLAND ACCESS RD
HONOLULU, HI 96819
HONOLULU
SOURCE: US EPA

Rev: 03/07/2016
ID/Status: 0904482
ID/Status: HID984468363

SEMS-ARCHIVE:
Site ID: 904482
EPA ID: HID984468363
Federal Facility: N
NPL: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

Following information was gathered from the prior CERCLIS update completed in 10/2013: :
Site ID: 0904482
Federal Facility: Not a Federal Facility
NPL Status: Not on the NPL
Non NPL Status: NFRAP-Site does not qualify for the NPL based on existing information

CERCLIS-NFRAP Site Contact Details:
Contact Sequence ID: 13037666.00000
Person ID: 9000059.00000

CERCLIS-NFRAP Assessment History:
Action: DISCOVERY
Date Started: / /
Date Completed: 05/04/92
Priority Level: Not reported

Action: SITE INSPECTION
Date Started: 03/29/94
Date Completed: 09/30/94
Priority Level: NFRAP-Site does not qualify for the NPL based on existing information

Action: ARCHIVE SITE
Date Started: / /
Date Completed: 09/30/94
Priority Level: Not reported

Action: PRELIMINARY ASSESSMENT
Date Started: / /
Date Completed: 09/30/94
Priority Level: Higher priority for further assessment

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

LUST

EDR ID: U001235072 **DIST/DIR:** 0.455 NNE **ELEVATION:** 7 **MAP ID:** G47

NAME: ASSOCIATED STEEL WORKERS, LTD.

ADDRESS: 1714 SILVA ST
HONOLULU, HI 96819

Rev: 09/12/2016
ID/Status: Site Cleanup Completed with EHMP
ID/Status: 010003
ID/Status: 9-100163

SOURCE: HI Department of Health

LUST:
Facility ID: 9-100163
Facility Status: Site Cleanup Completed with EHMP
Facility Status Date: 04/16/2010
Release ID: 010003
Project Officer: Shunsheng Fu

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S104534384 **DIST/DIR:** 0.461 North **ELEVATION:** 3 **MAP ID:** H48

NAME: STATE POULTRY PROCESSORS FACILITY **Rev:** 05/06/2016

ADDRESS: 2132 KALIAWA ST
HONOLULU, HI 96813

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: (new) 1728 Hart St
Island: Oahu
Environmental Interest: State Poultry Processors Facility
HID Number: Not reported
Facility Registry Identifier: 110013778028
Lead Agency: HEER
Program: State
Project Manager: Fenix Grange
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Undetermined
Island: Oahu
SDAR Environmental Interest Name: State Poultry Processors Facility
HID Number: Not reported
Facility Registry Identifier: 110013778028
Lead Agency: HEER
Potential Hazard And Controls: Hazard Undetermined
Priority: NFA
Assessment: Assessment Ongoing
Response: Not reported
Nature of Contamination: Found: Diesel
Nature of Residual Contamination: Not reported
Use Restrictions: Undetermined
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: No Further Action - Type Undetermined
Document Date: 05/02/2005
Document Number: Not reported
Document Subject: Not reported
Project Manager: Fenix Grange
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

LUST

EDR ID: U003154855 **DIST/DIR:** 0.472 North **ELEVATION:** 3 **MAP ID:** J49

NAME: SECURITY ARMORED CAR SERVICES OF HAWAII

ADDRESS: 2140 KALIAWA ST
HONOLULU, HI 96819

Rev: 09/12/2016
ID/Status: Site Cleanup Completed (NFA)
ID/Status: 960051
ID/Status: 9-103176

SOURCE: HI Department of Health

LUST:
Facility ID: 9-103176
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 10/25/1996
Release ID: 960051
Project Officer: Jose Ruiz

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

LUST

EDR ID: U001235159 **DIST/DIR:** 0.480 NNE **ELEVATION:** 7 **MAP ID:** 50

NAME: TAGAMI AUTO SERVICE, LTD.

ADDRESS: 1733 KAHAI ST
HONOLULU, HI 96819

Rev: 09/12/2016
ID/Status: Site Cleanup Completed (NFA)
ID/Status: 000073
ID/Status: 9-100321

SOURCE: HI Department of Health

LUST:
Facility ID: 9-100321
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 02/11/2003
Release ID: 000073
Project Officer: Shunsheng Fu

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

LUST

EDR ID: U003221685 **DIST/DIR:** 0.488 North **ELEVATION:** 3 **MAP ID:** 51

NAME: BROWNING-FERRIS INDUSTRIES OF HAWAII

ADDRESS: 207 PUUHALE RD
HONOLULU, HI 96819

Rev: 09/12/2016
ID/Status: Site Cleanup Completed (NFA)
ID/Status: 930017
ID/Status: 9-101719

SOURCE: HI Department of Health

LUST:
Facility ID: 9-101719
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 10/18/2002
Release ID: 930017
Project Officer: Richard Takaba

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

LUST

EDR ID: U001235006 **DIST/DIR:** 0.493 North **ELEVATION:** 3 **MAP ID:** J52

NAME: SAND ISLAND 76 (#104)

ADDRESS: 165 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

Rev: 09/12/2016
ID/Status: Site Cleanup Completed (NFA)
ID/Status: 020011
ID/Status: 960081
ID/Status: 9-100023

LUST:
Facility ID: 9-100023
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 02/08/2002
Release ID: 020011
Project Officer: Shunsheng Fu

Facility ID: 9-100023
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 08/04/2003
Release ID: 960081
Project Officer: Shunsheng Fu

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S110169103 **DIST/DIR:** 0.499 NNW **ELEVATION:** 3 **MAP ID:** K53

NAME: HECO PAD-MOUNTED TRANSFORMER #63855 RELEASE **Rev:** 05/06/2016

ADDRESS: 2344 PAHOUNUI DR
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Ameron Hawaii Sand Island Facility
HID Number: Not reported
Facility Registry Identifier: 110009359764
Lead Agency: HEER
Program: State
Project Manager: Cal Miyahara
Hazard Priority: Medium
Potential Hazards And Controls: Hazard Undetermined
Island: Oahu
SDAR Environmental Interest Name: Ameron Hawaii Sand Island Facility
HID Number: Not reported
Facility Registry Identifier: 110009359764
Lead Agency: HEER
Potential Hazard And Controls: Hazard Undetermined
Priority: Medium
Assessment: Assessment Ongoing
Response: Response Ongoing
Nature of Contamination: Found: TPH-O (above Tier 1 EAL) found in gw sample taken from excavation pit. One monitoring well north of excavation pit had TPH-O above Tier 1 EAL.
Nature of Residual Contamination: Not reported
Use Restrictions: Undetermined
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Cal Miyahara
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

LUST

EDR ID: U003221574 **DIST/DIR:** 0.499 NNW **ELEVATION:** 3 **MAP ID:** K54

NAME: AMERON - SAND ISLAND

ADDRESS: 2344 PAHOUNUI DR.
HONOLULU, HI 96819

SOURCE: HI Department of Health

Rev: 09/12/2016
ID/Status: Site Cleanup Completed (NFA)
ID/Status: 990138
ID/Status: 020026
ID/Status: 9-100171

LUST:
Facility ID: 9-100171
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 01/08/2001
Release ID: 990138
Project Officer: Shunsheng Fu

Facility ID: 9-100171
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 08/12/2002
Release ID: 020026
Project Officer: Shunsheng Fu

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S110061240 **DIST/DIR:** 0.513 NNW **ELEVATION:** 3 **MAP ID:** 55

NAME: 158 SAND ISLAND ACCESS RD **Rev:** 05/06/2016

ADDRESS: 158 SAND ISLAND ACCESS RD
HONOLULU, HI

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: 158 Sand Island Access Rd
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Cal Miyahara
Hazard Priority: Medium
Potential Hazards And Controls: Hazard Present
Island: Oahu
SDAR Environmental Interest Name: 158 Sand Island Access Rd
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: Hazard Present
Priority: Medium
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: Arsenic, barium, cadmium, lead, petroleum hydrocarbon, and PCB in soils above HDOH Interim Final EALs.
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Sand Island Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Cal Miyahara
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID:	U003221573	DIST/DIR:	0.538 NNW	ELEVATION:	3	MAP ID:	K56

NAME: AIR ENGINEERING **Rev:** 05/06/2016

ADDRESS: 2308 PAHOUNUI DR
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Hawaii Select Investments - 2308 Pahounui Drive
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: Fast Track
Project Manager: Kelton Otsuka
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: Hawaii Select Investments - 2308 Pahounui Drive
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Found: Lead and RRO in soil and lead in groundwater.
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: Not reported
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Not reported
Site Closure Type: No Further Action Letter - Restricted Use
Document Date: 05/27/2009
Document Number: 2009-346-KO
Document Subject: No Further Action with Institutional Controls Determination at Hawaii Select Investments - 2308 Pahounui Drive
Project Manager: Kelton Otsuka
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S108008765 **DIST/DIR:** 0.544 East **ELEVATION:** 3 **MAP ID:** 57

NAME: CITIZENS ENERGY SERVICES PIER 38 **Rev:** 05/06/2016

ADDRESS: NIMITZ HWY
HONOLULU, HI

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Honolulu Harbor Pier 38
Island: Oahu
Environmental Interest: Citizens Energy Services Pier 38
HID Number: Not reported
Facility Registry Identifier: 110013779205
Lead Agency: HEER
Program: State
Project Manager: Anna Fernandez
Hazard Priority: Low
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: Citizens Energy Services Pier 38
HID Number: Not reported
Facility Registry Identifier: 110013779205
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: Low
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: Methane in soil gas, metals PAHs in soil.
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: Provide for proper abandonment of soil borings and wells.
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Anna Fernandez
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S110061241 **DIST/DIR:** 0.550 North **ELEVATION:** 3 **MAP ID:** L58

NAME: 180 SAND ISLAND ACCESS RD **Rev:** 05/06/2016

ADDRESS: 180 SAND ISLAND ACCESS RD
HONOLULU, HI

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: 180 Sand Island Access Rd
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Cal Miyahara
Hazard Priority: Medium
Potential Hazards And Controls: Hazard Present
Island: Oahu
SDAR Environmental Interest Name: 180 Sand Island Access Rd
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: Hazard Present
Priority: Medium
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: Lead present in the soil at concentrations above HDOH EAL.
Petroleum contamination found in soil near southwest boundary.
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Sand Island Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Cal Miyahara
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S110061242 **DIST/DIR:** 0.571 North **ELEVATION:** 3 **MAP ID:** L59

NAME: 2135 AUIKI ST **Rev:** 05/06/2016

ADDRESS: 2135 AUIKI ST
HONOLULU, HI

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: 2135 Auiki St
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Cal Miyahara
Hazard Priority: Medium
Potential Hazards And Controls: Hazard Present
Island: Oahu
SDAR Environmental Interest Name: 2135 Auiki St
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: Hazard Present
Priority: Medium
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: Arsenic, barium, cadmium, lead, TPH diesel and oil, and PCB in soil above HDOH Interim Final EAL. PCB in groundwater above HDOH Interim Final EAL from the northwest area of the site.
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Sand Island Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Cal Miyahara
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S110061244 **DIST/DIR:** 0.610 NNW **ELEVATION:** 3 **MAP ID:** 60

NAME: 2250 PAHOUNUI DRIVE **Rev:** 05/06/2016

ADDRESS: 2250 PAHOUNUI DR
HONOLULU, HI

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: 2250 Pahounui Drive
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Cal Miyahara
Hazard Priority: Medium
Potential Hazards And Controls: Hazard Present
Island: Oahu
SDAR Environmental Interest Name: 2250 Pahounui Drive
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: Hazard Present
Priority: Medium
Assessment: Assessment Ongoing
Response: Not reported
Nature of Contamination: Found: Arsenic, barium, cadmium, and lead in soil above HDOH Interim Final EAL. Petroleum odor in soil and groundwater in the northern portion of the site near Stoddard UST.
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Sand Island Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Cal Miyahara
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S113230429 **DIST/DIR:** 0.625 NNE **ELEVATION:** 10 **MAP ID:** M61

NAME: 1950 HOMERULE STREET **Rev:** 05/06/2016

ADDRESS: 1950 HOMERULE ST
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: 1950 Homerule Street
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Eric Sadoyama
Hazard Priority: Low
Potential Hazards And Controls: No Hazard
Island: Oahu
SDAR Environmental Interest Name: 1950 Homerule Street
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: No Hazard
Priority: Low
Assessment: Response Not Necessary
Response: Not reported
Nature of Contamination: Found: PAHs
Nature of Residual Contamination: Not reported
Use Restrictions: No Hazard Present For Unrestricted Residential Use
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: No Action Letter
Document Date: 10/19/2012
Document Number: 2012-587-ES
Document Subject: Review of Limited Phase II ESA, 1950 Homerule St, Honolulu HI 96819 (revised Oct 2012)
Project Manager: Eric Sadoyama
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S111677154 **DIST/DIR:** 0.632 ENE **ELEVATION:** 3 **MAP ID:** 62

NAME: DOMESTIC COMMERCIAL FISHING VILLAGE **Rev:** 05/06/2016

ADDRESS: 1133 N NIMITZ HWY
HONOLULU, HI 96817

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Honolulu Harbor Pier 36-38
Island: Oahu
Environmental Interest: Domestic Commercial Fishing Village
HID Number: Not reported
Facility Registry Identifier: 110013782344
Lead Agency: HEER
Program: State
Project Manager: Steve Mow
Hazard Priority: Low
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: Domestic Commercial Fishing Village
HID Number: Not reported
Facility Registry Identifier: 110013782344
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: Low
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: Methane in soil gas
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: Limit Further Land Use - Site is restricted to industrial use only
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Steve Mow
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S108009312 **DIST/DIR:** 0.633 ENE **ELEVATION:** 3 **MAP ID:** 63

NAME: YOUNG BROTHERS, LTD. PIERS 39, 40 **Rev:** 05/06/2016

ADDRESS: 1331 N NIMITZ HWY
HONOLULU, HI 96817

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Honolulu Harbor Pier 39/40 at Waiakamilo Rd
Island: Oahu
Environmental Interest: Young Brothers, Ltd. Piers 39, 40
HID Number: Not reported
Facility Registry Identifier: 110013774521
Lead Agency: HEER
Program: State
Project Manager: Unassigned
Hazard Priority: Low
Potential Hazards And Controls: Hazard Undetermined
Island: Oahu
SDAR Environmental Interest Name: Young Brothers, Ltd. Piers 39, 40
HID Number: Not reported
Facility Registry Identifier: 110013774521
Lead Agency: HEER
Potential Hazard And Controls: Hazard Undetermined
Priority: Low
Assessment: Assessment Ongoing
Response: Not reported
Nature of Contamination: Not reported
Nature of Residual Contamination: Not reported
Use Restrictions: Undetermined
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Kapalama Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Unassigned
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S110061243 **DIST/DIR:** 0.643 North **ELEVATION:** 3 **MAP ID:** 64

NAME: 218 MOHONUA PLACE **Rev:** 05/06/2016

ADDRESS: 218 MOHONUA PL
HONOLULU, HI

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: 218 Mohonua Place
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Cal Miyahara
Hazard Priority: Medium
Potential Hazards And Controls: Hazard Present
Island: Oahu
SDAR Environmental Interest Name: 218 Mohonua Place
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: Hazard Present
Priority: Medium
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: Arsenic, cadmium, lead, mercury, and TPH diesel and oil in soil above HDOH Interim Final EAL. Lead in groundwater above HDOH Interim Final EAL in a temp well on the southwest-central portion of the site. Petroleum impacted soil in western portion.
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Sand Island Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Cal Miyahara
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: U001235221 **DIST/DIR:** 0.643 North **ELEVATION:** 3 **MAP ID:** 65

NAME: HAWAIIAN BITUMULS & PAVING **Rev:** 05/06/2016

ADDRESS: 248 SAND ISLAND ACCESS RD
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Hawaiian Bitumuls Paving & Precast Company-Sand Island Access Road
HID Number: HID006926919
Facility Registry Identifier: 110005284101
Lead Agency: HEER
Program: State
Project Manager: Laura Young
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: Hawaiian Bitumuls Paving & Precast Company-Sand Island Access Road
HID Number: HID006926919
Facility Registry Identifier: 110005284101
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Found: Petroleum in soil and groundwater.
Nature of Residual Contamination: Petroleum in soil and groundwater
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Prohibit Excavation
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Not reported
Site Closure Type: No Further Action Letter - Restricted Use
Document Date: 01/28/2000
Document Number: 2000-044-MN
Document Subject: NFA letter for 248 Sand Island Access Rd
Project Manager: Laura Young
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S110061865 **DIST/DIR:** 0.670 NNE **ELEVATION:** 11 **MAP ID:** M66

NAME: YUE-FUNG KWAN CONSTRUCTION SITE **Rev:** 05/06/2016

ADDRESS: 2004-2008 REPUBLICAN ST
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: 822 Kawaiahao Street
Island: Oahu
Environmental Interest: Yue-Fung Kwan Construction Site
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Kelton Otsuka
Hazard Priority: NFA
Potential Hazards And Controls: No Hazard
Island: Oahu
SDAR Environmental Interest Name: Yue-Fung Kwan Construction Site
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: No Hazard
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Found: Bunker Fuel Oil in Soil.
Nature of Residual Contamination: Not reported
Use Restrictions: No Hazard Present for Unrestricted Residential Use
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: No Further Action Letter - Unrestricted Residential Use
Document Date: 06/20/2008
Document Number: 2008-414-KO
Document Subject: Underground Storage Tank Closure Report, 2004 & 2008 Republican St, Honolulu HI 96813
Project Manager: Kelton Otsuka
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: 1006819073 **DIST/DIR:** 0.688 NNE **ELEVATION:** 13 **MAP ID:** 67

NAME: PACIFIC POULTRY **Rev:** 05/06/2016

ADDRESS: 1804 KANAKANUI ST
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Pacific Poultry
HID Number: Not reported
Facility Registry Identifier: 110013768397
Lead Agency: HEER
Program: State
Project Manager: Mark Sutterfield
Hazard Priority: NFA
Potential Hazards And Controls: No Hazard
Island: Oahu
SDAR Environmental Interest Name: Pacific Poultry
HID Number: Not reported
Facility Registry Identifier: 110013768397
Lead Agency: HEER
Potential Hazard And Controls: No Hazard
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Found: Diesel.
Nature of Residual Contamination: Petroleum contaminated soil
Use Restrictions: No Hazard Present for Unrestricted Residential Use
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: Letter of Completion - Unrestricted Residential Use
Document Date: 12/06/2004
Document Number: 2004-519-MS
Document Subject: NFA for diesel release from UST
Project Manager: Mark Sutterfield
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S106815169 **DIST/DIR:** 0.692 ENE **ELEVATION:** 3 **MAP ID:** 68

NAME: 1305 HART STREET **Rev:** 05/06/2016

ADDRESS: 1305 HART ST
HONOLULU, HI 96814

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: 1305 Hart St, 1301 and 1321 also?
Island: Oahu
Environmental Interest: 1305 Hart Street
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Mark Sutterfield
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: 1305 Hart Street
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Not reported
Nature of Residual Contamination: Lead in soil
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Not reported
Site Closure Type: No Further Action Letter - Restricted Use
Document Date: 12/16/2004
Document Number: 2004-539-MS
Document Subject: NFA 1305 Hart St Lead in surface below Tier I based on 95% UCL
Project Manager: Mark Sutterfield
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S107769133 **DIST/DIR:** 0.712 SE **ELEVATION:** 3 **MAP ID:** 69

NAME: SAND ISLAND WWTP **Rev:** 05/06/2016

ADDRESS: 1350 SAND ISLAND PKWY
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Sand Island WWTP
HID Number: Not reported
Facility Registry Identifier: 110005726802
Lead Agency: HEER
Program: State
Project Manager: Cal Miyahara
Hazard Priority: Low
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: Sand Island WWTP
HID Number: Not reported
Facility Registry Identifier: 110005726802
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: Low
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: PCBs in soil
Nature of Residual Contamination: PCBs in soil below TSCA levels.
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: The Site is limited to commercial use.
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Honolulu Harbor Sand Island Unit
Site Closure Type: No Further Action Letter - Restricted Use
Document Date: 10/06/2006
Document Number: 2006-629-CAC
Document Subject: Review of the Final Site Investigation Report, Sand Island Wastewater Treatment Plant, Honolulu HI, Jul 2005
Project Manager: Cal Miyahara
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Organization: Not reported
Supplemental Location: Sand Island Waste Water Treatment Plant (WWTP)
Island: Oahu
Environmental Interest: Mokuone Electrical Substation
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: Not reported
Program: State

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S107769133 **DIST/DIR:** 0.712 SE **ELEVATION:** 3 **MAP ID:** 69

NAME: SAND ISLAND WWTP **Rev:** 05/06/2016

ADDRESS: 1350 SAND ISLAND PKWY
HONOLULU, HI 96819

SOURCE: HI Department of Health

Project Manager: Diane England
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: Mokuone Electrical Substation
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: Not reported
Potential Hazard And Controls: Hazard Managed With Controls
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Found: Lead and petroleum contaminated soils.
Nature of Residual Contamination: Lead and petroleum contaminated soils
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: SOIL: Restricted Use - Maintenance of a cap over lead and petroleum contaminated soils. GROUNDWATER: Unrestricted Use
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Honolulu Harbor Sand Island Unit
Site Closure Type: No Further Action Letter - Restricted Use
Document Date: 11/13/2006
Document Number: 2006-697-DE
Document Subject: No Further Action Determination for Soil Contamination at 1350 Sand Island Pkwy, Honolulu HI 96819
Project Manager: Diane England
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Towco - Sand Island
HID Number: HID984468645
Facility Registry Identifier: 110013773764
Lead Agency: HEER
Program: State
Project Manager: Unassigned
Hazard Priority: Low
Potential Hazards And Controls: Hazard Undetermined
Island: Oahu
SDAR Environmental Interest Name: Towco - Sand Island
HID Number: HID984468645
Facility Registry Identifier: 110013773764
Lead Agency: HEER
Potential Hazard And Controls: Hazard Undetermined

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S107769133 **DIST/DIR:** 0.712 SE **ELEVATION:** 3 **MAP ID:** 69

NAME: SAND ISLAND WWTP **Rev:** 05/06/2016

ADDRESS: 1350 SAND ISLAND PKWY
HONOLULU, HI 96819

SOURCE: HI Department of Health

Priority: Low
Assessment: Assessment Ongoing
Response: Not reported
Nature of Contamination: Not reported
Nature of Residual Contamination: Not reported
Use Restrictions: Undetermined
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Sand Island Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Unassigned
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S108008763 **DIST/DIR:** 0.734 East **ELEVATION:** 3 **MAP ID:** N70

NAME: CHEVRON KAPALAMA TERMINAL **Rev:** 05/06/2016

ADDRESS: 1105 N NIMITZ HWY
HONOLULU, HI 96817

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Honolulu Harbor Pier 36
Island: Oahu
Environmental Interest: Chevron Kapalama Northeast Parcel
HID Number: Not reported
Facility Registry Identifier: 110013779731
Lead Agency: HEER
Program: State
Project Manager: Jordan Nakayama
Hazard Priority: Medium
Potential Hazards And Controls: Hazard Present
Island: Oahu
SDAR Environmental Interest Name: Chevron Kapalama Northeast Parcel
HID Number: Not reported
Facility Registry Identifier: 110013779731
Lead Agency: HEER
Potential Hazard And Controls: Hazard Present
Priority: Medium
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: Subsurface petroleum contamination in soil and groundwater
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Jordan Nakayama
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Organization: Not reported
Supplemental Location: Kapalama
Island: Oahu
Environmental Interest: Chevron Kapalama Northwest Parcel
HID Number: Not reported
Facility Registry Identifier: 110013779722
Lead Agency: HEER
Program: State
Project Manager: Jordan Nakayama

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S108008763 **DIST/DIR:** 0.734 East **ELEVATION:** 3 **MAP ID:** N70

NAME: CHEVRON KAPALAMA TERMINAL **Rev:** 05/06/2016

ADDRESS: 1105 N NIMITZ HWY
HONOLULU, HI 96817

SOURCE: HI Department of Health

Hazard Priority: Low
Potential Hazards And Controls: Hazard Present
Island: Oahu
SDAR Environmental Interest Name: Chevron Kapalama Northwest Parcel
HID Number: Not reported
Facility Registry Identifier: 110013779722
Lead Agency: HEER
Potential Hazard And Controls: Hazard Present
Priority: Low
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: Additional assessment for Petroleum Products in Soil underway. Ongoing GW monitoring for this site for Petroleum. No contaminants in groundwater above EALs in 2008.
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Jordan Nakayama
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Organization: Not reported
Supplemental Location: Honolulu Harbor Pier 37
Island: Oahu
Environmental Interest: Chevron Kapalama Southwest Parcel
HID Number: Not reported
Facility Registry Identifier: 110013779713
Lead Agency: HEER
Program: State
Project Manager: Jordan Nakayama
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: Chevron Kapalama Southwest Parcel
HID Number: Not reported
Facility Registry Identifier: 110013779713
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: NFA

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S108008763 **DIST/DIR:** 0.734 East **ELEVATION:** 3 **MAP ID:** N70

NAME: CHEVRON KAPALAMA TERMINAL **Rev:** 05/06/2016

ADDRESS: 1105 N NIMITZ HWY
HONOLULU, HI 96817

SOURCE: HI Department of Health

Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Found: Petroleum in soil and groundwater
Nature of Residual Contamination: Most of nonhazardous oily pollution was cleaned up and remaining contaminants do not pose a threat to human health or the environment during the proposed future use of the property - NFA ltr Chevron2-Lau dated August 26, 1993
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Limit Further Land Use - Site is restricted to industrial use only
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: No Further Action Letter - Restricted Use
Document Date: 08/26/1993
Document Number: 014-
Document Subject: Chevron Oil Company's Former Kapalama Fuel Terminal, Southwest Parcel, Pier 37, Honolulu
Project Manager: Jordan Nakayama
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Chevron Kapalama Terminal
HID Number: Not reported
Facility Registry Identifier: 110005730842
Lead Agency: HEER
Program: State
Project Manager: Jordan Nakayama
Hazard Priority: Medium
Potential Hazards And Controls: Hazard Present
Island: Oahu
SDAR Environmental Interest Name: Chevron Kapalama Terminal
HID Number: Not reported
Facility Registry Identifier: 110005730842
Lead Agency: HEER
Potential Hazard And Controls: Hazard Present
Priority: Medium
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: Subsurface petroleum contamination in soil and groundwater
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S108008763 **DIST/DIR:** 0.734 East **ELEVATION:** 3 **MAP ID:** N70

NAME: CHEVRON KAPALAMA TERMINAL **Rev:** 05/06/2016

ADDRESS: 1105 N NIMITZ HWY
HONOLULU, HI 96817

SOURCE: HI Department of Health

Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Jordan Nakayama
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: U003154453 **DIST/DIR:** 0.739 East **ELEVATION:** 3 **MAP ID:** N71

NAME: HART STREET WWPS **Rev:** 05/06/2016

ADDRESS: 1031 N NIMITZ HWY
HONOLULU, HI 96817

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Nimitz Highway Relief Sewer
HID Number: Not reported
Facility Registry Identifier: 110013788678
Lead Agency: HEER
Program: State
Project Manager: Steve Mow
Hazard Priority: Low
Potential Hazards And Controls: Hazard Present
Island: Oahu
SDAR Environmental Interest Name: Nimitz Highway Relief Sewer
HID Number: Not reported
Facility Registry Identifier: 110013788678
Lead Agency: HEER
Potential Hazard And Controls: Hazard Present
Priority: Low
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: Subsurface petroleum contamination in soil and groundwater
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Steve Mow
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S106818797 **DIST/DIR:** 0.750 North **ELEVATION:** 3 **MAP ID:** O72

NAME: LONGS DRUG STORES WAREHOUSE **Rev:** 05/06/2016

ADDRESS: 2270 HOONEE PL
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Longs Drug Stores Warehouse
HID Number: Not reported
Facility Registry Identifier: 110013771203
Lead Agency: HEER
Program: State
Project Manager: Eric Sadoyama
Hazard Priority: Low
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: Longs Drug Stores Warehouse
HID Number: Not reported
Facility Registry Identifier: 110013771203
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: Low
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Found: Petroleum in soil and groundwater
Nature of Residual Contamination: Petroleum in soil and groundwater.
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: Prohibit Excavation
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Not reported
Site Closure Type: No Further Action Letter - Restricted Use
Document Date: 01/30/2014
Document Number: 2014-055-ES
Document Subject: No Further Action with Institutional Controls Determination for Longs Drug Stores Warehouse
Project Manager: Eric Sadoyama
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: 1006818946 **DIST/DIR:** 0.751 East **ELEVATION:** 3 **MAP ID:** N73

NAME: MCCABE, HAMILTON, & RENNY COMPANY, LTD **Rev:** 05/06/2016

ADDRESS: 1130 N NIMITZ HWY
HONOLULU, HI 96817

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Suite A265
Island: Oahu
Environmental Interest: McCabe, Hamilton, & Renny Company, Ltd.
HID Number: Not reported
Facility Registry Identifier: 110013767030
Lead Agency: HEER
Program: State
Project Manager: Steve Mow
Hazard Priority: Low
Potential Hazards And Controls: Hazard Undetermined
Island: Oahu
SDAR Environmental Interest Name: McCabe, Hamilton, & Renny Company, Ltd.
HID Number: Not reported
Facility Registry Identifier: 110013767030
Lead Agency: HEER
Potential Hazard And Controls: Hazard Undetermined
Priority: Low
Assessment: Assessment Ongoing
Response: Not reported
Nature of Contamination: Found: Subsurface petroleum in soil and groundwater
Nature of Residual Contamination: Not reported
Use Restrictions: Undetermined
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Steve Mow
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S106817210 **DIST/DIR:** 0.758 East **ELEVATION:** 3 **MAP ID:** N74

NAME: GTE HAWAIIAN TEL - CONTAMINATED SOIL **Rev:** 05/06/2016

ADDRESS: ALAKAWA ST & NIMITZ HWY
HONOLULU, HI 96817

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: GTE Hawaiian Tel - Contaminated Soil
HID Number: Not reported
Facility Registry Identifier: 110013789524
Lead Agency: HEER
Program: State
Project Manager: Anna Fernandez
Hazard Priority: Low
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: GTE Hawaiian Tel - Contaminated Soil
HID Number: Not reported
Facility Registry Identifier: 110013789524
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: Low
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: Subsurface petroleum in soil
Nature of Residual Contamination: PCS was discovered here when utility lines were installed. PCS remains there and will need to be managed if daylighted
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: Not reported
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: No Further Action Letter - Restricted Use
Document Date: 09/25/2007
Document Number: Not reported
Document Subject: Not reported
Project Manager: Anna Fernandez
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S106817380 **DIST/DIR:** 0.769 East **ELEVATION:** 3 **MAP ID:** P75

NAME: HAWAII STEVEDORES **Rev:** 05/06/2016

ADDRESS: 965 N NIMITZ HWY
HONOLULU, HI 96817

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Honolulu Harbor Pier 35
Island: Oahu
Environmental Interest: Chevron Pier 35 Pipeline Release
HID Number: Not reported
Facility Registry Identifier: 110013779278
Lead Agency: HEER
Program: State
Project Manager: Steve Mow
Hazard Priority: Low
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: Chevron Pier 35 Pipeline Release
HID Number: Not reported
Facility Registry Identifier: 110013779278
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: Low
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: Subsurface petroleum contamination in soil.
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: Prohibit Any Activity That May Disturb the Integrity of the Capping System and prohibit the disturbance of soil.
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Steve Mow
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Organization: Not reported
Supplemental Location: Honolulu Harbor
Island: Oahu
Environmental Interest: Hawaii Stevedores
HID Number: Not reported
Facility Registry Identifier: 110005725082
Lead Agency: HEER
Program: State

- Continued on next page -

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S106817380 **DIST/DIR:** 0.769 East **ELEVATION:** 3 **MAP ID:** P75

NAME: HAWAII STEVEDORES **Rev:** 05/06/2016

ADDRESS: 965 N NIMITZ HWY
HONOLULU, HI 96817

SOURCE: HI Department of Health

Project Manager: Steve Mow
Hazard Priority: Low
Potential Hazards And Controls: Hazard Present
Island: Oahu
SDAR Environmental Interest Name: Hawaii Stevedores
HID Number: Not reported
Facility Registry Identifier: 110005725082
Lead Agency: HEER
Potential Hazard And Controls: Hazard Present
Priority: Low
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: Subsurface petroleum contamination in soil and groundwater
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Steve Mow
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: U003154454 **DIST/DIR:** 0.781 East **ELEVATION:** 3 **MAP ID:** P76

NAME: CHEVRON HONOLULU TRANSPORTATION TERMINAL **Rev:** 05/06/2016

ADDRESS: 933 N NIMITZ HWY
HONOLULU, HI 96817

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Chevron Honolulu Transportation Terminal
HID Number: Not reported
Facility Registry Identifier: 110000486466
Lead Agency: HEER
Program: State
Project Manager: Iris van der Zander
Hazard Priority: Low
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: Chevron Honolulu Transportation Terminal
HID Number: Not reported
Facility Registry Identifier: 110000486466
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: Low
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: Subsurface petroleum contamination in soil.
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: Prohibit Any Activity That May Disturb the Integrity of the Capping System and prohibit disturbance of the soil.
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Iris van der Zander
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S106817239 **DIST/DIR:** 0.782 North **ELEVATION:** 3 **MAP ID:** O77

NAME: HAGADONE PRINTING COMPANY SAND ISLAND **Rev:** 05/06/2016

ADDRESS: 2278 HOONEE PL
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Hagadone Printing Company Sand Island
HID Number: Not reported
Facility Registry Identifier: 110013790139
Lead Agency: HEER
Program: State
Project Manager: Eric Sadoyama
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: Hagadone Printing Company Sand Island
HID Number: Not reported
Facility Registry Identifier: 110013790139
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Found: Petroleum in soil and groundwater.
Nature of Residual Contamination: Petroleum in soil and groundwater.
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Prohibit Excavation
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Not reported
Site Closure Type: No Further Action Letter - Restricted Use
Document Date: 03/16/2004
Document Number: 2004-099-ES
Document Subject: Former Hagadone Printing Company site, 2278 Hoonee Pl, Honolulu
Project Manager: Eric Sadoyama
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S106817180 **DIST/DIR:** 0.805 ENE **ELEVATION:** 10 **MAP ID:** Q78

NAME: GENERAL TIRE **Rev:** 05/06/2016

ADDRESS: 505 WAIAKAMILO RD
HONOLULU, HI 96817

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Former General Tire Petroleum Contamination
HID Number: Not reported
Facility Registry Identifier: 110005726884
Lead Agency: HEER
Program: State
Project Manager: Mark Sutterfield
Hazard Priority: NFA
Potential Hazards And Controls: No Hazard
Island: Oahu
SDAR Environmental Interest Name: Former General Tire Petroleum Contamination
HID Number: Not reported
Facility Registry Identifier: 110005726884
Lead Agency: HEER
Potential Hazard And Controls: No Hazard
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Not reported
Nature of Residual Contamination: Petroleum contaminated soil detected at concentrations below HDOH EALs
Use Restrictions: No Hazard Present for Unrestricted Residential Use
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: No Further Action Letter - Unrestricted Residential Use
Document Date: 01/28/2004
Document Number: 2004-033-MS
Document Subject: NFA for Former General Tire Location
Project Manager: Mark Sutterfield
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S106821137 **DIST/DIR:** 0.814 East **ELEVATION:** 3 **MAP ID:** 79

NAME: WEYERHAEUSER **Rev:** 05/06/2016

ADDRESS: 900 N NIMITZ HWY
HONOLULU, HI 96817

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Weyerhaeuser
HID Number: Not reported
Facility Registry Identifier: 110001760390
Lead Agency: HEER
Program: State
Project Manager: Steve Mow
Hazard Priority: Low
Potential Hazards And Controls: Hazard Present
Island: Oahu
SDAR Environmental Interest Name: Weyerhaeuser
HID Number: Not reported
Facility Registry Identifier: 110001760390
Lead Agency: HEER
Potential Hazard And Controls: Hazard Present
Priority: Low
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: Subsurface petroleum contamination in soil and groundwater
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Steve Mow
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S118422779 **DIST/DIR:** 0.837 ENE **ELEVATION:** 10 **MAP ID:** Q80

NAME: 1385 COLBURN STREET **Rev:** 05/06/2016

ADDRESS: 1385 COLBURN ST
HONOLULU, HI

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: 1385 Colburn Street
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Paul Chong
Hazard Priority: Low
Potential Hazards And Controls: Hazard Undetermined
Island: Oahu
SDAR Environmental Interest Name: 1385 Colburn Street
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: Hazard Undetermined
Priority: Low
Assessment: Assessment Ongoing
Response: Not reported
Nature of Contamination: Not reported
Nature of Residual Contamination: Not reported
Use Restrictions: Undetermined
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Paul Chong
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S108859941 **DIST/DIR:** 0.841 East **ELEVATION:** 3 **MAP ID:** R81

NAME: 861-869 NORTH NIMITZ HIGHWAY **Rev:** 05/06/2016

ADDRESS: 861-869 N NIMITZ HWY
HONOLULU, HI 96817

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Hakim Properties, Inc.
HID Number: Not reported
Facility Registry Identifier: 110013790460
Lead Agency: HEER
Program: State
Project Manager: Eric Sadoyama
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: Hakim Properties, Inc.
HID Number: Not reported
Facility Registry Identifier: 110013790460
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Found: Petroleum and related constituents
Nature of Residual Contamination: Some conatminants remain just above Tier 1 levels including, ethylbenzene in soil near one UST removal and acenapthene and fluoranthense in groundwater near hydraulic lift removal site, according to 1997 NFA ltr.
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: Limit Further Land Use - The concrete and asphalt cap must remain intact.
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: No Further Action Letter - Restricted Use
Document Date: 07/13/2005
Document Number: Not reported
Document Subject: Not reported
Project Manager: Eric Sadoyama
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: U001235311 **DIST/DIR:** 0.852 East **ELEVATION:** 3 **MAP ID:** R82

NAME: HAWAIIAN ELECTRIC COMPANY (HECO) - IWILEI TANK YARD **Rev:** 05/06/2016

ADDRESS: 855 N NIMITZ HWY
HONOLULU, HI 96818

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Hawaiian Electric Company (HECO) - Iwilei Tank Yard
HID Number: Not reported
Facility Registry Identifier: 110013791593
Lead Agency: HEER
Program: State
Project Manager: Steve Mow
Hazard Priority: Low
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: Hawaiian Electric Company (HECO) - Iwilei Tank Yard
HID Number: Not reported
Facility Registry Identifier: 110013791593
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: Low
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: Petroleum in soil and groundwater
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: Prohibit Any Activity That May Disturb the Integrity of the Capping System and prohibit disturbance of the soil.
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Steve Mow
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S115488694 **DIST/DIR:** 0.862 ESE **ELEVATION:** 3 **MAP ID:** S83

NAME: EQUILON ENTERPRISES LLC HONOLULU TERMINAL **Rev:** 05/06/2016

ADDRESS: 789 N NIMITZ HWY
HONOLULU, HI 96817

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Aloha Petroleum Honolulu Terminal
Island: Oahu
Environmental Interest: Equilon Enterprises LLC Honolulu Terminal
HID Number: Not reported
Facility Registry Identifier: 110000486475
Lead Agency: HEER
Program: State
Project Manager: Jordan Nakayama
Hazard Priority: Medium
Potential Hazards And Controls: Hazard Present
Island: Oahu
SDAR Environmental Interest Name: Equilon Enterprises LLC Honolulu Terminal
HID Number: Not reported
Facility Registry Identifier: 110000486475
Lead Agency: HEER
Potential Hazard And Controls: Hazard Present
Priority: Medium
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Not reported
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Jordan Nakayama
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S115488665 **DIST/DIR:** 0.867 SE **ELEVATION:** 3 **MAP ID:** 84

NAME: 1122 MAKEPONO STREET **Rev:** 05/06/2016

ADDRESS: 1122 MAKEPONO ST
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: 1122 Makepono Street
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Eric Sadoyama
Hazard Priority: NFA
Potential Hazards And Controls: No Hazard
Island: Oahu
SDAR Environmental Interest Name: 1122 Makepono Street
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: No Hazard
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Found: PCBs in soil
Nature of Residual Contamination: Not reported
Use Restrictions: No Hazard Present For Unrestricted Residential Use
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: No Further Action Letter - Unrestricted Residential Use
Document Date: 01/30/2014
Document Number: 2014-033-ES
Document Subject: No Further Action Determination for 1122 Makepono Street
Project Manager: Eric Sadoyama
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID:	S108009116	DIST/DIR:	0.884 East	ELEVATION:	3	MAP ID:	S85

NAME: PAULEY PETROLEUM **Rev:** 05/06/2016

ADDRESS: 795 N NIMITZ HWY
HONOLULU, HI 96817

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Honolulu Harbor Pier 32/33
Island: Oahu
Environmental Interest: Former Pauley Petroleum
HID Number: Not reported
Facility Registry Identifier: 110013773522
Lead Agency: HEER
Program: State
Project Manager: Clarence Callahan
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: Former Pauley Petroleum
HID Number: Not reported
Facility Registry Identifier: 110013773522
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: NFA
Assessment: Assessment Ongoing
Response: Not reported
Nature of Contamination: Found: NFA for pesticide storage but industrial waste and hydrocarbons still under investigation.
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: Prohibit Any Activity That May Disturb the Integrity of the Capping System and prohibit disturbance of the soil.
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: No Further Action Letter - Restricted Use
Document Date: 11/18/2005
Document Number: 2005-594-CAC
Document Subject: No Further Action Letter
Project Manager: Clarence Callahan
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S105887731 **DIST/DIR:** 0.904 East **ELEVATION:** 3 **MAP ID:** 86

NAME: HOME DEPOT **Rev:** 05/06/2016

ADDRESS: 421 ALAKAWA ST
HONOLULU, HI 96817

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Home Depot
HID Number: Not reported
Facility Registry Identifier: 110013785608
Lead Agency: HEER
Program: State
Project Manager: Mark Sutterfield
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: Home Depot
HID Number: Not reported
Facility Registry Identifier: 110013785608
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Found: Methane, BTEX, PAHs, and TPH in soil and groundwater.
Nature of Residual Contamination: Methane, BTEX, PAHs, and TPH in soil and groundwater.
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: Prohibit Any Activity That May Disturb the Integrity of the Monitoring System
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Letter of Completion - Restricted Use
Document Date: 09/03/1999
Document Number: Not reported
Document Subject: VRP LOC with Conditions
Project Manager: Mark Sutterfield
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S106816881 **DIST/DIR:** 0.911 NNE **ELEVATION:** 23 **MAP ID:** 87

NAME: DILLINGHAM BOULEVARD & MOKAUEA STREET **Rev:** 05/06/2016

ADDRESS: DILLINGHAM BLVD & MOKAUEA ST
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Dillingham and Mokauea
HID Number: Not reported
Facility Registry Identifier: 110013781372
Lead Agency: HEER
Program: State
Project Manager: Steve Mow
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: Dillingham and Mokauea
HID Number: Not reported
Facility Registry Identifier: 110013781372
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Found: Petroleum free product
Nature of Residual Contamination: No Contamination above HDOH EAL's
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: Not reported
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Not reported
Site Closure Type: No Further Action Letter - Restricted Use
Document Date: 05/11/2005
Document Number: 2005-255-SPM
Document Subject: No Further Action Required at Dillingham Blvd & Mokauea St
Project Manager: Steve Mow
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: U001235369 **DIST/DIR:** 0.912 ESE **ELEVATION:** 3 **MAP ID:** S88

NAME: CHEVRON HONOLULU TERMINAL MARINE **Rev:** 05/06/2016

ADDRESS: 777 N NIMITZ HWY
HONOLULU, HI 96817

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Chevron Honolulu Terminal Marine
HID Number: Not reported
Facility Registry Identifier: 110000486457
Lead Agency: HEER
Program: State
Project Manager: Steve Mow
Hazard Priority: Medium
Potential Hazards And Controls: Hazard Present
Island: Oahu
SDAR Environmental Interest Name: Chevron Honolulu Terminal Marine
HID Number: Not reported
Facility Registry Identifier: 110000486457
Lead Agency: HEER
Potential Hazard And Controls: Hazard Present
Priority: Medium
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: Subsurface petroleum contaminationin soil and groundwater
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Steve Mow
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S110061575 **DIST/DIR:** 0.932 ENE **ELEVATION:** 9 **MAP ID:** 89

NAME: KAMEHAMEHA SCHOOLS - 1336 DILLINGHAM BOULEVARD **Rev:** 05/06/2016

ADDRESS: 1336 DILLINGHAM BLVD
HONOLULU, HI 96813

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Kamehameha Schools - 1336 Dillingham Boulevard
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Steve Mow
Hazard Priority: Medium
Potential Hazards And Controls: Hazard Present
Island: Oahu
SDAR Environmental Interest Name: Kamehameha Schools - 1336 Dillingham Boulevard
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: Hazard Present
Priority: Medium
Assessment: Assessment Ongoing
Response: Response Ongoing
Nature of Contamination: Found: TCE in soil and groundwater
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Steve Mow
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S110061247 **DIST/DIR:** 0.938 East **ELEVATION:** 3 **MAP ID:** T90

NAME: 775 NORTH NIMITZ HIGHWAY **Rev:** 05/06/2016

ADDRESS: 775 N NIMITZ HWY
HONOLULU, HI

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: 775 North Nimitz Highway
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Steve Mow
Hazard Priority: Medium
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: 775 North Nimitz Highway
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: Medium
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Not reported
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: Not reported
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Steve Mow
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S108859910 **DIST/DIR:** 0.939 East **ELEVATION:** 3 **MAP ID:** 91

NAME: COSTCO GAS STATION **Rev:** 05/06/2016

ADDRESS: 520 ALAKAWA ST
HONOLULU, HI 96817

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Alakawa St & Dillingham Blvd
Island: Oahu
Environmental Interest: Costco Gas Station
HID Number: Not reported
Facility Registry Identifier: 110013779401
Lead Agency: HEER
Program: Voluntary Response Program
Project Manager: Mark Sutterfield
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: Costco Gas Station
HID Number: Not reported
Facility Registry Identifier: 110013779401
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Found: TPH-D,o BTEX free product in soil, groundwater and soil vapor
Nature of Residual Contamination: BTEX, PAHs, TPH free product in soil and groundwater.
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: Submit a soil management plan before subsurface construction. Also evaluate soil vapor intrusion for new above ground construction.
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Letter of Completion - Restricted Use
Document Date: 10/23/2006
Document Number: 2006-655-MS
Document Subject: Transmittal Memo for Final RAM Costco
Project Manager: Mark Sutterfield
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S110061246 **DIST/DIR:** 0.939 East **ELEVATION:** 3 **MAP ID:** T92

NAME: 755 N NIMITZ HWY **Rev:** 05/06/2016

ADDRESS: 755 N NIMITZ HWY
HONOLULU, HI

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Akamai Car Rental
Island: Oahu
Environmental Interest: 755 North Nimitz Highway
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Steve Mow
Hazard Priority: Medium
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: 755 North Nimitz Highway
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: Medium
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: petroleum in soil
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: Not reported
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Steve Mow
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: 1000167494 **DIST/DIR:** 0.958 East **ELEVATION:** 3 **MAP ID:** U93

NAME: HONOLULU TERMINAL TANK 4284 **Rev:** 05/06/2016

ADDRESS: 411 PACIFIC STREET
HONOLULU, HI 96817
HONOLULU

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: TOSCO Corporation-Honolulu Terminal #0282
HID Number: Not reported
Facility Registry Identifier: 110000495848
Lead Agency: HEER
Program: Voluntary Response Program
Project Manager: Jordan Nakayama
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: TOSCO Corporation-Honolulu Terminal #0282
HID Number: Not reported
Facility Registry Identifier: 110000495848
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: NFA
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: Petroleum in soil and groundwater
Nature of Residual Contamination: Petroleum in soils, EHMP implemented by Lowe's
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: Prohibit Any Activity That May Disturb the Integrity of the Capping or Monitoring System
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: No Further Action Letter - Restricted Use
Document Date: 10/08/2015
Document Number: 2015-574-JQN
Document Subject: No Further Action (NFA) with Institutional Controls.
Project Manager: Jordan Nakayama
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S117391422 **DIST/DIR:** 0.970 ENE **ELEVATION:** 3 **MAP ID:** 94

NAME: CLASSIC BOWL **Rev:** 05/06/2016

ADDRESS: 1190 DILLINGHAM BLVD
HONOLULU, HI

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Classic Bowl
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Jordan Nakayama
Hazard Priority: Medium
Potential Hazards And Controls: Hazard Present
Island: Oahu
SDAR Environmental Interest Name: Classic Bowl
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: Hazard Present
Priority: Medium
Assessment: Assessment Ongoing
Response: Not reported
Nature of Contamination: Found: Petroleum-impacted soil, groundwater, and soil gas.
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Jordan Nakayama
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S110277531 **DIST/DIR:** 0.970 East **ELEVATION:** 3 **MAP ID:** 95

NAME: BHP GASCO BENZENE SITE **Rev:** 05/06/2016

ADDRESS: 616 IWILEI RD
HONOLULU, HI 96817

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: BHP Gasco Benzene Site
HID Number: HID982392367
Facility Registry Identifier: 110013780499
Lead Agency: HEER
Program: State
Project Manager: Steve Mow
Hazard Priority: High
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: BHP Gasco Benzene Site
HID Number: HID982392367
Facility Registry Identifier: 110013780499
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: High
Assessment: Response Necessary
Response: Response Ongoing
Nature of Contamination: Found: Benzene
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Prohibit Any Activity That May Disturb the Integrity of the Monitoring System
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Steve Mow
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: 1000934769 **DIST/DIR:** 0.981 North **ELEVATION:** 7 **MAP ID:** 96

NAME: HAWAII DAIRY HOLDINGS, INC DBA FOREMOST DAIRIES **Rev:** 05/06/2016

ADDRESS: 2277 KAMEHAMEHA HWY
HONOLULU, HI 96819

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: House Foods, Hawaii (Foremost)
HID Number: Not reported
Facility Registry Identifier: 110002148747
Lead Agency: HEER
Program: Voluntary Response Program
Project Manager: Wendy Ray
Hazard Priority: Medium
Potential Hazards And Controls: No Hazard
Island: Oahu
SDAR Environmental Interest Name: House Foods, Hawaii (Foremost)
HID Number: Not reported
Facility Registry Identifier: 110002148747
Lead Agency: HEER
Potential Hazard And Controls: No Hazard
Priority: Medium
Assessment: Assessment Ongoing
Response: Response Ongoing
Nature of Contamination: Found: Lead/TPH/Heptachlor
Nature of Residual Contamination: Petroleum contaminated soil
Use Restrictions: No Hazard Present for Unrestricted Residential Use
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Not reported
Site Closure Type: No Further Action - Type Undetermined
Document Date: 08/25/2005
Document Number: Not reported
Document Subject: Not reported
Project Manager: Wendy Ray
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S110169069 **DIST/DIR:** 0.981 East **ELEVATION:** 3 **MAP ID:** U97

NAME: 356 PACIFIC STREET BWS TRENCHING SHEEN **Rev:** 05/06/2016

ADDRESS: 356 PACIFIC ST
HONOLULU, HI

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Chevron Tanker Truck Loading Rack (TTLR)
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Program: State
Project Manager: Jordan Nakayama
Hazard Priority: High
Potential Hazards And Controls: Hazard Undetermined
Island: Oahu
SDAR Environmental Interest Name: Chevron Tanker Truck Loading Rack (TTLR)
HID Number: Not reported
Facility Registry Identifier: Not reported
Lead Agency: HEER
Potential Hazard And Controls: Hazard Undetermined
Priority: High
Assessment: Assessment Ongoing
Response: Not reported
Nature of Contamination: Not reported
Nature of Residual Contamination: Not reported
Use Restrictions: Undetermined
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Jordan Nakayama
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: 1000436248 **DIST/DIR:** 0.982 East **ELEVATION:** 3 **MAP ID:** U98

NAME: BREWER ENVIRONMENTAL INDUSTRIES-PACIFIC STREET **Rev:** 05/06/2016

ADDRESS: 311 PACIFIC ST
HONOLULU, HI 96817

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Brewer Environmental Industries-Pacific Street
HID Number: HID059472357
Facility Registry Identifier: 110000903210
Lead Agency: HEER
Program: Voluntary Response Program
Project Manager: Jordan Nakayama
Hazard Priority: High
Potential Hazards And Controls: Hazard Present
Island: Oahu
SDAR Environmental Interest Name: Brewer Environmental Industries-Pacific Street
HID Number: HID059472357
Facility Registry Identifier: 110000903210
Lead Agency: HEER
Potential Hazard And Controls: Hazard Present
Priority: High
Assessment: Assessment Ongoing
Response: Not reported
Nature of Contamination: Found: Petroleum & PCS
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Jordan Nakayama
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: S106816192 **DIST/DIR:** 0.987 ESE **ELEVATION:** 3 **MAP ID:** T99

NAME: BHP PIER 29 **Rev:** 05/06/2016

ADDRESS: 739 N NIMITZ HWY
HONOLULU, HI 96817

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Honolulu Harbor Pier 29
Island: Oahu
Environmental Interest: BHP Pier 29
HID Number: Not reported
Facility Registry Identifier: 110013780462
Lead Agency: HEER
Program: State
Project Manager: Kelton Otsuka
Hazard Priority: NFA
Potential Hazards And Controls: Hazard Present
Island: Oahu
SDAR Environmental Interest Name: BHP Pier 29
HID Number: Not reported
Facility Registry Identifier: 110013780462
Lead Agency: HEER
Potential Hazard And Controls: Hazard Present
Priority: NFA
Assessment: Response Necessary
Response: Response Complete
Nature of Contamination: Presumed: Unknown
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Historic NFA - Restricted Use
Document Date: 06/23/1997
Document Number: 1997-227-01-BH
Document Subject: NFA letter for Pier 29
Project Manager: Kelton Otsuka
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: 1006820139 **DIST/DIR:** 0.987 ESE **ELEVATION:** 3 **MAP ID:** T100

NAME: ALOHA PETROLEUM TERMINAL **Rev:** 05/06/2016

ADDRESS: 739 N NIMITZ HWY
HONOLULU, HI 96817

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Aloha Petroleum Terminal
HID Number: Not reported
Facility Registry Identifier: 110005723404
Lead Agency: HEER
Program: State
Project Manager: Iris van der Zander
Hazard Priority: Medium
Potential Hazards And Controls: Hazard Managed With Controls
Island: Oahu
SDAR Environmental Interest Name: Aloha Petroleum Terminal
HID Number: Not reported
Facility Registry Identifier: 110005723404
Lead Agency: HEER
Potential Hazard And Controls: Hazard Managed With Controls
Priority: Medium
Assessment: Assessment Ongoing
Response: Response Ongoing
Nature of Contamination: Found: LNAPL, TPH in groundwater and soil; no soil data, but assumed in whole property
Nature of Residual Contamination: Not reported
Use Restrictions: Controls Required to Manage Contamination
Engineering Control: Engineering Control Required
Description of Restrictions: Not reported
Institutional Control: Government - Hawaii Dept. of Health Letter Issued
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Iris van der Zander
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Site Detail Report

Target Property: NA
HONOLULU, HI 96819

JOB: NA

SHWS

EDR ID: U003402808 **DIST/DIR:** 0.992 ESE **ELEVATION:** 3 **MAP ID:** T101

NAME: HAWAIIAN GRAIN CORPORATION **Rev:** 05/06/2016

ADDRESS: 701 N NIMITZ HWY
HONOLULU, HI 96817

SOURCE: HI Department of Health

SHWS:
Organization: Not reported
Supplemental Location: Not reported
Island: Oahu
Environmental Interest: Fred L. Waldron Feed Mill
HID Number: Not reported
Facility Registry Identifier: 110013789640
Lead Agency: HEER
Program: State
Project Manager: Anna Fernandez
Hazard Priority: Low
Potential Hazards And Controls: Hazard Undetermined
Island: Oahu
SDAR Environmental Interest Name: Fred L. Waldron Feed Mill
HID Number: Not reported
Facility Registry Identifier: 110013789640
Lead Agency: HEER
Potential Hazard And Controls: Hazard Undetermined
Priority: Low
Assessment: Assessment Ongoing
Response: Not reported
Nature of Contamination: Found: petroleum in soil and groundwater
Nature of Residual Contamination: Not reported
Use Restrictions: Undetermined
Engineering Control: Not reported
Description of Restrictions: Not reported
Institutional Control: Not reported
Within Designated Areawide Contamination: Honolulu Harbor Iwilei Unit
Site Closure Type: Not reported
Document Date: Not reported
Document Number: Not reported
Document Subject: Not reported
Project Manager: Anna Fernandez
Contact Information: (808) 586-4249 919 Ala Moana Blvd, Honolulu, HI 96814

Database Descriptions

NPL: NPL 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. NPL - National Priority List Proposed NPL - Proposed National Priority List Sites.

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

CERCLIS: SEMS SEMS (Superfund Enterprise Management System) tracks hazardous waste sites, potentially hazardous waste sites, and remedial activities performed in support of EPA's Superfund Program across the United States. The list was formerly know as CERCLIS, renamed to SEMS by the EPA in 2015. The list contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). This dataset also contains sites which are either proposed to or on the National Priorities List (NPL) and the sites which are in the screening and assessment phase for possible inclusion on the NPL. SEMS - Superfund Enterprise Management System

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

RCRA COR ACT: CORRACTS CORRACTS identifies hazardous waste handlers with RCRA corrective action activity. CORRACTS - Corrective Action Report

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

RCRA GEN: 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. RCRA-LQG - RCRA - Large Quantity Generators RCRA-SQG - RCRA - Small Quantity Generators. RCRA-CESQG - RCRA - Conditionally Exempt Small Quantity Generators.

Federal IC / EC: US ENG CONTROLS 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. US ENG CONTROLS - Engineering Controls Sites List US INST CONTROL - Sites with Institutional Controls.

Database Descriptions

ERNS: ERNS Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances. ERNS - Emergency Response Notification System

State/Tribal CERCLIS: SHWS 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). SHWS - Sites List

State/Tribal SWL: SWF/LF 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. SWF/LF - Permitted Landfills in the State of Hawaii

State/Tribal LTANKS: LUST 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. LUST - Leaking Underground Storage Tank Database INDIAN LUST R10 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R9 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R4 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R8 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R7 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R6 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R1 - Leaking Underground Storage Tanks on Indian Land. INDIAN LUST R5 - Leaking Underground Storage Tanks on Indian Land.

State/Tribal Tanks: UST 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. UST - Underground Storage Tank Database INDIAN UST R7 - Underground Storage Tanks on Indian Land. INDIAN UST R6 - Underground Storage Tanks on Indian Land. INDIAN UST R5 - Underground Storage Tanks on Indian Land. INDIAN UST R4 - Underground Storage Tanks on Indian Land. INDIAN UST R9 - Underground Storage Tanks on Indian Land. INDIAN UST R8 - Underground Storage Tanks on Indian Land. INDIAN UST R10 - Underground Storage Tanks on Indian Land. INDIAN UST R1 - Underground Storage Tanks on Indian Land.

State/Tribal IC / EC: ENG CONTROLS A listing of sites with engineering controls in place. ENG CONTROLS - Engineering Control Sites INST CONTROL - Sites with Institutional Controls.

State/Tribal VCP: VCP 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. VCP - Voluntary Response Program Sites

ST/Tribal Brownfields: BROWNFIELDS 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. BROWNFIELDS - Brownfields Sites

US Brownfields: US BROWNFIELDS Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs. US BROWNFIELDS - A Listing of Brownfields Sites

Other Haz Sites: US CDL 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. US CDL - Clandestine Drug Labs

Database Descriptions

Spills: HMIRS Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT. HMIRS - Hazardous Materials Information Reporting System SPILLS - Release Notifications. SPILLS 90 - SPILLS90 data from FirstSearch.

Other: RCRA NonGen / NLR 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. RCRA NonGen / NLR - RCRA - Non Generators / No Longer Regulated FEDLAND - Federal and Indian Lands. TSCA - Toxic Substances Control Act. TRIS - Toxic Chemical Release Inventory System. SSTS - Section 7 Tracking Systems. RAATS - RCRA Administrative Action Tracking System. PRP - Potentially Responsible Parties. PADS - PCB Activity Database System. ICIS - Integrated Compliance Information System. FTTS - FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act). FTTS INSP - FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act). MLTS - Material Licensing Tracking System. RADINFO - Radiation Information Database. BRS - Biennial Reporting System. INDIAN RESERV - Indian Reservations. US AIRS (AFS) - Aerometric Information Retrieval System Facility Subsystem (AFS). US AIRS MINOR - Air Facility System Data. FINDS - Facility Index System/Facility Registry System.

Database Sources

NPL: EPA

Updated Quarterly

NPL Delisted: EPA

Updated Quarterly

CERCLIS: EPA

Updated Quarterly

NFRAP: EPA

Updated Quarterly

RCRA COR ACT: EPA

Updated Quarterly

RCRA TSD: Environmental Protection Agency

Updated Quarterly

RCRA GEN: Environmental Protection Agency

Updated Quarterly

Federal IC / EC: Environmental Protection Agency

Varies

ERNS: National Response Center, United States Coast Guard

Updated Annually

State/Tribal CERCLIS: Department of Health

Updated Semi-Annually

State/Tribal SWL: Department of Health

Varies

State/Tribal LTANKS: Department of Health

Updated Semi-Annually

State/Tribal Tanks: Department of Health

Updated Semi-Annually

Database Sources

State/Tribal IC / EC: Department of Health

Varies

State/Tribal VCP: Department of Health

Varies

ST/Tribal Brownfields: Department of Health

Varies

US Brownfields: Environmental Protection Agency

Updated Semi-Annually

Other Haz Sites: Drug Enforcement Administration

Updated Quarterly

Spills: U.S. Department of Transportation

Updated Annually

Other: Environmental Protection Agency

Varies

Street Name Report for Streets near the Target Property

Target Property: NA
HONOLULU, HI 96819

JOB: NA

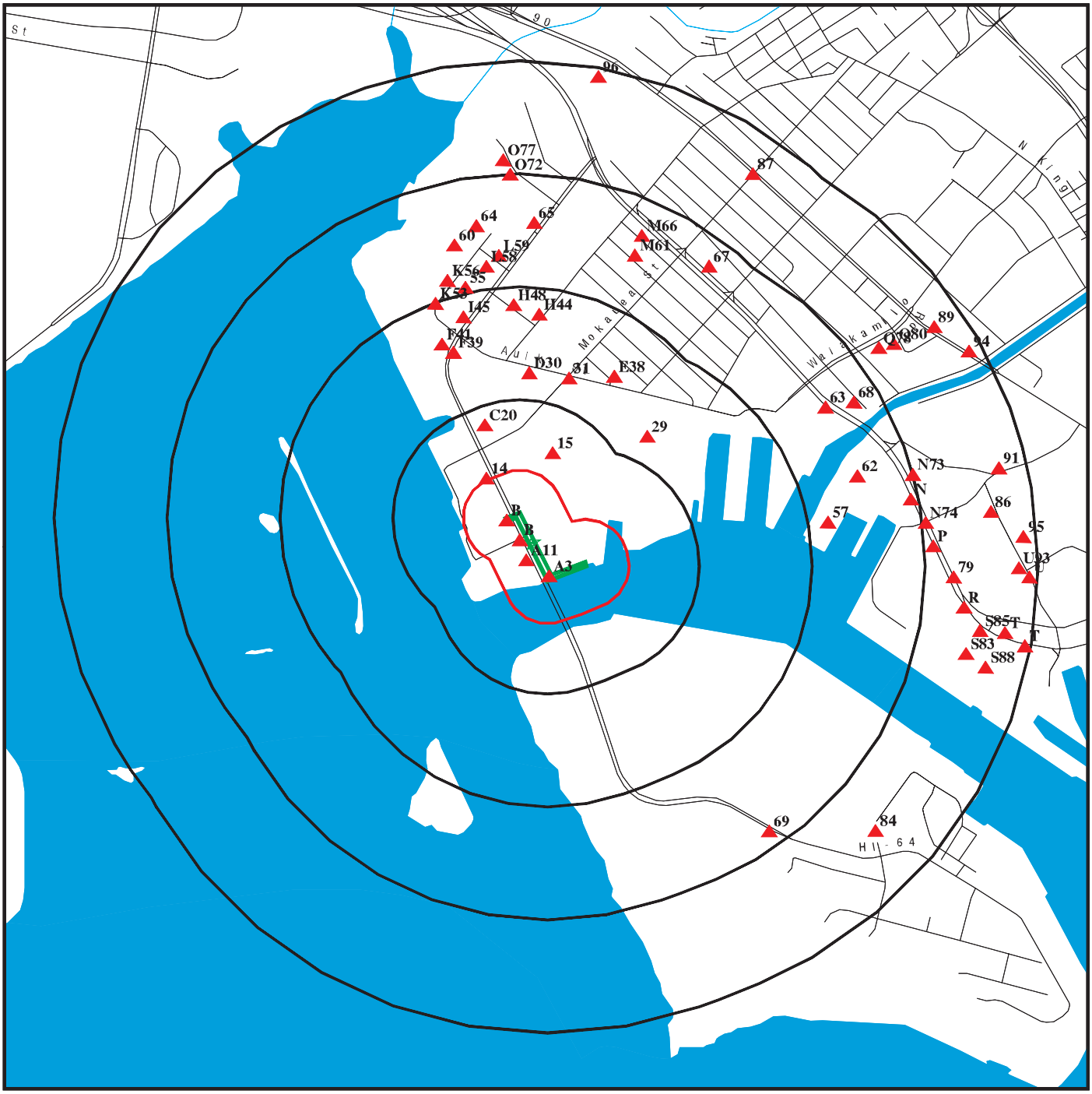
Street Name	Dist/Dir	Street Name	Dist/Dir
HI-64	0.01 WSW		
Keehi Marina	0.02 NW		
Road No 2	0.24 NNW		

Environmental FirstSearch

1.000 Mile Radius

ASTM MAP: NPL, RCRACOR, STATES Sites

NA HONOLULU, HI 96819



Black Rings Represent Qtr. Mile Radius; Red Ring Represents 500 ft. Radius

★ Target Property (Latitude: 21.316341 Longitude: 157.888772)

▲ Identified Sites

National Priority List Sites

Indian Reservations BIA

Copyright © 2016 EDR, Inc. © 2015 TomTom Rel. 2015.

Environmental FirstSearch

0.500 Mile Radius

ASTM MAP: CERCLIS, RCRATSD, LUST, SWL

NA HONOLULU, HI 96819

Black Rings Represent Qtr. Mile Radius; Red Ring Represents 500 ft. Radius

★ Target Property (Latitude: 21.316341 Longitude: 157.888772)

▲ Identified Sites

National Priority List Sites

Indian Reservations BIA

EDR Reference Code (EDR internal use only): 4811271.2s
Copyright © 2016 EDR, Inc. © 2015 TomTom Rel. 2015.
16-12-20.13:51:35.Tue

Environmental FirstSearch

0.25 Mile Radius

ASTM MAP: RCRAGEN, ERNS, UST, FED IC/EC, METH LABS

NA HONOLULU, HI 96819

Black Rings Represent Qtr. Mile Radius; Red Ring Represents 500 ft. Radius

★ Target Property (Latitude: 21.316341 Longitude: 157.888772)

▲ Identified Sites

National Priority List Sites

Indian Reservations BIA

EDR Reference Code (EDR internal use only): 4811271.2s
Copyright © 2016 EDR, Inc. © 2015 TomTom Rel. 2015.
16-12-20.13:51:41.Tue

Environmental FirstSearch

0.25 Mile Radius

Non ASTM Map, Spills, FINDS

NA HONOLULU, HI 96819

Black Rings Represent Qtr. Mile Radius; Red Ring Represents 500 ft. Radius

★ Target Property (Latitude: 21.316341 Longitude: 157.888772)

▲ Identified Sites

Sensitive Receptors

National Priority List Sites

Indian Reservations BIA

EDR Reference Code (EDR internal use only): 4811271.2s
Copyright © 2016 EDR, Inc. © 2015 TomTom Rel. 2015.
16-12-20.13:51:47.Tue

Site location Map

Topo: 0.75 Mile Radius

NA HONOLULU, HI 96819

Map Image Position: TP
Map Reference Code & Name: 5941635 Honolulu
Map State(s): HI
Version Date: 2013
Map Image Position: W
Map Reference Code & Name: 5941087 Pearl Harbor
Map State(s): HI
Version Date: 2013

APPENDIX B. Site Reconnaissance Photographs

Photograph 1. A Google Earth image of the west end of Honolulu Harbor and its vicinity. Sand Island bridge is visible in bottom left. The warehouses are no longer present (Dec. 2016).

Photograph 2. A view of the shoreline of Kalihi Channel. The former UH Marine Center is to the right, and Sand Island bridge is visible in the background (Dec. 21, 2016).

Photograph 3. A view of the area in between the shoreline and a building on the former UH Marine Center. The proposed fuel pipeline may be placed in this area (Dec. 21, 2016).

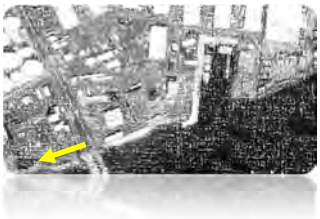
Photograph 4. A view of the fuel pipeline easement along Sand Island Access Road. New vehicles are parked on the former Kapalama Military Reservation parcel on the right (Dec. 21, 2016).

Photograph 5. A view of the fuel pipeline easement along Sand Island Access Road. The fence on the right separates the former UH Marine Center (Dec. 21, 2016).

Photograph 6. A view of the existing fuel pipeline easement, along Sand Island Access Road. The stretch of road elevation varies from equal gradient with the fuel farm to approx. 10 ft high in elevation (Dec. 21, 2016).

Photograph 7. A view of the fuel pipeline easement to the north, along Sand Island Access Road, before bridge (Dec. 21, 2016).

Photograph 8. A view from Sand Island Access Road toward Keehi Lagoon (Dec. 21, 2016).



Photograph 9. A view of the fuel tanks west of Sand Island Access Road. Tanks of the PAR Hawaii Refinery property is visible in the foreground of the HFFC property (Dec. 21, 2016).

Photograph 10. A view of the HFFC facility's south boundary. The paved access road is parcel 027 which connects to Sand Island Access Road, at the end of this road (Apr. 29, 2017).

Photograph 11. A view of Jet Fuel ASTs in the HFFC facility to northwest (Apr. 29, 2017).

Photograph 12. A view of Tank No. 19 which appeared to be drained. An opening is visible at the bottom right of this image (Apr. 29, 2017)

Photograph 13. A view of the adjoining property to the north. This narrow building was used by the former UH Marine Center for storage. The concrete walls are still intact, but damaged roofing was visible (Jan. 27, 2017).
(Refer to Photographs 22-24 for interior views.)

Photograph 14. A view of the area of the proposed fuel pipeline. The building was used by UH Marine Center for storage, lab, and offices. Sand Island bridge is visible in the background left (Dec. 21, 2016).
(Refer to Photographs 19-21 for interior views.)

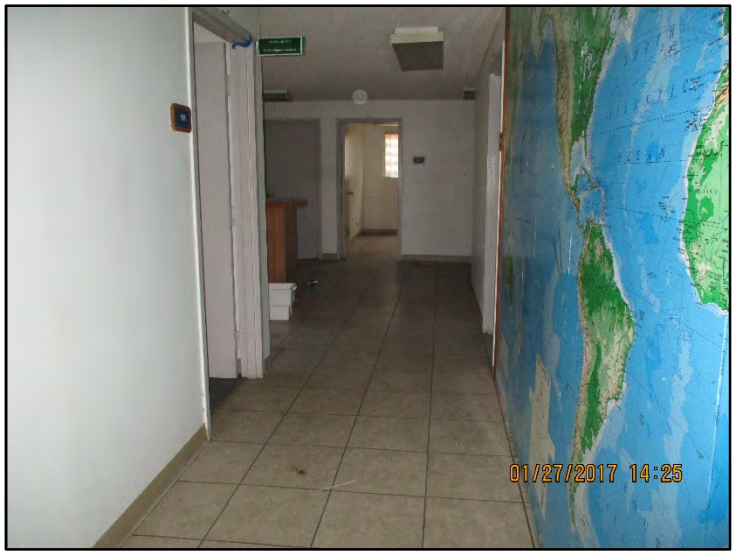
Photograph 15. A view of Machine Shop which was used by the former UH Marine Center for equipment maintenance (Dec. 21, 2016).
(Refer to Photographs 27-28 for interior views.)

Photograph 16. A view of the adjoining property to the northeast. A large tent used to house research equipment in this open area. Sewage pump house is visible under trees (Jan. 27, 2016).

Photograph 17. A view of the former sandblast/paint area to the east. The entire area was used for storage of unwanted materials and machines since the early 1990s (Jan. 27, 2016).

Photograph 18. Debris observed along harbor embankment of the former sandblast/paint area.

Source: E2 Project No 140017 (Photo #9, May 2, 2014).



Photograph 19. A view of the hallway in Main Office bldg. (Jan. 27, 2016).

Photograph 20. Large portion of the Main Office bldg. was used for storage (Jan. 27, 2016).

Photograph 21. A view of a damaged wall of the Main Office bldg. Unauthorized entry to the bldg. is assumed (Jan. 27, 2016).

Photograph 22. A view of one of many rooms in the narrow bldg. (Jan. 27, 2016).

Photograph 23. A view of a vacant storage room in the narrow bldg. (Jan. 27, 2016).

Photograph 24. A view of a vacant hazardous material storage room, west end of the narrow bldg. The sign was on the exterior of the entrance (Jan. 27, 2016).

Photograph 25. A view of a large storage space in the L-shape Warehouse. The ladder on the right is assumed to be left by unauthorized entry to the warehouse (Jan. 27, 2016).

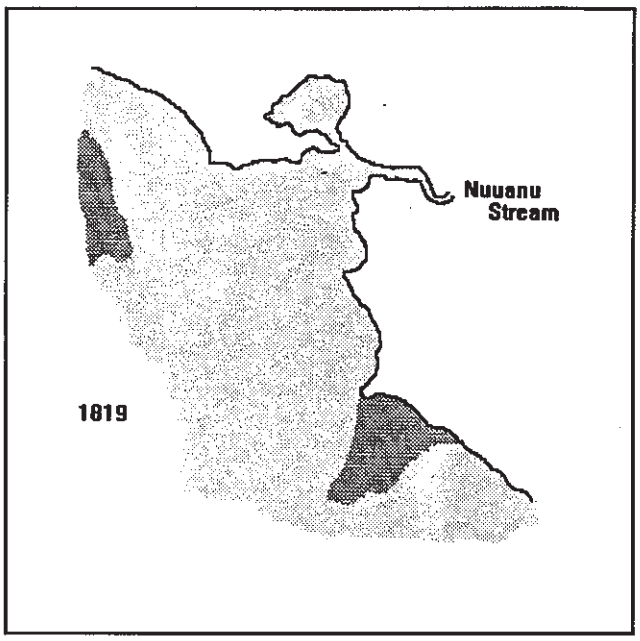
Photograph 26. A view of a hood in what appeared to be a lab in the L-shape Warehouse. On the hood, some posting indicated use of radioisotopes (Jan. 27, 2016).

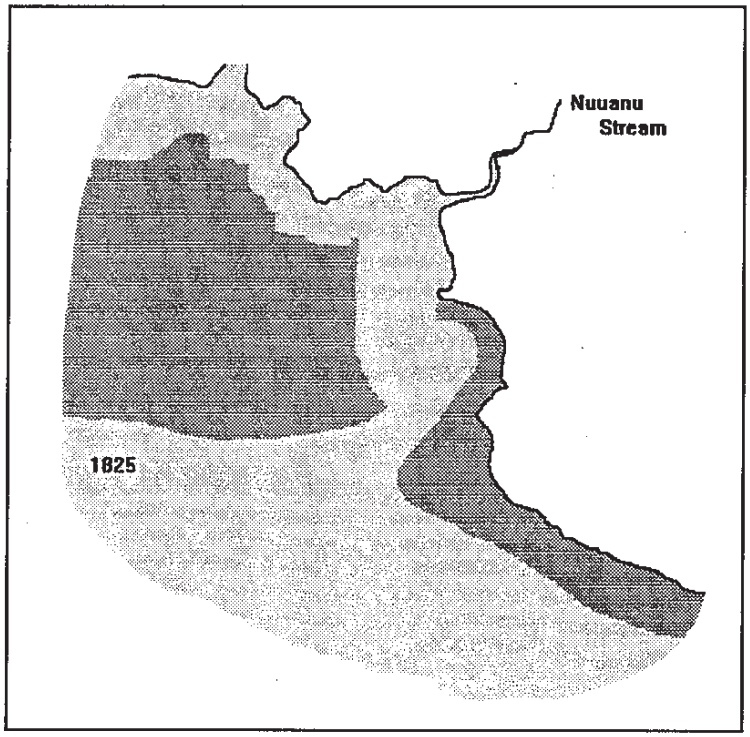
Photograph 27. A view of the interior of Machine Shop. (Jan. 27, 2016).

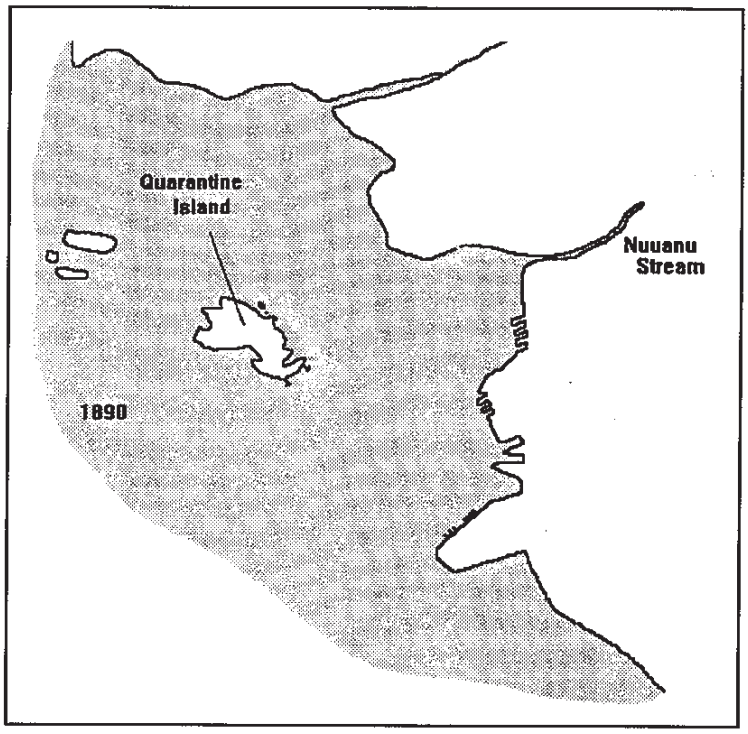
Photograph 28. A view of a utility corner of the Machine Shop. This corner appeared to have been vandalized based on the cut metal pipe. Stain on the concrete slab was observed (Jan. 27, 2016).

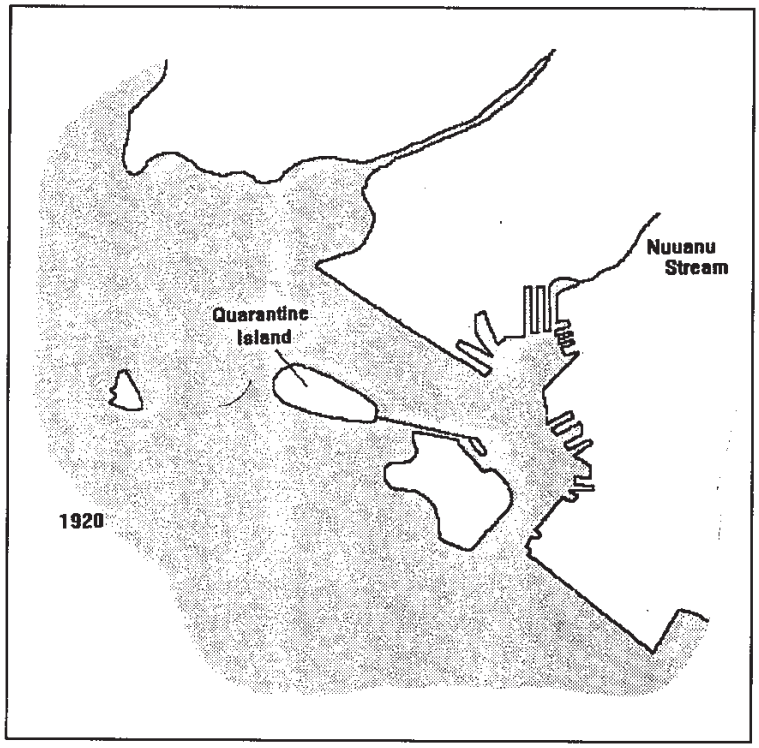
APPENDIX C. Additional Supporting Materials

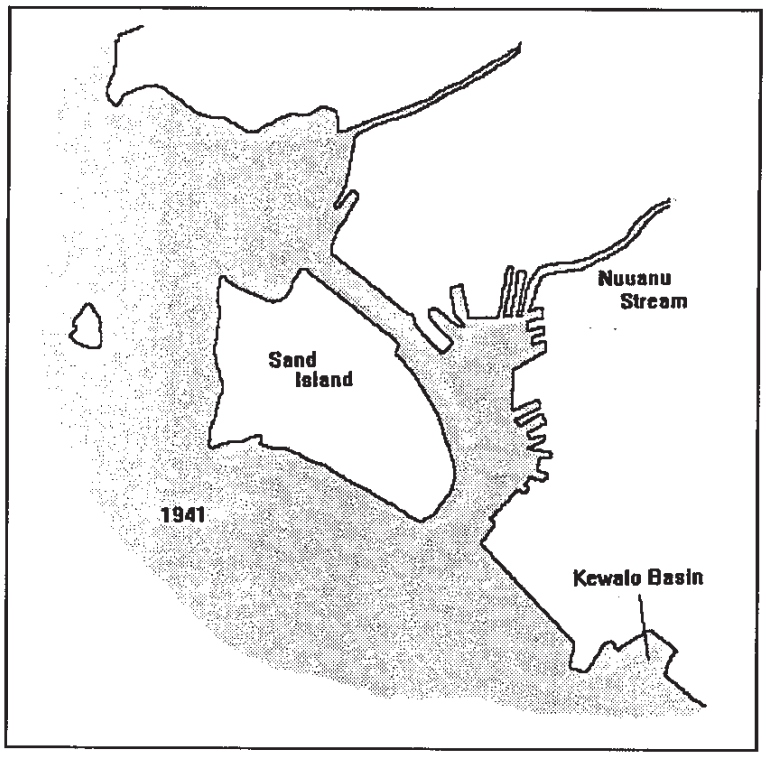
Honolulu Harbor 1819 to 1961

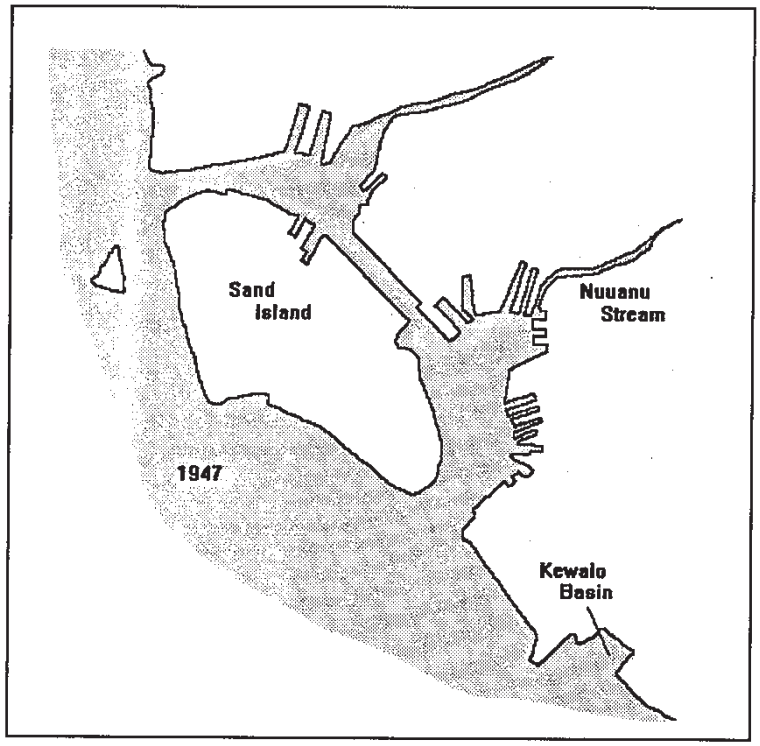

Nuuanu
Stream
1819

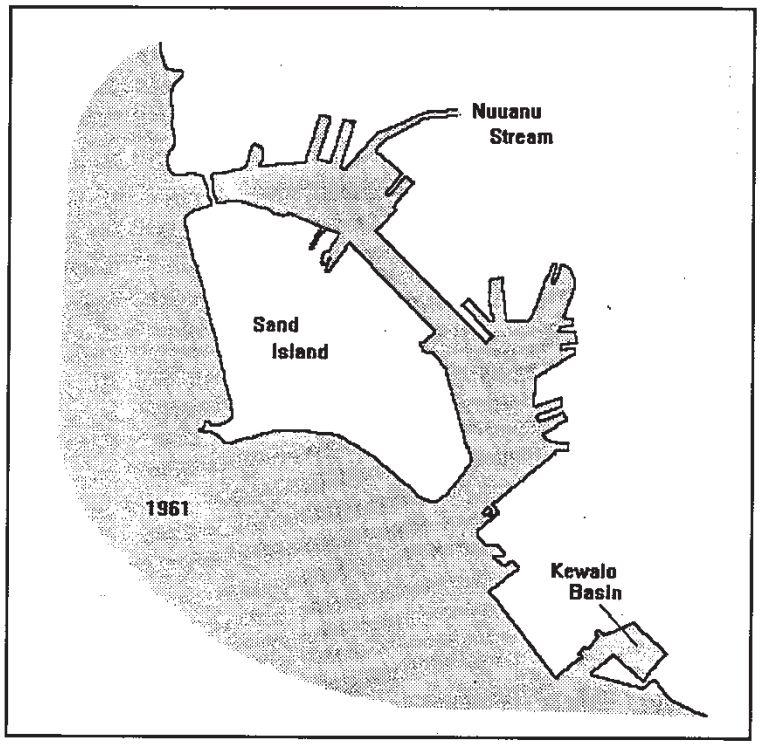

Nuuanu
Stream
1825


Quarantine
Island
Nuuanu
Stream
1890


Nuuanu
Stream
Quarantine
Island
1920


Nuuanu
Stream
Sand
Island
1941
Kewalo Basin


Sand
Island
Nuuanu
Stream
1947
Kewalo
Basin


Nuuanu
Stream
Sand
Island
1961
Kewalo
Basin

APPENDIX C

Biological Resources Survey Report

SWCA®
ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.®

Biological Resources Survey Report for Kapalama Fuel Line Project

Prepared for

Myounghee Noh & Associates, L.L.C.

Prepared by

SWCA Environmental Consultants

March 2017

BIOLOGICAL RESOURCES SURVEY REPORT FOR KAPALAMA FUEL LINE PROJECT

Prepared for

Myounghee Noh & Associates, L.L.C.
99-1046 Iwaena Street, 210A
Aiea, Hawai‘i 96701

Submitted to

Graham Paul Knopp
Environmental Project Manager
Myounghee Noh & Associates, L.L.C.
99-1046 Iwaena Street, 210A
Aiea, Hawai‘i 96701

Prepared by

SWCA Environmental Consultants
Bishop Square ASB Tower
1001 Bishop Street, Suite 2800
Honolulu, Hawai‘i
(808) 548-7899
www.swca.com

SWCA Project No. 041380

March 2017

EXECUTIVE SUMMARY

Myounghee Noh & Associates, L.L.C., requested that SWCA Environmental Consultants conduct a biological resources survey in support of the Kapalama Fuel Line project. The project is located along Sand Island Access Road, Honolulu, on the island of O‘ahu.

SWCA Environmental Consultants conducted the biological resources survey on December 21, 2016, to record all terrestrial flora, fauna, and vegetation types in the survey area. This report summarizes the results of this biological resources survey.

The vegetation types and plant species identified during the survey are not considered unique. Two indigenous plant species were observed (*Heliotropium curassavicum* and *Waltheria indica*), neither of which is a federal- or state-listed threatened or endangered species, a species proposed for listing, or a candidate species. Therefore, the proposed project is not expected to have a significant, adverse effect on botanical resources.

No federal- or state-listed endangered birds were observed in and around the waterways of the survey area. The Hawaiian hoary bat (*Lasiurus cinereus semotus*), a federal- and state-listed endangered mammal, was not observed in the area and is not likely to occur in the area because of lack of suitable habitat. Other federal- or state-listed species with potential to occur on the island of O‘ahu are not likely to occur in the survey area because it is either outside the range of the species or because appropriate habitat is not found in the survey area. The survey area does not overlap critical habitat of any listed species.

This page intentionally blank

CONTENTS

1. Introduction **1**
2. Description of the survey area **1**
2.1. Location and Vicinity 1
3. Methods **3**
3.1. Flora 3
3.2. Fauna 3
4. Results **4**
4.1. Flora 4
4.2. Fauna 4
4.2.1. Birds 4
4.2.2. Hawaiian Hoary Bat 4
4.2.3. Other Mammals 4
5. Discussion and Recommendations **7**
5.1. Flora 7
5.2. Fauna 8
5.2.1. Birds 8
5.2.2. Hawaiian Hoary Bat 8
5.2.3. Other Mammals 8
6. Literature Cited **9**

APPENDICES

Appendix A. Checklist of Plants Observed in the Kapalama Fuel Line Survey Area on December 21, 2016
Appendix B. Checklist of Birds Observed in the Kapalama Fuel Line Survey Area on December 21, 2016

FIGURES

Figure 1. Project Area. 2
Figure 2. Paved area within the survey area. 5
Figure 3. Typical vegetation along the water. 6
Figure 4. Typical vegetation along Sand Island Access Road. 7

This page intentionally blank

1. INTRODUCTION

Myounghee Noh & Associates, L.L.C., requested that SWCA Environmental Consultants (SWCA) conduct a biological resources survey to support Hawai‘i Revised Statutes Chapter 343 compliance for a private action on leased Hawai‘i Department of Transportation-Harbors lands. The Kapalama project area consists of an approximately 270-foot-long linear impact area paralleling Sand Island Access Road in Honolulu, Hawai‘i. The proposed fuel line is to be installed at the site of the new proposed container terminal.

This report summarizes the results of the biological resources survey conducted at the Kapalama project area by SWCA biologists on December 21, 2016.

2. DESCRIPTION OF THE SURVEY AREA

2.1. Location and Vicinity

The survey area consists of the 270-foot linear alignment of the proposed fuel line, and 10 feet on either side of this alignment. The survey area is located in an industrial area adjacent to Sand Island Access Road, Honolulu (Figure 1). The original condition of the area was altered by the U.S. Army in the 1940s for military operations, and subsequently for commercial use, and the survey area consists mostly or entirely of filled material. The survey area parallels the existing fuel line that will be replaced to ensure efficient fuel transfer to the nearby fuel storage facility that supplies fuel to Honolulu International Airport. The survey area is fenced and paved, and plant recruitment consists primarily of non-native and invasive plant species. The project site also includes the fuel line easement along Sand Island Access Road, and totals 1,860 linear feet. The proposed fuel line would traverse from the planned Pier 43 to the existing HFFC Fuel Facility (tank farm) along Sand Island Access Road.

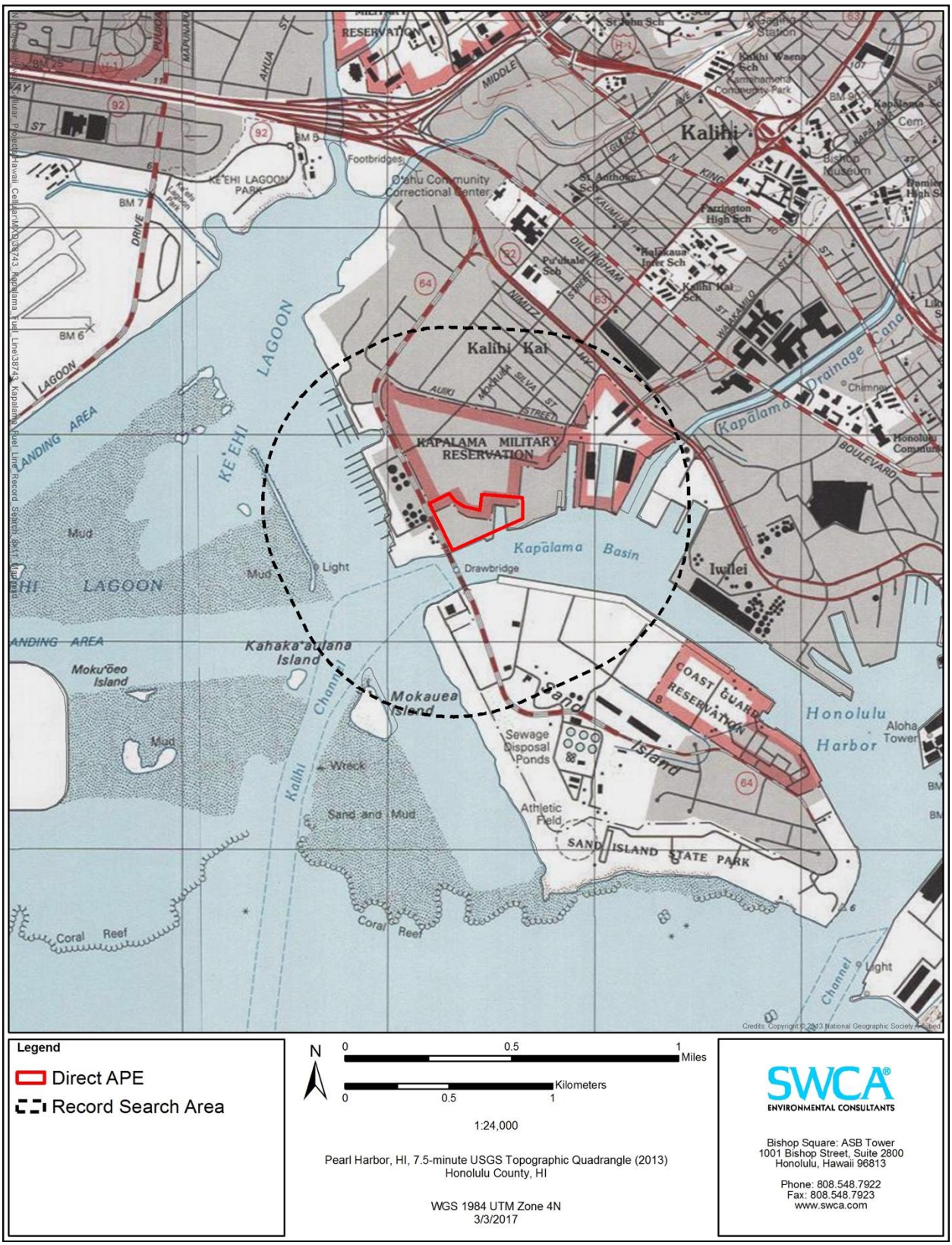


Figure 1. Project Area.

3. METHODS

SWCA reviewed available scientific and technical literature regarding natural resources in and near the survey area. This literature review encompassed a thorough search of referenced scientific journals, technical journals and reports, environmental assessments, environmental impact statements, relevant government documents, U.S. Fish and Wildlife Service (USFWS) online data, and unpublished data that provide insight into the area's natural history and ecology. SWCA also reviewed available geospatial data, aerial photographs, and topographic maps of survey area. SWCA field experts conducted a site survey on December 21, 2016, to verify the results of the literature review.

3.1. Flora

SWCA conducted a pedestrian flora (botanical) survey on December 21, 2016, to document all vascular plant species and vegetation types. Areas more likely to support native plants (e.g., rocky outcrops and shady areas) were more intensively examined.

Plants recorded during the survey are indicative of the season ("rainy" versus "dry") and the environmental conditions at the time of the survey. It is likely that additional surveys conducted at a different time of the year would result in minor variations in the species and abundances of plants observed.

3.2. Fauna

Fauna surveys consisted of three 8-minute variable circular plot count surveys spaced approximately 200 meters (m) (656 feet) apart around the survey area perimeter and a pedestrian survey in the survey area interior in the morning hours (before 11:00 a.m.), when wildlife was most likely to be active. All observed birds, mammals, reptiles, amphibians, fish, and invertebrate species were noted during the survey. Fauna were detected by sight (using the naked eye or using 10 × 42–millimeter binoculars), by ear, or by sign (e.g., scat and tracks).

Formal field surveys for the endangered Hawaiian hoary bat or ʻōpeʻapeʻa (*Lasiurus cinereus semotus*) were not conducted; however, areas of suitable habitat for foraging and roosting were noted when present.

4. RESULTS

4.1. Flora

No state- or federal-listed threatened, endangered, proposed, or candidate plant species, or rare native Hawaiian plant species were observed in the survey area. In all, 31 plant species were recorded in the survey area during the survey, two of which are native to the Hawaiian Islands. ‘Uhalua (*Waltheria indica*) is an indigenous species that is commonly found in disturbed areas in Hawai‘i. Seaside heliotrope (*Heliotropium curassavicum*) is common in coastal areas in Hawai‘i. A list of all plant species observed by SWCA biologists in the survey area during the survey is provided in Appendix A.

The vegetation in the survey area consists of ruderal vegetation characterized by various non-native grasses, shrubs, and herbaceous understory. Much of the survey area consists of pavement, with some grasses such as swollen finger grass (*Chloris barbata*) and tree tobacco (*Nicotiana glauca*) growing in cracks. The vegetation along the water is dominated with non-native grasses, in particular swollen finger grass, with scattered drought-tolerant herbaceous species and some shrubs, most notably sourbush (*Pluchea carolinensis*) and Christmas berry (*Schinus terebinthifolius*). Along Sand Island Access Road, vegetation primarily consists of a contained grass berm dominated by introduced sod grasses.

4.2. Fauna

4.2.1. Birds

The bird species observed in the survey area are species typically found in disturbed lowland areas. Only three bird species were documented, including the cattle egret (*Bubulcus ibis*), which is federally protected under the Migratory Bird Treaty Act (Appendix B). All of the species are introduced to the Hawaiian Islands.

4.2.2. Hawaiian Hoary Bat

The endangered Hawaiian hoary bat is the only native terrestrial mammal species that is still extant within the Hawaiian Islands (USFWS 1998). Hawaiian hoary bats are insectivores and are regularly observed foraging over streams, reservoirs, and wetlands (U.S. Department of Agriculture 2009). The Hawaiian hoary bats typically roost in dense canopy foliage (or in the subcanopy when canopy is sparse) with open access for launching into flight (U.S. Department of Agriculture 2009). Suitable Hawaiian hoary bat roosting habitat is not present in the survey area.

4.2.3. Other Mammals

The survey area is bordered by industrial buildings and Sand Island Access Road (Route 64). No other mammals were observed during the pedestrian survey. Although not detected during the survey, the small Indian mongoose (*Herpestes javanicus*), feral cat (*Felis catus*), house mouse (*Mus musculus*), and rats (*Rattus* spp.) may likely occur in the survey area.

Figure 2. Paved area within the survey area.

Figure 3. Typical vegetation along the water.

Figure 4. Typical vegetation along Sand Island Access Road.

5. DISCUSSION AND RECOMMENDATIONS

5.1. Flora

The survey area is an active commercial use area which was cleared for development in the 1940s. The vegetation types and species identified are not considered unique. Over 98% of the plant species observed are not native to the Hawaiian Islands. The two native species observed are indigenous (found in Hawai‘i and elsewhere) and common throughout the Hawaiian Islands. No threatened or endangered plants were found during the survey, and no designated plant critical habitat occurs in the area. The survey area does not overlap critical habitat for any listed species. Therefore, the proposed project is not expected to have a significant, adverse effect on flora (botanical) resources. Refer to Appendix A for a summary of the plant species observed in the survey area.

5.2. Fauna

5.2.1. Birds

Three common bird species were observed in the area, and only 10 individuals were observed during the survey (see Appendix B). No native birds were observed, and all of the birds in the survey area are common to the area and surrounding areas. Only one of the bird species observed (cattle egret) is federally protected under the Migratory Bird Treaty Act; no endangered bird species were observed during the survey (see Appendix B). The survey area does not overlap critical habitat for any listed species. Therefore, the proposed project does not pose a significant threat to the observed bird species.

5.2.2. Hawaiian Hoary Bat

Hawaiian hoary bats are known to occur on O‘ahu in native, non-native, agricultural, and developed landscapes (U.S. Department of Agriculture 2009; USFWS 1998). Hawaiian hoary bats forage in open, wooded, and linear habitats with a wide range of vegetation types. These animals are insectivores and are regularly observed foraging over streams, reservoirs, and wetlands up to 300 feet (100 m) offshore (U.S. Department of Agriculture 2009). Hawaiian hoary bats typically roost in trees greater than 16 feet (5 m) in height with dense canopy foliage (or in the subcanopy when canopy is sparse) with open access for launching into flight (Gorresen et al. 2013; U.S. Department of Agriculture 2009). Due to the lack of suitable habitat in the survey area, impacts to Hawaiian hoary bats or their habitat are not expected.

5.2.3. Other Mammals

The survey area is bordered by industrial buildings and Sand Island Access Road (Route 64). No other mammals were observed during the pedestrian survey. Although not detected during the survey, the small Indian mongoose, feral cat, house mouse, and rats may likely occur in the survey area.

6. LITERATURE CITED

U.S. Department of Agriculture. 2009. *Bats of the U.S. Pacific Islands*. Biology Technical Note No. 20. Natural Resources Conservation Service, Pacific Islands Area.

U.S. Fish and Wildlife Service (USFWS). 1998. *Recovery Plan for the Hawaiian Hoary Bat (*Lasiurus cinereus semotus*).* Portland, Oregon: U.S. Fish and Wildlife Service, Region 1.

This page intentionally blank

Appendix A

Checklist of Plants Observed in the Kapalama Fuel Line Survey Area on December 21, 2016

Table A1 provides an inventory checklist of plant species observed by SWCA Environmental Consultants on December 21, 2016, in the Kapalama Fuel Line survey area. The plant names are arranged alphabetically by family and then by species into three groups: ferns and lycophytes; monocots; and dicots. The taxonomy and nomenclature of the ferns and lycophytes are in accordance with Palmer (2003) and Evenhuis and Eldredge (2011). The taxonomy and nomenclature of the flowering plants are in accordance with Wagner et al. (1999), Wagner and Herbst (2003), and Staples and Herbst (2005). Recent name changes are those recorded in Wagner et al. (2012).

Table A1. Checklist of Plants Observed in the Kapalama Fuel Line Survey Area on December 21, 2016

Family	Scientific Name	Common/Hawaiian Name	Status
Monocots			
Poaceae	*Axonopus compressus* (Sw.) P.Beauv.		
Poaceae	*Bothriochloa pertusa* (L.) A.Camus	pitted beard grass	X
Poaceae	*Cenchrus ciliaris* L.	bufflegrass	X
Poaceae	*Cenchrus echinatus* L.	common sandbur, ‘umeʻalu, mauʻu kukū	X
Poaceae	*Chloris barbata* Sw.	swollen fingergrass, maʻu lei	X
Poaceae	*Eragrostis amabilis* (L.) Wight & Arn.	lovegrass	X
Poaceae	*Melinis repens* (Willd.) Zizka	Natal redtop	X
Poaceae	*Sacciolepis indica* (L.) Chase	Glenwood grass	X
Dicots			
Amaranthaceae	*Amaranthus viridis*	slender amaranth, pakai, ‘āheahea, pākaikai, pakapakai (Niʻihau)	X
Anacardiaceae	*Schinus terebinthifolius* Raddi	Christmas berry, wilelaiki, nani o Hilo (Molokaʻi)	X
Asteraceae	*Bidens pilosa* L.	Spanish needle, beggartick, kï, kï nehe, kï pipili, nehe	X
Asteraceae	*Emilia fosbergii* Nicolson	pualele (Niʻihau)	X
Asteraceae	*Pluchea carolinensis* (Jacq.) G.Don	sourbush, marsh fleabane	X
Asteraceae	*Tridax procumbens* L.	coat buttons	X
Boraginaceae	*Heliotropium curassavicum* L.	kïpūkai, nena, seaside heliotrope, lau poʻopoʻohina (Niʻihau)	I
Convolvulaceae	*Ipomoea obscura* (L.) Ker Gawl.	morning glory	X
Euphorbiaceae	*Euphorbia hirta* L.	hairy spurge, garden spurge, koko kahiki	X
Fabaceae	*Alysicarpus vaginalis* (L.) DC.	alyce clover	X
Fabaceae	*Crotalaria pallida* Aiton	smooth rattlepod, pikakani, kolomona (Niʻihau)	X
Fabaceae	*Desmanthus pernambucanus* (L.) Thell.	slender mimosa, virgate mimosa	X
Fabaceae	*Desmodium tortuosum* (Sw.) DC.	Florida beggarweed	X
Fabaceae	*Indigofera spicata* Forssk.	creeping indigo	X
Fabaceae	*Leucaena leucocephala* (Lam.) de Wit	koa haole, ēkoa, lilikoa	X
Fabaceae	*Macroptilium atropurpureum* (DC.) Urb.		X
Malvaceae	*Sida ciliaris* L.		X

Table A1. Checklist of Plants Observed in the Kapalama Fuel Line Survey Area on December 21, 2016

Family	Scientific Name	Common/Hawaiian Name	Status
Malvaceae	*Sida linifolia* Cav.		X
Nyctaginaceae	*Boerhavia coccinea* Mill.		X
Passifloraceae	*Passiflora foetida* L.	love-in-a-mist, running pop, wild water lemon, lani wai (Niʻihau), pohāpohā	X
Portulacaceae	*Portulaca oleracea* L.	pigweed, ʻākulikuli kula, ʻākulikuli lau liʻi, ʻihi	X
Solanaceae	*Nicotiana glauca* Graham	tree tobacco, mustard tree, mākāhala, paka	X
Sterculiaceae	*Waltheria indica* L.	ʻuhaloa, ʻalaʻala pū loa, hala ʻuhaloa, hiʻaloa, kanakaloa	I

* Status:

I = indigenous (native to the Hawaiian Islands and elsewhere).

X = introduced/ alien (plants brought to the Hawaiian Islands by humans, intentionally or accidentally, after Western contact [Cook's arrival in the islands in 1778]).

Literature Cited

Staples, G.W. and D.R. Herbst. 2005. *A Tropical Garden Flora: Plants Cultivated in the Hawaiian Islands and Other Tropical Places*. Honolulu, Hawaiʻi: Bishop Museum Press.

Wagner, W.L., and D.R. Herbst. 2003. *Supplement to the* Manual of the Flowering Plants of Hawaiʻi. Version 3.1 (12 Dec 2003). Honolulu, Hawaiʻi: University of Hawaiʻi Press. Available at: http://botany.si.edu/pacificislandbiodiversity/hawaiianflora/ManualSupplement3.pdf. Accessed March 6, 2017.

Wagner, W.L., D.R. Herbst, N. Khan, and T. Flynn. 2012. *Hawaiian Vascular Plant Updates: A Supplement to the Manual of the Flowering Plants of Hawaiʻi and Hawaiʻi's Ferns and Fern Allies.* Version 1.3. Available at: http://botany.si.edu/pacificislandbiodiversity/hawaiianflora/Hawaiian_vascular_plant_updates_1.3.pdf. Accessed March 6, 2017.

Wagner, W.L., D.R. Herbst, and S.H. Sohmer. 1999. *Manual of the Flowering Plants of Hawaiʻi.* Volumes I and II. Revised edition. Honolulu, Hawaiʻi: University of Hawaiʻi Press.

Palmer, D. D. 2003. *Hawaii's Ferns and Fern Allies*. University of Hawaii Press, Honolulu, Hawaii.

Neal L. Evenhuis & Lucius G Eldredge. (2011) *Taxonomic changes in Hawaiian fenrs and Lycophytes.* Honolulu Hawaii: Bishop Museum Occasional Papers

Appendix B

Checklist of Birds Observed in the Kapalama Fuel Line Survey Area on December 21, 2016

Table B1 provides an inventory checklist of bird species observed by SWCA Environmental Consultants on December 21, 2016, at the Kapalama Fuel Line survey area, during the point count surveys.

Table B1. Checklist of Birds Observed in the Kapalama Fuel Line Project Survey Area on December 21, 2016

Common Name	Scientific Name	Status	MBTA
Cattle egret	*Bubulcus ibis*	NN	X
Spotted dove	*Streptopelia chinensis*	NN	–
Zebra dove	*Geopelia striata*	NN	–
Total			**3 species** **10 individuals**

Notes: NN = non-native permanent resident; MBTA = protected under the Migratory Bird Treaty Act.

This page intentionally blank

APPENDIX D

Cultural Resources Inventory Survey Report

SWCA®
ENVIRONMENTAL CONSULTANTS
Sound Science. Creative Solutions.®

Cultural Resources Inventory for the Proposed Kapālama Fuel Line Project, Honolulu County, Hawai‘i

Prepared for

Myounghee Noh & Associates, L.L.C.

and the

Hawai‘i State Historic Preservation Division

Prepared by

SWCA Environmental Consultants

September 2017

For Official Use Only
Disclosure of Historic Properties Locations Prohibited
43 Code of Federal Regulations 7.18

CULTURAL RESOURCES INVENTORY FOR THE PROPOSED KAPĀLAMA FUEL LINE PROJECT, HONOLULU COUNTY, HAWAIʻI

Prepared for concurrence with

Hawaiʻi State Historic Preservation Division
601 Kamokila Boulevard, Suite 555
Kapolei, Hawaiʻi 96707

On behalf of

Myounghee Noh & Associates, L.L.C.
99-1046 Iwaena Street, 210A
Aiea, Hawaiʻi 96701

And
Hawaiʻi Fueling Facilities Corporation
3201 Aolele ST.
Honolulu, Hawaiʻi 96819

Prepared by

Richard Stark, Ph.D.

SWCA Environmental Consultants
Bishop Square ASB Tower
1001 Bishop Street, Suite 2800
Honolulu, Hawaiʻi
(808) 548-7899
www.swca.com

SWCA Project No. 41380

September 5, 2017

For Official Use Only: Disclosure of Historic Property Locations Prohibited
43 Code of Federal Regulations 7.18

ABSTRACT

To identify potential effects to cultural resources, Myounghee Noh & Associates, L.L.C., requested that SWCA Environmental Consultants (SWCA) conduct a cultural resources background literature and records review, and a visual effects analysis, in support of the proposed Kapālama Fuel Line project. The proposed project exists on lands leased from Hawai‘i Department of Transportation (HDOT)-Harbors lands, leased by the Hawai‘i Fueling Facilities Corporation (HFFC). This report has been prepared to facilitate federal agency and stakeholder consultation. The proposed project is located within portions of the traditional Mokauea and Kapalama Fisheries, within Kalihi Ahupua‘a, and immediately south of Palena Ahupua‘a, on the island of O‘ahu; specifically, the project site is located on the east side of Sand Island Access Road approximately 1,200 feet north of the proposed fuel line. The proposed project entails the installation of a new fuel line along the planned pier 43. The new 1,250-foot-long fuel line will connect with existing infrastructure within a heavily built environment. State of Hawai‘i and other federal regulations require that a technical report be prepared that describes the history of land modification and development of a proposed project area, to describe any historic properties and assesses their integrity, significance, and eligibility for inclusion in the Hawai‘i State Register of Historic Places and the National Register of Historic Places. The results of this report may be used for consultation with interested agencies and stakeholders. Specifically, the project is subject to compliance with and review under Hawai‘i historic preservation legislation, Hawai‘i Revised Statute 6E-8, and Hawai‘i Administrative Rule 13-13-275, and with the environmental review of the project under Hawai‘i Revised Statute 343. The purpose of this report is to be presented as consultation with the Hawai‘i State Historic Preservation Division. This report has been prepared to further fulfill the requirements of Hawai‘i Administrative Rule 13-13-276 and Hawai‘i State Register of Historic Places eligibility recommendations for any cultural resources or historic properties, and it is intended for review and acceptance by the Hawai‘i State Historic Preservation Division. This report is also intended to support any project-related historic preservation consultation with stakeholders, such as state and county agencies and interested Native Hawaiian organizations and community groups, if applicable. SWCA conducted the background literature and records review to identify all historic properties listed in the Hawai‘i State Register of Historic Places and the National Register of Historic Places, nearby burials, and other important cultural resources near the proposed project. Also, geomorphologic features and sediments in the area capable of preserving buried cultural resources were reviewed to address the probability of encountering undocumented cultural material during the project. This report summarizes the results of this cultural background literature and records review and visual effects analysis, and concludes with a related discussion and recommendations. To identify potential impacts to any cultural resources in and near the proposed project area, Myounghee Noh & Associates, L.L.C., requested that SWCA conduct the background research and report the findings in regard to any cultural resources within 0.5 mile of the proposed project area. This larger, surrounding area is referred to as the study area. One historic property—Ananoho Fishpond, Kalihi (State Inventory and Historic Places [SIHP] #50-80-14-00073)—is within a portion of the proposed project area. The Ananoho Fishpond was in-filled during World War II. Because the Ananoho Fishpond has been destroyed and in-filled, SWCA recommends that the proposed project will have no adverse effect on this historic property. The Auiki Fishpond (SIHP #50-80-14-00073), Pahouiki and Pahounui Fishponds (SIHP #50-80-14-00074), and a human burial site (SIHP #50-80-14-05581) have been recorded within the surrounding study area, and SWCA recommends the proposed project would result in no adverse effect on these cultural resources. The historic properties documented in this report were abandoned and at least partially destroyed during large-scale in-filling of the area associated with U.S. military development of the area during World War II and especially immediately following the attack on Pearl Harbor. That said, the location of the proposed project area, within the boundaries of a traditional Hawaiian fishpond, and adjacent to the ocean, indicates a slight possibility for encountering in situ, subsurface cultural features associated with traditional Hawaiian resource procurement. Because the proposed project is within a portion of a known cultural resource and in close proximity to other recorded cultural resources, SWCA recommends archaeological monitoring of all ground-disturbing activities.

CONTENTS

1. Introduction **1**
2. Natural Setting **5**
3. Cultural Setting **5**
3.1. Pre-Contact (A.D. 300–1766) and Historic Period (post-A.D. 1766–1966) 6
4. Previous Archaeological Investigations and Documented Historic Properties Adjacent to the Direct Area of Potential Effects and the Study Area **10**
5. Discussion and Recommendations **13**
6. References Cited **16**

FIGURES

Figure 1. Approximate location of the proposed project (work site). 3
Figure 2. Location of the proposed project area and study area. 4
Figure 3. Previously recorded historic properties with the proposed project area and study area. 12

TABLES

Table 1. Previously Recorded Historic Property in the Proposed Project Area 11
Table 2. Previously Recorded Historic Properties in the Study Area 11
Table 3. Evaluation of the Effects on Historic Properties within the Proposed Project Area 13
Table 4. Evaluation of the Effects on Historic Properties within the Surrounding Study Area 14

1. INTRODUCTION

SWCA Environmental Consultants (SWCA), in consultation with the Hawai‘i State Historic Preservation Division (SHPD), prepared this cultural resources inventory report to document the results of a background literature and records review and visual effect analysis conducted to mitigate effects from the proposed fuel line installation (Figure 1 and Figure 2). The proposed project location is within Hawai‘i Department of Transportation (HDOT)-Harbors lands, leased by the Hawai‘i Fueling Facilities Corporation (HFFC), within portions of the traditional Mokauea and Kapalama Fisheries, within Kalihi Ahupua‘a, and immediately south of Palena Ahupua‘a, on the island of O‘ahu. For this project, the proposed work site is defined as the proposed project area, and the surrounding 0.5 miles is referred to as the study area.

The proposed project entails the installation of a new fuel line along the planned Pier 43, with the anticipation that groundwater will be encountered throughout the proposed fuel line excavation. Of the total 2,000 foot fuel line, approximately 1,250 linear feet would be within the proposed project area. Specifically, the project consists of installation of an 18-inch, below grade fuel line and fuel on/off loading site with valve pit at Pier 43, with a proposed fuel line along the east side of Sand Island Access Road, transiting under Sand Island Access Road to the HFFC Fuel Facility to the west of the roadway, and a new tie-in at the existing HFFC fuel facility.

The on/off loading site would be located at Pier 43, which is planned for renovation as described in the Kapalama Container Terminal and Tenant Relocation Final Environmental Impact Statement (HDOT-Harbors, 2014). The proposed fuel line would extend directly from the on/off loading terminal on Pier 43 to the east side of Sand Island Access Road, were it would utilize an existing fuel line easement, and make a right angle to the north, extending along Sand Island Access Road within the existing fuel line easement for 600-1,225 feet, at which point it would make another right angle to the west, passing under Sand Island Access Road to a proposed tie in within the existing HFFC fuel facility.

The 1,250-foot-long portion of the fuel line within the proposed project area will connect with existing infrastructure within a heavily built environment. SWCA archaeologists reviewed available scientific and technical literature regarding cultural resources in the proposed project area and the study area. This literature review encompassed a search of journals, technical reports, relevant government documents, and any other documents that provide insight into the history and cultural resources of the area. SWCA also will make a site visit, and review available geospatial data, aerial photographs, and topographic maps of the proposed project area and the study area. The background literature and records review documents the history of land modification and development in the proposed project area and describes any potential effect to historic properties in the proposed project area and the study area.

This report was prepared under Permit No.17-4 to conduct archaeological activities in the State of Hawai‘i for the calendar year 2017. A team of professional SWCA researchers contributed to portions of this report, including geographic information system (GIS) specialist Peter Albert Von der Porten and technical editor Cynthia Manseau. The project is managed by senior project manager Jaap Eijzenga, and Alex Wesson serves as the officer of quality control. The background research was conducted by archaeologists Andrew Soltz, and the lead archaeologist and principal investigator for the project is Richard Stark, Ph.D. Resumes of the staff associated with this project can be provided upon request.

The regulatory context of this report includes consultation with interested agencies. This report satisfies State of Hawai‘i regulations, which require technical reporting of the history of land modification and development in a proposed project area to describe any historic properties, to assess the significance and integrity of encountered historic properties, and to assess eligibilities for the Hawai‘i State Register of Historic Places and the National Register of Historic Places (NRHP). The project is subject to compliance

with and review under the Department of Land and Natural Resources, Hawai‘i historic preservation legislation, Hawai‘i Revised Statute 6E-42, and Hawai‘i Administrative Rules (HAR), Chapter 13-284; *The process supports the policy of Hawai‘i Revised Statutes (HRS) Chapter 6E, to preserve, restore, and maintain historic properties for future generations (HRS 6E*). The proposed project utilizes the expectations and definitions terms as articulated in HAR, Chapter 13-284, including Archaeological Inventory Survey (AIS). This report has been prepared for review and acceptance by the Hawai‘i SHPD; *The goal of this review process is to identify significant historic properties in project areas, asses any effects, and then to develop and execute plans to avoid, minimize, or mitigate adverse effects to the significant historic properties in the public interest (HAR, Chapter 13-284).*

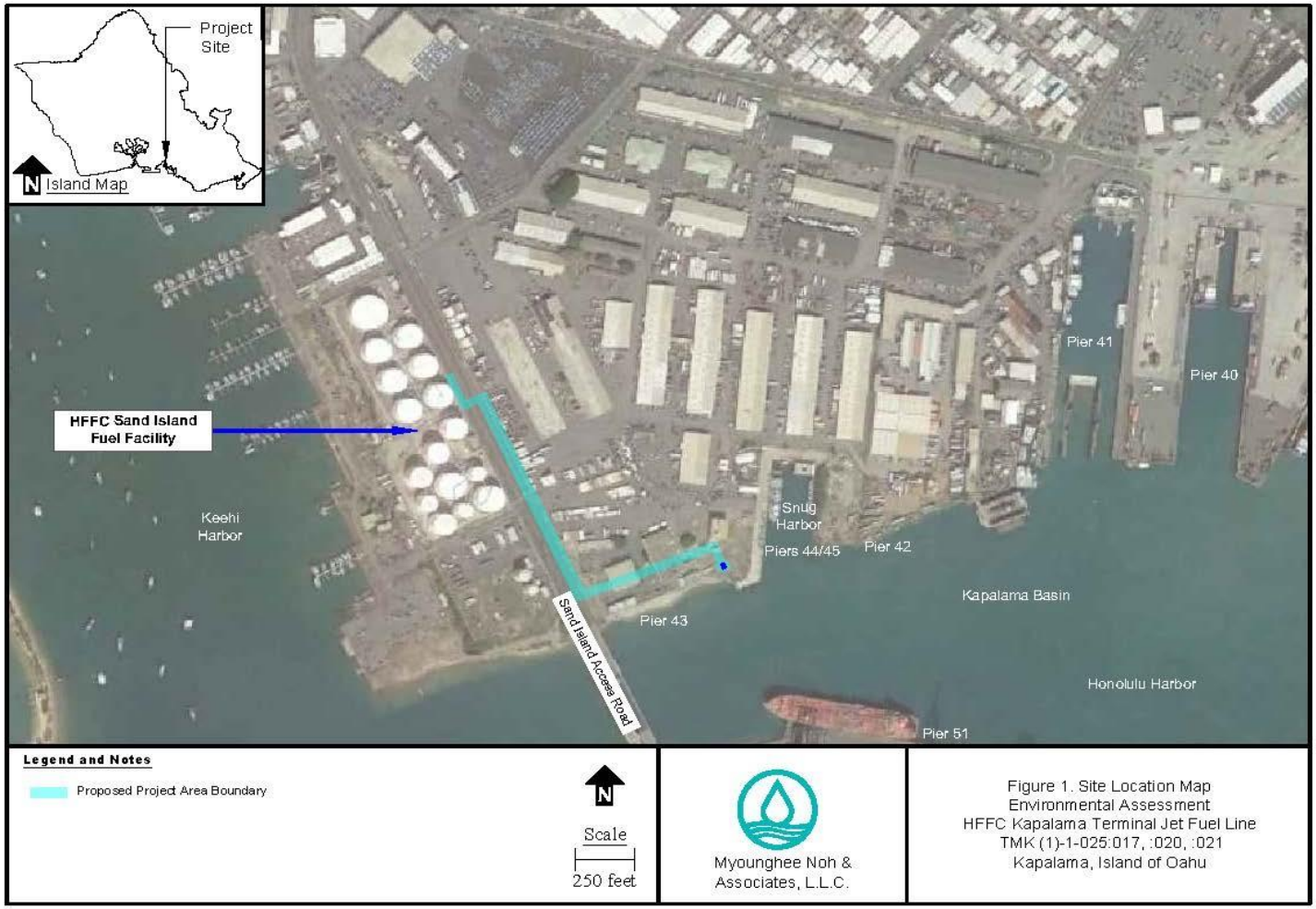


Figure 1. Approximate location of the proposed project (work site).

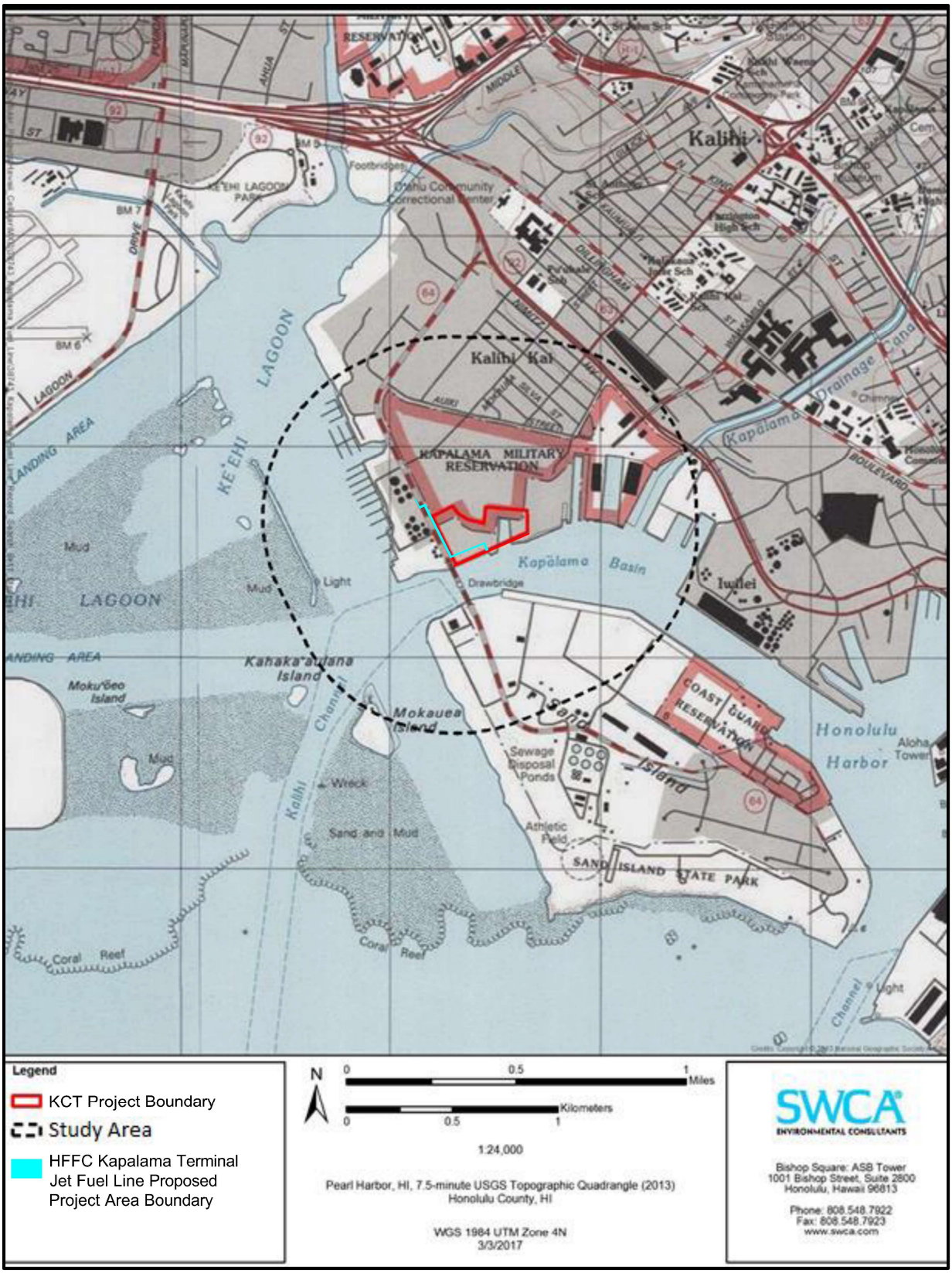


Figure 2. Location of the proposed project area and study area.

2. NATURAL SETTING

The elevation of the proposed project area is less than 10 meters above mean sea level. Previously, the area in which the proposed project area is located extended beyond the coastline and within the channel; however, land development and surface in-filling have resulted in the current setting of the area. The average annual rainfall in the proposed project area is approximately 80 centimeters (31 inches) (Giambelluca et al. 2013). Vegetation in the larger study area includes hau (*Hibiscus tiliaceus*), haole koa (*Leucocephala leucaena*), and kiawe trees (*Prosopis juliflora*). The introduction of long-thorn kiawe (*Prosopis juliflora*), a mesquite tree, was first documented in Hawai‘i in 1878 (Gonser 2001). The natural setting of the proposed project area is influenced by, relatively "… low rainfall, saline soil, and the man-made origin of the area and the high degree of development and human activity" (CSX World Terminals Consulting 2001:8).

The local substrata within the study area is primarily fill (FL), and also includes underwater coastal reefs and channels, and redeposited alluvium from basalt lava flows, with exposed basalt bedrock slopes from previous volcanism. These slopes present a rugged characteristic of leeward Hawai‘i. The geomorphic landscape is dominated by the Ko‘olau Mountains, beyond the study area to the north, which represent erosional remnants of a once larger shield volcano that became dormant approximately 1.7 million years ago. The geological records document a subsequent cataclysmic erosional event in which much of the eastern portion of the massive shield volcano slid into the Pacific Ocean approximately 1.6 million years ago.

The sediments immediately underlying the proposed project area are fill (FL), built during and after the historic in-filling of Ananoho Pond immediately to the northeast (HLMG) (California Soil Resource Lab 2016; Natural Resources Conservation Service 2014). "This land type consists of areas filled with material from dredging, excavation from adjacent uplands, garbage, and slurry from sugar mills… occurs mostly near Pearl Harbor and in Honolulu, adjacent to the ocean. It consists of areas filled with material dredged from the ocean or hauled from nearby areas… and general material from other sources" (Foote et al. 1972:31).

Local prominent natural features include the Kapālama Basin Channel, which connects directly with Honolulu Harbor to the east, and is fed locally by the Kapālama Stream. Kahaka'aulana and Mokauea Islands straddle Kalihi Channel approximately 1,000 meters southwest of the proposed project area. These islands were formed naturally, "… by freshwater flows from Nuuanu Valley which inhibited coral growth within a small, reefed basin and cut several channels through the surrounding reef. Between these outflows, rose occasional spots of earth and coral" (Hawaii State Department of Transportation 1997:iv–1).

Stark et al. (2015) describe the impacts of dredging and in-filling within the study area: "… what is referred to as Sand Island and the current extent of Mokauea Island represents the western portion of the island not obliterated by historic dredging. The existing portion of Mokauea Island, well outside and to the west of the project area, appears to have received some of the spoils from the dredging of the seaplane channel. Mokauea Island, Kahaka‘aulana Island, and other small islets in the vicinity are part of a larger lagoon and reef barrier biome referred to as Ke‘ehi Lagoon" (Stark et al. 2015:8). Prior to dredging and filling of Honolulu Harbor, the Sand Island area originally consisted of marginal lands and submerged coral reefs.

3. CULTURAL SETTING

The following discussion presents a cultural history of the study area, including the traditional land uses in the area, from pre-contact (A.D. 300–1766) through the Historic period (post–A.D. 1766–1966). The discussion notes the pre-contact traditional mythic and socioeconomic setting, with ensuing historic

influences of Christian missionaries, the Māhele Act, private property, foreign investment, and the tourist economy in Hawai‘i. The proposed project location is within the traditional Mokauea and Kapalama Fisheries, within Kalihi Ahupua‘a, and immediately south of Palena Ahupua‘a, on the island of O‘ahu. Traditional Hawaiian stories and mythic accounts are numerous for the area, and they are beyond the scope of this report; however, the reader is referred to Kalākaua (1990) and Fornander (1878) for such details. Kalihi, the Mokauea Fishery, and the Kapālama Stream were the first earthly residence of Hawaiian mythic creators Wakea and his wife Papa, in her human form of Haumea. It is in the general vicinity of the survey area where they marry, create children and grandchildren, and create the Hawaiian people (Stark et al. 2015:18). Haumea is known for her abilities to produce food for people and for the powers of female reproduction (Beckwith 1970). Honolulu was traditionally referenced as Kou, a royal complex for ali‘i (chiefs). In the re-telling of the Pele and Hi‘iaka story, Hi‘iaka from Hawai‘i Island and Lohi‘au, chief of Kaua‘i, joined with Pele‘ula, Chiefess of O‘ahu, for pleasure at Kou (Emerson 1915:168).

3.1. Pre-Contact (A.D. 300–1766) and Historic Period (post-A.D. 1766–1966)

Traditional Hawaiian settlers built grass-thatched habitation structures on rock platforms. Sacred spaces were defined by stacked rock shrines (heiau). Traditional Hawaiian subsistence involves intensive ‘auwai-based (irrigation canal) agriculture. Ahupua‘a (a concept involving land divisions), kinship boundaries, and land-management designations involved systematic and symbiotic use of resources mauka (inland) to makai (seaward). The primary crop grown in ahupua‘a gardens was kalo (taro) (*Colocasia esculenta*), supplemented by sweet potato (‘uala) (*Ipomoea batatas*). The Hawaiian ahupua‘a concept is an essential baseline for understanding the Hawaiian way of knowing:

> The ancient Hawaiian system of land naming and use … is thought to have been introduced on Kauai‘i by Manokalanipo, a legendary high chief. An ahupua‘a, pronounced ah-hoo-poo-ah-ah, is an area of land and water extending from the top of the mountains, across the lowlands to the outer reef. Typically centered upon a stream, the terrestrial and marine portions of the ahupua‘a as an integrated unit … the ahupua‘a is more than geography. It is a metaphor for a native way of seeing and being on the land. (The Kauaian Institute 2007)

People in the Kapālama area have depended on freshwater irrigated resources and marine resources from pre-contact to contemporary times, and agriculture and fishing still play an important part in local cultural identity.

Archaeological evidence, discussed further in Section 4, demonstrates permanent pre-contact (ca. A.D. 300) human habitation in the Kapālama area. Traditionally, Hawaiians used intensive agriculture; kept pet dogs and pigs; practiced deep-sea fishing, in-shore line fishing, and spear fishing for octopus and reef fish; hunted seabirds for feathers, meat, and eggs; gathered and processed salt; and foraged for shelled marine invertebrates. Voyaging Hawaiians brought domesticated pigs, dogs, chickens, and many useful plants with them, including kalo (taro), ulu (breadfruit) (*Artocarpus altilis*), ki (ti) (*Cordyline nucifera*), wauke (mulberry) (*Broussonetia papyrifera*), coconut (*Cocos nucifera*), ‘uala (sweet potato), uhi (yams) (*Dioscorea* spp.), mai‘a (banana) (*Musa acuminata*), ‘ōlena (turmeric) (*Curcuma domestica*), kukui (candlenut tree) (*Aleurites moluccana*), ‘awa (kava) (*Piper methysticum*), and noni (*Morinda citrifolia*. The nearby beachfronts were traditionally used for fishing, surfing, collecting shellfish, and farming limu (edible seaweed) (*Enteromorpha prolifera*).

The Islands of the Mokauea Fishery, especially Kahaka‘aulana Island, were traditionally places where kilo hōkū (navigator astronomy) was taught. Specially trained kūpuna (priests) taught the making and use of the navigational gourds here, also referred to as a calabash compass or ipuho‘okelewa‘a: “Take the

lower part of a gourd or hula (hokeo), rounded wheel, on which several lines are to be marked (burned in), these lines are called ‘Na alanui o na hoku hookele (the highways of the navigation stars)” (Kamakau 1865).

Traditional kinship relationships were fostered and re-established through ahupua‘a-based socio-economics. Extended kinship groups settled in various parts of an ahupua‘a, facilitating resource harvesting from both the land and the sea. Ideally, each ahupua‘a was self-sufficient and supplied needed resources for survival from many different environmental zones and supplied surpluses for ali‘i (chiefs) and kahuna (priests). Heiaus (shrines) were maintained and used by kahuna (priests) and ali‘i (chiefs).

The ahupua‘a concept designates traditional management of lands with systematic and symbiotic use of natural resources mauka (inland) to makai (seaward). The ahupua‘a land management system typically follows stream catchments, with built agricultural terraces, stone ‘auwai (irrigation ditches), and ultimately lagoonal and tidal resource ponds with traditional names, designations, and family group associations (Earle 1980). Mauka (inland) to makai (seaward) trails allowed for use of upland and marine resources within one ahupua‘a, whereas other trails followed the coastline, inter-connecting the various ahupua‘a. This system allowed for local specialization and oversight of sustainable food production and foraging within designated resource areas. Each ahupua‘a had a designated konohiki (caretaker) with other roles defined, including lawai‘i (fishermen), mahi‘ai (farmer), kia manu (bird catchers), and kahuna (priest).

Archaeological evidence indicates that Hawaiian voyagers settled in Kapālama over 1,000 years ago, and by the fourteen century, extensive ahupua‘a agricultural systems appear to be in use (Stark et al. 2015). Sweet potatoes were grown on the sand berms; raising fish in fishponds, fishing for lobster, and catching turtles were traditional occupations in Kapālama. During the fourteenth century, as the ahupua‘a engineering became refined, food production capacities increased, regional populations grew, and powerful chiefdoms developed in Hawai‘i, with local ancestral lines of chiefs, including the legendary windward O‘ahu chief, Olomana. A theme of competition, conflict, and conquest between groups related to powerful chiefs was observed at the time of European contact (A.D. 1778). This was part of a long-term pattern of increasing population, food production, labor specialization, and battles/alliances between chiefs from the 1400s through the 1700s.

The well-developed ahupua‘a agricultural system, which had intensified food production capacities through centuries of careful ecological engineering, was challenged by the introduction of cattle and sheep in the 1700s. These animals were initially protected from slaughter by a 10-year kapu (taboo) enforced by King Kamehameha I, resulting in a cattle and sheep population explosion and the concurrent construction of rock fences, corals, and houses built on walled platforms to prevent the utter devastation of homes, gardens, and resource areas. The area was populated with farmers and fisher-foragers at the time of European contact (A.D. 1778), with coastal resource ponds and lo‘i (wet garden) along inland makai (seaward) terraces next to springs and stream drainages.

From 1845 to 1848, the Land Commission, also called the Board of Commissioners to Quiet Land Titles, reviewed and resolved land claims from individuals in Hawai‘i. Termed the Māhele, this formally introduced the concept of private property to the Hawaiian Islands, dividing lands between ali‘i (chiefs) and commoners (Chinen 1958). Land Commission Awards (LCAs), which document the Māhele, are useful historically in that they mark a significant shift in power and indicate details of local land use subsistence strategies during this transitional time. Stark et al. (2015) summarizes the general social situation and the transfer of lands in the area during the Māhele:

> Undoubtedly residential patterns had changed from pre-Contact times as a result of massive depopulation owing to introduced diseases on the one hand and in-migration into greater Honolulu from out-lying areas on the other hand. The pattern of land holdings ca 1850

> suggests the majority of Hawaiians in the ahupua‘a were living relatively close to Kalihi Stream, inland of present day Dillingham Boulevard and seaward of the confluence of Kalihi and Kamanaiki streams… Numerous taro pond fields or lo‘i were claimed during the Māhele, particularly along Kalihi and Niuhelewai streams, which served as the eastern and western boundaries of Kalihi. However, on the flat of Kaluapuhi where Kalihi Kai meets the ocean, there is no indication of taro lo‘i or fresh water sources … the reef area and islets immediately surrounding Mokauea were awarded to Pahene (LCA 10611)… Lands in Kalihi Kai were principally awarded to very notable people, including advisors to the Kamehameha line or to royalty themselves, most likely on account of the abundant fishponds in the locality. Queen Kalama was awarded a house lot in Pu‘uhale, Kalihi Kai (LCA 2038) adjacent to Loko Auiki… Another high ranking ali‘i, Kaunuohua, received land in Kalihi during the Māhele (Waihona ‘Aina 2000). Kaunuohua was a female descendant of a high ranking ali‘i of Hawai‘i Island, Kalaninui‘īamamao, father of Kalani‘ōpu‘u (Kame‘eleihiwa 1992:249). She was also Alexander Liholiho’s (Kamehameha IV) guardian. Though she had many lands prior to the Māhele, most of these were lost with the exception of three, Pu‘ulena in Waikīkī, Mokauea in Kalihi, and Kalaupapa on Moloka‘i (Kame‘eleihiwa 1992:264). LCA 6450 to Kaunuohua names five‘ili in Kalihi being awarded to her including Kaluaopalena, Keauhou, Mahani, Niau, and Mokauea…. Hewahewa, a descendant from the Paoa, priestly class who served three of the Kamehamehas, was awarded the ‘ili of Kaluapulu in Kalihi which included fishponds at Kalihi Kai (Kamakau 1961; LCA 3237). A second kahuna (priest) of the same Hewahewa line, Nahinu, was also awarded lands in Kalihi, near the outlet of the Kalihi Stream (Bushnell and Hammatt 2002:6). Nahinu also served as konohiki (caretaker) for Kalihi Kai during the time of the Māhele (Landrum and Klieger 1991:22-23). (Stark et al. 2015:26)

Although pre-contact Hawaiian population densities were low, when compared with current population densities, Hawaiian populations witnessed by early European colonizers represented communities utterly decimated by introduced diseases. Traditional Hawaiian populations had increased incrementally through time with increases in food surpluses, and the local population continued to incrementally, and exponentially, increase over time, especially when colonially charged with labor and tourist immigration (Coulter 1931). During the Historic period, concurrent diversification of carbohydrate staple choices and food preferences emerged to match increasingly heterogeneous ethnicities. In the mid- to late nineteenth century and into the twentieth century, the agricultural economy of Kapālama fully transitioned from traditional ahupua‘a agriculture to rice production.

Changes in the way socioeconomic power was wielded in Kapālama were related to broader cultural shifts away from the traditional Hawaiian religious and ahupua‘a systems and toward Western private property, capitalism, and Christian-based modes of exchange and norms. These changes are expressed archaeologically, manifesting in features such as built fence lines, stone heiaus repurposed as livestock corrals, and ‘auwai (Hawaiian irrigation canals) repurposed for rice production or abandoned. Further historic changes in the area include increased urbanism and built environment, as seen in the establishment of nearby U.S. military bases before and during Warld War II; the dredgeing of the channel for a sea plane runway; and as seen in residential subdivisions in the 1950s, increasing industrial and commercial development intensity through the 1980s, and currently.

> The cultural landscape of Ke‘ehi was drastically altered after the bombing of Pearl Harbor. Under martial law, the Territory of Hawai‘i took control of the area and started dredging the lagoon to create landing channels for seaplanes. As a result, many of the kupuna [elders] who resided or frequented the area were displaced. Once the reef system was disconnected, they couldn’t walk back home anymore during low tide. They couldn’t go unless they had a canoe or boat, and that is when things really changed. (Mana 2015)

Post-World War II, local food production practices quickly diversified by international immigration, and the immigrants adapted their practices with local traditions. “Informant Muriel Lupenui reported that the fleet of Japanese fishermen who docked their sampans at Pu‘uhale used the traditional Hawaiian fishing kū‘ula (stone god). They made offerings to the god and many of them spoke fluent Hawaiian. They would also leave fish at her house if they had a successful day. This transition was also noticed in the cultivation of the fishponds at Kalihi Kai” (Napoka 1976:16).

4. PREVIOUS ARCHAEOLOGICAL INVESTIGATIONS AND DOCUMENTED HISTORIC PROPERTIES ADJACENT TO THE DIRECT AREA OF POTENTIAL EFFECTS AND THE STUDY AREA

Fourteen archaeological investigations have occurred within approximately 1 mile of the proposed project area; however, no previous archaeological inquiries have occurred within the proposed project area (Stark et al. 2015). One documented historic property, Ananoho Fishpond, Kalihi (State Inventory and Historic Places [SIHP] #50-80-14-00073), is located in the proposed project area; this historic property and the associated bibliographic references are presented in Table 1; Figure 3). Three previously recorded historic properties are located within the surrounding 0.5-mile study area: Auiki Fishpond (SIHP #50-80-14-00073), Pahouiki and Pahounui Fishponds (SIHP #50-80-14-00074), and a human burial site (SIHP #50-80-14-05581). The approximate distance to proposed project area and associated bibliographic references for each of the three historic properties are presented in Table 2. The locations of the previously recorded cultural resources are illustrated in Figure 3.

McAllister (1933:90–91) and Sterling and Summers (1978:322) document Site 73, Ananoho Fishpond Kalihi (SIHP #50-80-14-00073), within a portion of the proposed project area. McAllister (1933) also documents the nearby, but slightly farther to the north, Pahouiki, Pahounui, and Apili Fishponds, grouping them as Site 74 (SIHP #-00074), three adjoining fishponds off Kalihi.

> Site 73 is an oval-shaped pond 52 acres in area. The walls approximate 4700 feet in length, and average 6 feet in width. They are primarily of coral and average 3 feet in height. There are now two houses on the wall, but houses are modern. Auiki is a small adjoining pond partly filled. It is 12 acres in area with a 900-foot wall. Pahouiki is the smallest, being 14 acres in area with a wall 1050 feet in length. The wall is of coral, with one house. It is open to Pahounui, a pond of 26 acres with a wall 2600 feet long. The walls are also of coral with one house. It adjoins but does not open to Apili pond, which is 28 acres in extent, with a wall 1500 feet long. (McAllister 1933:90)

Although the proposed project area is primarily located within what was once the submerged Kapālama Basin, the inclusion of an in-filled fishpond within the boundaries of the proposed work area, and the close proximity to other traditional Hawaiian fishponds and a human burial within the study area, does merit an archaeological awareness of the possibility of encountering in situ cultural materials, especially within the central, northern, and northeastern portions of the proposed project area. Kama‘āina (native Hawaiians) did bury their family members within their Kuleana (area of responsibility and maintenance) (Stark et al. 2015:48). Ananoho, within the Mokauea Fishery, translates as a reference to a chair, to sit, dwell, or inhabit an ana (cave), which could be a reference to a human burial. An inadvertent burial was documented on the original coastline at Pier 40, designated as SIHP #50-80-14-5581 (Moore and Kennedy 1999:5). Situated near the effluence of Kapālama Stream, this burial was near many former fishponds, the nearest being Ananoho of Kalihi Kai. SIHP #50-80-14-5581 was determined to be a primary burial, probably post-Contact, and was identified as significant for its potential to yield information of scientific value (Moore 1997:11). In 2002, Athens and Ward document fill overlaying traditional Hawaiian fishponds, Auiki and Ananoho (SIHP #-00073) (Athens and Ward 2002, 2007). A 2004 investigation of sediments that once ringed Kalihi Kai peninsula documents prehistoric/historic fishponds, Apili and Pahouiki, and provides examples of fishpond sediments forming relatively thin (5- to 10^{+}-centimeter-thick) layers (Moore et al. 2004:25).

Table 1. Previously Recorded Historic Property in the Proposed Project Area

Site Name or Type and Number	Reference
Ananoho Fishpond, Kalihi, 50-80-14-00073	Athens and Ward 1997; 2002; 2007 McAllister 1933; Sterling and Summers 1978

Table 2. Previously Recorded Historic Properties in the Study Area

Approximate Minimum Distance to the Proposed Project Area (miles)	Site Name or Type and Number	Reference
0.2	Auiki Fishpond, SIHP # 50-80-14-00073	Athens and Ward 1997, 2002, 2007; McAllister 1933; Moore et al. 2004; Sterling and Summers 1978
0.5	Pahouiki and Pahounui Fishponds, SIHP # 50-80-14-00074	McAllister 1933; Sterling and Summers 1978
0.4	Human burial, SIHP # 50-80-14-05581	Moore and Kennedy 1999

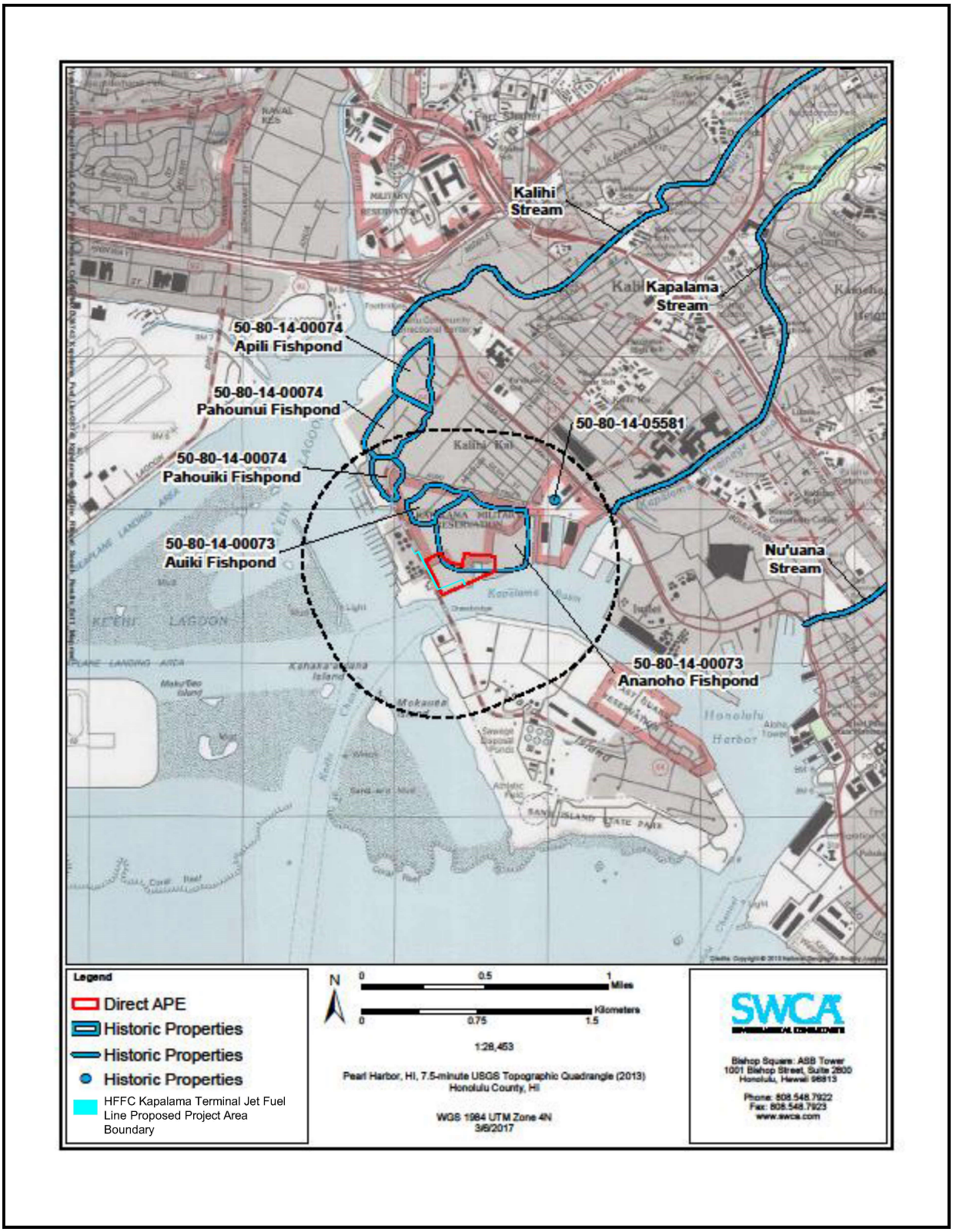


Figure 3. Previously recorded historic properties with the proposed project area and study area.

5. DISCUSSION AND RECOMMENDATIONS

SWCA reviewed cultural resources literature and databases, geomorphologic features, and sediments to assess the potential for project-related impacts to cultural resources in the proposed project area and study area, to assess historic property significance, historic property integrity, and to determine the probability of encountering undocumented cultural material during the proposed project. The review of previously conducted archaeological investigations and previously recorded archeological and historical sites indicates that one previously recorded historic property (Ananoho Fishpond, Kalihi [SIHP #50-80-14-00073]) is located in the proposed project area (see Table 1) and three previously recorded historic properties (Auiki Fishpond [SIHP #50-80-14-00073], Pahouiki and Pahounui Fishponds [SIHP #50-80-14-00074], and a human burial site [SIHP #50-80-14-05581]) are located within the study area (see Tables 2, 3 and 4). Each of these historic properties are assessed historic property significance under Criterion "a," *as they are associated with important contributions to the broad patterns of our history*, Criterion "d," as they have *yielded and are likely to yield information important to research on prehistory or history*, and Criterion "e," as they each have an *important value to the native Hawaiian people, with cultural practices once carried out at the proposed project area, and due to the associations with traditional beliefs, and events important to native Hawaiian history and cultural identity* (HAR §13-284-6).

The entirety of the proposed project area exists within a built environment with a ground surface created by historic mechanical in-filling. Because historic property identified within the proposed project area during this inquiry (SIHP #50-80-14-00073) has been in-filled and mechanically altered, the site integrity is considered to be at least partially destroyed, and SWCA recommends an evaluation of no adverse effect (Table 3). Similarly, SWCA recommends an evaluation of no adverse effect to the three historic properties recorded within the surrounding study area, Auiki Fishpond [SIHP #50-80-14-00073], Pahouiki and Pahounui Fishponds [SIHP #50-80-14-00074], and a human burial site [SIHP #50-80-14-05581], with the observance of impaired site integrity due to the destruction of portions or all portions these sites through historic in-filling and the mechanical movement of sediments (Table 4).

The historic properties documented in this report were abandoned and at least partially destroyed during large-scale in-filling of the area associated with U.S. military development of the area during World War II, and especially immediately following the attack on Pearl Harbor. That said, the location of the proposed project area, within close proximity to a traditional Hawaiian fishpond and adjacent to the ocean, indicates a slight possibility for encountering in situ, subsurface cultural features associated with traditional Hawaiian resource procurement, and the possibly funerary activities. Because of these possibilities, SWCA recommends archaeological monitoring for all ground-disturbing activities associated with this project. An archaeological monitoring plan is presented below in Section 5.1.

Table 3. Evaluation of the Effects on Historic Properties within the Proposed Project Area

Approximate Distance to proposed project area (miles)	Site Name	Age	Site Number & Integrity	Significance Criteria and Evaluation of Effects
0.3	Ananoho Fishpond	Prehistoric / Historic	50-80-14-00073; partially destroyed	a, d, e No adverse effect

Table 4. Evaluation of the Effects on Historic Properties within the Surrounding Study Area

Approximate Distance to proposed project area (miles)	Site Name or Type	Age	Site Number & Integrity	Significance Criteria and Evaluation of Effects
0.2	Auiki Fishpond	Prehistoric / Historic	50-80-14-00073; partially destroyed	a, d, e No adverse effect
0.5	Pahouiki and Pahounui Fishponds	Prehistoric/ Historic	50-80-14-00074; partially destroyed	a, d, e No adverse effect
0.4	Human burial	Prehistoric/ Historic	50-80-14-05581; partially destroyed	a, d, e No adverse effect

5.1. Archaeological Monitoring Plan

The proposed project entails the excavation of sediments for installation of a fuel line and connections with existing fuel line utilities. The location of the proposed project area, within a documented traditional Hawaiian fishpond, and in close proximity to other known cultural resources, indicates the probability that buried in situ cultural materials exist within the proposed project area. Thus, SWCA recommends full-time archaeological monitoring during all ground-disturbing activities associated with the proposed project.

The following plan articulates SWCA’s recommendations for archaeological monitoring related to all ground-disturbing activities during the proposed project. The archaeological monitor should be well versed in this archaeological monitoring plan, and should brief all excavators regarding the plan in a pre-construction conference with the backhoe operator and any excavators. The archaeological monitor should make it known what types of materials may be encountered and that these artifacts will remain the property of the landowner and may not be removed without the written consent of the landowner and SHPD. The archaeological monitor should also make it clear that no ground-disturbing activities should occur without the presence of the archaeological monitor. The archaeological monitor should make this report available at the construction site during ground-disturbing activities.

With the proposed excavation in one location, one archaeological monitor is recommended, with the expectation that all relevant parties will be informed of the archaeological monitor’s role and authority to halt construction excavation in the event of cultural materials being encountered. The archaeological monitor will collect no artifacts, but will document any encountered artifacts and sediments underlying the proposed project area using standard archaeological procedures, including global positioning system (GPS) geo-referencing, written description, illustration, and photographic documentation. Throughout the excavation, the archaeological monitor may require that excavation cease in order to carefully observe the excavated matrix for any cultural materials and to further document any stratigraphic changes.

In the event of any subsurface cultural materials, including human remains, being observed during construction excavation, all ground-disturbing activities will halt until the archaeological monitor makes an assessment. The archaeological monitor will then consult with SHPD to determine appropriate steps for further archaeological mitigation. In the event of encountering human remains, a burial plan will be prepared, in consultation with the O‘ahu Island Burial Council and SHPD. Upon completion of fieldwork, all background research, archaeological documentation, analyses, and discussion will be compiled into an archaeological monitoring report, for review and approval by SHPD.

6. REFERENCES CITED

Athens, J., and J. Ward

1997 Liliha Paleo-environmental Study, Honolulu, Hawai‘i. Honolulu. International Archaeological Research Institute, Inc., Honolulu.

2002 Paleo-environmental Study of Auiki and Ananoho Fishponds Kalihi Kai, Honolulu, O‘ahu. International Archaeological Research Institute, Inc., Honolulu.

2007 Ananoho Fishpond, Kalihi Kai, Honolulu, O‘ahu: Paleo-environmental Study TMK [1] 1-2-025:011. International Archaeological Research Institute, Inc., Honolulu.

Beckwith, Martha

1970 *Hawaiian Mythology*. University of Hawaii Press, Honolulu.

Bushnell, K., and H. Hammatt

2002 *Cultural Impact Assessment of the Proposed Middle Street Transit Center, Kalihi Ahupua‘a, Kona District, O‘ahu* (TMK: 1-2-18:1, 2, 3, 8, 9, 10). Cultural Surveys Hawai‘i, Inc., Kailua, Hawai‘i.

California Soil Resource Lab

2016 Soilweb. Available at: http://casoilresource.lawr.ucdavis.edu/gmap/. Accessed August 10, 2016.

Chinen, J.

1958 *The Great Mahele, Hawai‘i’s Land Division of 1848.* University of Hawai‘i Press, Honolulu, Hawai‘i.

Coulter, J.

1931 *Population and Utilization of Land and Sea in Hawai‘i, 1853*. Bernice Pauahi Bishop Museum Bulletin 88, Honolulu, Hawai‘i.

CSX World Terminals Consulting

2001 *Final Environmental Assessment for Stevedore Driveway Access and Parking Lot at Sand Island, Honolulu, Oahu, Hawai‘i*. Job H.C. 10096, November 26, 2001.

Earle, T.

1980 Prehistoric irrigation in the Hawaiian Islands: an evaluation of evolutionary significance. *Archaeology and Physical Anthropology in Oceania* 15:1–28.

Emerson, N.

1915 *Pele and Hi‘iaka: A Myth from Hawaii*. Honolulu Star-Bulletin Ltd., Honolulu.

Fornander, A.

1878 *An Account of the Polynesian Race: Its Origins and Migrations and the Ancient History of the Hawaiian People to the Times of Kamehameha I. Volume I.* Trubner & Company, Ludgate Hill, London.

Foote, D., E. Hill, S. Nakamura, and F. Stephens

1972 *Soil Survey of the Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii*. U.S. Department of Agriculture, Soil Conservation Service, in cooperation with the University of Hawai'i Agricultural Experiment Station. U.S. Government Printing Office, Washington, D.C.

Giambelluca, T.W., Q. Chen, A.G. Frazier, J.P. Price, Y.-L. Chen, P.-S. Chu, J.K. Eischeid, and D.M. Delparte

2013 Online rainfall atlas of Hawai'i. Bulletin of American Meteorological Society 94, 313-316, doi: 10.1175/BAMS-D-11-00228.1. Available at: http://rainfall.geography.hawaii.edu/. Accessed July 13, 2016.

Gonser, J.

2001 Long-thorned Kiawe on Agriculture Hit List. Honolulu Advertiser, January 8, 2001. Available at: http://the.honoluluadvertiser.com/2001/Jan/08/ 18localnews17.html. Accessed March 1, 2017.

Hawaii State Department of Transportation (HDOT) Harbors

1997 *Oahu Commercial Harbors 2020 Master Plan*. Prepared by Hawaii State Department of Transportation Harbors Division, Honolulu, Hawaii. Available at: http://hidot.hawaii.gov/harbors/files/2013/01/Oahu-2020-Master-Plan.pdf. Accessed March 1, 2017.

2014 *Kapalama Container Terminal and Tenant Relocation Final Environmental Impact Statement.* Prepared by Hawaii State Department of Transportation Harbors Division, Honolulu, Hawaii.

Kamakau, S.M.

1865 Instructions in Ancient Hawaiian Astronomy. *Nupepa Kuokoa* August 5, 1865.

Kame'elehiwa, L.

1992 *Native Land and Foreign Desires: Pehea Lā E Pono Ai*. Bishop Museum Press, Honolulu.

Kalākaua, D.

1990 *The Legends and Myths of Hawaii: The Fables and Folklore of a Strange People*. Mutual Publishing, Honolulu, Hawai'i.

Kauaian Institute

2007 *Ahupua'a on Hawaii: Ancient Hawaiian Boundaries and Place Names.* The Kauaian Institute. Available at: www.kauaian.net. Accessed July 1, 2016.

Landrum, J., and P.C. Klieger

1991 *Historical Literature and Document Search for the City and County of Honolulu, Department of Transportation Services, Bus Unit Repair Shop Facility, Kalihi, O‘ahu, Hawai‘i, TMK:1-2- 16:7*. Public Archaeology Section, Applied Research Group, Bernice Pauahi Bishop Museum, Honolulu.

Mana

2015 *Mokauea Lives and Breathes*. Available at: http://www.welivemana.com/ articles/mokauea-lives-and-breathes. Accessed March 2017.

McAllister, G.

1933 *Archaeology of Oahu*. Bishop Museum Bulletin 104. Bernice Pauahi Bishop Museum, Honolulu, Hawai‘i.

Moore, J.

1997 *The Inadvertent Burial Discovered at Pier 40 in Kapalama, Ahupua‘a, Kona*. Letter report to Sara Collins, Ph.D., O‘ahu Island Archaeologist, Department of Land and Natural Resources State Historic Archaeological Consultants of the Pacific, Inc. Hale‘iwa, Hawai‘i.

Moore, J., and J. Kennedy

1999 *The Archaeological Treatment of the Inadvertent Discovery of a Human Burial at Pier 40, TMK:[1] 1-5- 32:2, Kapalama Ahupua'a, Kona District, Island of Oahu, Final Report*. Archaeological Consultants of the Pacific, Inc., Hale‘iwa, Hawai‘i.

Moore, J.R., A. Bevan, and J. Kennedy

2004 *An Archaeological Inventory Survey Report for a Property Located at TMK [1] 1-2- 21:13 in Kalihi Ahupua‘a, Kona District, Island of O‘ahu*. Archaeological Consultants of the Pacific, Inc. Hale‘iwa, Hawai‘i.

Napoka, N.

1976 *Mokauea Island, A Historical Study*. Historic Preservation Office, Division of State Parks, Outdoor Recreation and Historic Sites. Department of Land and Natural Resources.

Natural Resources Conservation Service

2014 Soil Survey, Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Available at: http://websoilsurvey.nrcs.usda.gov/. Accessed January 5, 2017.

Stark, R., L. Krause, S. Belluomini, D. Shideler, M.A., and H. Hammatt,

2015 *Archaeological Assessment Report for the School of Ocean and Earth Science and Technology (SOEST) Facility at Sand Island and Floating Dock at the Marine Education Training Center (METC) Honolulu Ahupua‘a, Honolulu (Kona) District, O‘ahu, TMKs: [1] 1-5-041:334 por and 006 por*. Cultural Survey’s Hawai‘i. Kailua.

Sterling, E., and C. Summers

1978 *Sites of Hawai‘i*. Department of Anthropology, Bernice Pauahi Bishop Museum, Honolulu, Hawai‘i.

Thrum, T.

1907 Heiau and Heiau Sites throughout the Hawaiian Islands. *Hawaiian Almanac and Annual for 1907*. Honolulu, Hawai‘i.

Waihona ‘Aina

2000 The Māhele database. Available at: http://waihona.com. Accessed March 1, 2015.