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SEP 23 2014

AGENCY ACTIONS
SECTION 343-5(B), HRS
PUBLICATION FORM (FEBRUARY 2013 REVISION)

RECEIVED

Project Name: Kalaeloa Barbers Point Harbor Fuel Pier and Harbor Improvements

Island: O'ahu

14 SEP 11 A8:51

District: 'Ewa

TMK: (1) 9-1-014:008 (portion); 024 (portion); 025, 030, 031, 037, 038 & 040
(1) 9-1-074:037 (portion) & 038 (portion)

Permits: Rivers and Harbors Act Sections 10 & 404; Marine Protection, Research and Sanctuaries Act (MPRSA) Section 102, 103, & 108; Community Noise for Construction Activities; Department of Health (DOH) Section 401 Water Quality Certification; DOH National Pollutant Discharge Elimination System Permit; agency consultation for the Endangered Species Act Section 7, Fish and Wildlife Coordination Act, Coastal Zone Management Act, and Chapter 6E-42 Historic Preservation Review

Proposing/Determination Agency: Hawai'i Department of Transportation, Harbors Division
79 S. Nimitz Highway, Honolulu, HI 96813
Carter Luke, P.E.; Engineering Program Manager (808) 587-1862

Accepting Authority: Governor, State of Hawai'i

Consultant: Group 70 International, Inc.
925 Bethel Street, 5th Floor, Honolulu, HI 96813
Jeffrey H. Overton, Principal Planner (808) 523-5866

Status (check one only):

- DEA-AFNSI** Submit the proposing agency notice of determination/transmittal on agency letterhead, a hard copy of DEA, a completed OEQC publication form, along with an electronic word processing summary and a PDF copy (you may send both summary and PDF to oeqchawaii@doh.hawaii.gov); a 30-day comment period ensues upon publication in the periodic bulletin.
- FEA-FONSI** Submit the proposing agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and a PDF copy (send both summary and PDF to oeqchawaii@doh.hawaii.gov); no comment period ensues upon publication in the periodic bulletin.
- FEA-EISPN** Submit the proposing agency notice of determination/transmittal on agency letterhead, a hard copy of the FEA, an OEQC publication form, along with an electronic word processing summary and PDF copy (you may send both summary and PDF to oeqchawaii@doh.hawaii.gov); a 30-day consultation period ensues upon publication in the periodic bulletin.
- Act 172-12 EISPN** Submit the proposing agency notice of determination on agency letterhead, an OEQC publication form, and an electronic word processing summary (you may send the summary to oeqchawaii@doh.hawaii.gov). NO environmental assessment is required and a 30-day consultation period upon publication in the periodic bulletin.
- DEIS** The proposing agency simultaneously transmits to both the OEQC and the accepting authority, a hard copy of the DEIS, a completed OEQC publication form, a distribution list, along with an electronic word processing summary and PDF copy of the DEIS (you may send both the summary and PDF to oeqchawaii@doh.hawaii.gov); a 45-day comment period ensues upon publication in the periodic bulletin.
- FEIS** The proposing agency simultaneously transmits to both the OEQC and the accepting authority, a hard copy of the FEIS, a completed OEQC publication form, a distribution list, along with an electronic word processing summary and PDF copy of the FEIS (you may send both the summary and PDF to oeqchawaii@doh.hawaii.gov); no comment period ensues upon publication in the periodic bulletin.

___ Section 11-200-23
Determination

The accepting authority simultaneously transmits its determination of acceptance or nonacceptance (pursuant to Section 11-200-23, HAR) of the FEIS to both OEQC and the proposing agency. No comment period ensues upon publication in the periodic bulletin.

___Section 11-200-27
Determination

The accepting authority simultaneously transmits its notice to both the proposing agency 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 not required. No EA is required and no comment period ensues upon publication in the periodic bulletin.

___Withdrawal (explain)

Summary (Provide proposed action and purpose/need in less than 200 words. Please keep the summary brief and on this one page):

Kalaeloa Barbers Point Harbor (KBPH) is the second busiest commercial harbor in the state. KBPH serves as the primary 'bulk' harbor for liquid-bulk (i.e., petroleum products, biofuels and asphalt) and dry-bulk (i.e., coal, cement, sand and aggregate) cargos. The purpose of the Proposed Action is to add berthing space and optimize cargo handling efficiencies at KBPH.

The Proposed Action will create a dedicated Fuel Pier at Piers 3 and 4 within KBPH, adding 1,325 lineal feet of berth space with industry-standard infrastructure to modernize the facility. Separation of liquid- and dry-bulk cargo transfers will improve efficiency and enhance safety. Fuel Pier development will displace an existing tenant from Pier 3, and will require demolition of a Finger Pier used for harbor support vessels. Relocation of the tenant to Pier 9 and construction of a pier for support vessels at Pier 8 are proposed as part of the Fuel Pier project. Additional improvements identified in the concurrent *Kalaeloa Barbers Point Harbor 2040 Master Plan* to optimize harbor use of Piers 7 and 10, and on fastland to provide for harbor users, are proposed as actions independent from Fuel Pier development.

NEIL ABERCROMBIE
GOVERNOR



FORD N. FUCHIGAMI
INTERIM DIRECTOR

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'14 SEP 10 A9:01 STATE OF HAWAII
DEPARTMENT OF TRANSPORTATION
869 PUNCHBOWL STREET
HONOLULU, HAWAII 96813-5097
OFFICE OF ENVIRONMENTAL QUALITY CONTROL

Deputy Directors
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AUDREY HIDANO
ROSS M. HIGASHI
JADINE URASAKI

IN REPLY REFER TO:
HAR-EP
4939.15

September 11, 2014

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SEP 23 2014

TO: THE HONORABLE JESSICA WOOLEY, DIRECTOR
OFFICE OF ENVIRONMENTAL QUALITY CONTROL
DEPARTMENT OF HEALTH

FROM: FORD N. FUCHIGAMI
INTERIM DIRECTOR OF TRANSPORTATION

SUBJECT: KALAELOA BARBERS POINT HARBOR FUEL PIER AND HARBOR
IMPROVEMENTS ENVIRONMENTAL IMPACT STATEMENT
PREPARATION NOTICE, KALAELOA HARBOR, OAHU – JOB H.C. 10499

The Department of Transportation, Harbors Division has assessed the potential environmental impacts of the proposed Fuel Pier and other improvements at Kalaeloa Harbor and has determined that an Environmental Impact Statement (EIS) will be prepared. The project is situated at the following Tax Map Keys: (1) 9-1-014: 008 (portion), 024 (portion), 025, 030, 031, 037, 038 and 040. Also, (1) 9-1-074: 037 (portion) and 038 (portion).

Please publish a notice of availability of the attached EIS Preparation Notice for the proposed project in the next issue of *The Environmental Notice*.

We have enclosed a completed OEQC Publication Form, a hard copy of the EIS Preparation Notice, and a PDF file of the EIS Preparation Notice. Simultaneous with this memo, we have submitted the summary of the action in a text file by electronic mail to the OEQC.

If there are any questions, please have your staff contact Mr. Dean Watase of our Harbors Engineering Planning Section at 587-1883.

Enc.



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LETTER OF TRANSMITTAL

Group 70 International, Inc. • Architecture • Planning & Environment • Civil Engineering • Interior Design • Technology
 925 Bethel Street, Fifth Floor • Honolulu, Hawai'i 96813-4398 • PH: (808) 523-5866 • FAX: (808) 523-5874

TO: Office of Environmental Quality Control 235 So. Beretania Street, Suite 702 Honolulu, HI 96813		FILE COPY SEP 23 2014
ATTENTION: Director		
DATE: September 10, 2014		
PROJECT: Kalaeloa Barbers Point Harbor	PROJECT NO:	
SUBJECT: Request to Publish Environmental Impact Statement Preparation Notice availability in next issue of <i>The Environmental Notice</i>		
E-MAIL/FAX:		NO. OF PAGES:
WE ARE SENDING YOU:	<input checked="" type="checkbox"/> ATTACHED <input type="checkbox"/> UNDER SEPARATE COVER VIA	
THE FOLLOWING ITEMS:	<input checked="" type="checkbox"/> ORIGINAL <input type="checkbox"/> COPY <input type="checkbox"/> PRINTS <input type="checkbox"/> SHOP DWGS <input type="checkbox"/> LETTER <input type="checkbox"/> DOCUMENT <input type="checkbox"/> FILES	<input type="checkbox"/> E-MAIL <input type="checkbox"/> FAX <input type="checkbox"/> SPECIFICATIONS <input type="checkbox"/> CHANGE ORDERS <input type="checkbox"/> OTHER

TRANSMITTED AS CHECKED: FOR APPROVAL FOR YOUR USE AS REQUESTED FOR REVIEW AND COMMENT

COPIES	DATE	NO.	DESCRIPTION
1	9/11/2014		Cover Letter from State of Hawaii Department of Transportation
1	No date		Completed Publication Form for Agency Actions
1	Sept. 2014		Bound document: Kalaeloa Barbers Point Harbor Fuel Pier and Harbor Improvements EISPN
1	9/11/2014		Compact disc containing pdf file of EISPN; cover letter from Agency; and Word file of the publication form

Please contact Barrie Morgan at Group 70 International (441-4634) for any questions regarding delivery of contents.

Please note DOT-H contact on cover letter for any comments regarding project.

Mahalo

CC: Dean Watase, DOT-Harbors

UNLESS WRITTEN OBJECTION IS RECEIVED WITHIN SEVEN DAYS, WE ASSUME STATEMENTS CONTAINED WITHIN ARE ACCEPTED

Kalaeloa Barbers Point Harbor Fuel Pier and Harbor Improvements

ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE

Honouliuli, 'Ewa District, Kapolei, O'ahu



Submitted by:

Hawai'i Department of Transportation

Harbors Division



September 2014

Kalaeloa Barbers Point Harbor Fuel Pier and Harbor Improvements

ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE

This environmental document is prepared pursuant to Hawai'i Revised Statutes, Chapter 343, Environmental Impact Statement Law and Chapter 200 of Title 11, Administrative Rules, Department of Health, Environmental Impact Statement Rules.

Submitted by:

**Hawai'i Department of Transportation
Harbors Division**



September 2014



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Prepared by:



Architecture • Planning & Environmental Services • Interior Design • Civil Engineering

925 Bethel Street, 5th Floor, Honolulu, HI 96813 (808) 523-5866



ACRONYMS AND ABBREVIATIONS

AAQS	Ambient Air Quality Standards
DBEDT	Department of Business, Economic Development and Tourism, State of Hawai'i
DEIS	Draft Environmental Impact Statement
DLNR	Department of Land and Natural Resources, State of Hawai'i
DOH	Department of Health, State of Hawai'i
DOT	Department of Transportation, State of Hawai'i
DOT-H	Department of Transportation, Harbors Division, State of Hawai'i
EFH	Endangered Fish Habitat
EIS	Environmental Impact Statement
EISPN	Environmental Impact Statement Preparation Notice
FPDP	Fuel Pier Development Plan
HAR	Hawai'i Administrative Rules
HCEI	Hawai'i Clean Energy Initiative
HECO	Hawaiian Electric Company
HHUG	Hawai'i Harbors User Group
HRS	Hawai'i Revised Statutes
IWS	Individual Wastewater System
KBPH	Kalaeloa Barbers Point Harbor
LNG	Liquefied Natural Gas
LOA	Length Overall
NOAA	National Oceanographic and Atmospheric Administration
NPDES	National Pollutant Discharge Elimination System
OSRO	Oil Spill Response Organization
SMA	Special Management Area
USACE	U.S. Army Corps of Engineers



1.0 PROJECT SUMMARY

This Environmental Impact Statement Preparation Notice (EISPN) was prepared in accordance with Hawai'i Administrative Rules Title 11 Chapter 200 implementing Hawai'i Revised Statutes (HRS) Chapter 343. HRS 343 applies to the Proposed Action because the project involves use of state land and state funds. A previous EISPN was published August 8, 2013 in *The Environmental Notice* and withdrawn June 30, 2014 (Section 7 provides additional information). The purpose of this EISPN is to inform interested parties of the project and to seek agency and public input on issues and resources of concern. Input relevant to the Proposed Action received in response to this EISPN will help to define the evaluation conducted in the Environmental Impact Statement.

Type of Document:	Environmental Impact Statement Preparation Notice
Project Name:	Kalaeloa Barbers Point Harbor Fuel Pier & Harbor Improvements
Chapter 343, HRS Triggers:	Use of State Lands and State Funds
Proposing Agency:	Hawai'i Department of Transportation, Harbors Division 79 S. Nimitz Highway Honolulu, Hawai'i 96813
Accepting Authority:	Governor, State of Hawai'i
EIS Preparer:	Group 70 International, Inc.
Location:	91-550 Malakole Street, Honouliuli, 'Ewa District, O'ahu (<i>Figure 1</i>)
Tax Map Key:	(1) 9-1-014: 008 (portion) (1) 9-1-014: 024 (portion), 025, 030, 031, 037, 038 & 040 (1) 9-1-074: 037 (portion) & 038 (portion)
Total Property Area:	294 acres
Project Area:	114 acres
Recorded Fee Owner:	State of Hawai'i
State Land Use Classification:	Urban
City and County Zoning:	I-3, Waterfront Industrial
Special Management Area:	Within SMA (DOT-H Exempt)
Proposed Action:	Add berthing space and improve cargo handling efficiencies at Kalaeloa Barbers Point Harbor. Create a dedicated Fuel Pier at Piers 3 and 4 to add 1,325 lineal feet of berth space. Install industry-standard infrastructure to improve safety and modernize the Fuel Pier facility. Separate liquid- and dry-bulk cargo transfers to optimize harbor operational efficiencies. Fuel Pier development will displace a marine services tenant from Pier 3 and marine support vessels from a Finger Pier at Pier 4. Relocate the tenant from Pier 3 to Pier 9, and construct a pier structure at Pier 8 for support vessels. Additional improvements unrelated to the Fuel Pier and identified in the concurrent <i>Kalaeloa Barbers Point Harbor 2040 Master Plan</i> are proposed as independent actions.
Required Permits:	See Table 1 in Section 2.5.



KALAELOA BARBERS POINT HARBOR FUEL PIER & HARBOR IMPROVEMENTS
ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE



Figure 1 – Location Map



2.0 PROJECT DESCRIPTION

The State Department of Transportation, Harbors Division (DOT-H) is responsible for the control, management, use, and regulation of the State-owned commercial harbors in Hawai'i. DOT-H is a self-sufficient enterprise, with revenues for operation, maintenance, and capital improvements derived from wharfage, rentals, dockage, port entry fees, and other charges. Ten harbors located on six major Hawaiian Islands comprise the statewide harbors system, and serve the commercial cargo, passenger, and fishing industries. O'ahu is served by two commercial harbors: Honolulu Harbor and Kalaeloa Barbers Point Harbor (KBPH). These harbors work as an integrated system to receive nearly all consumable goods, durables, building materials and fuel brought to Hawai'i.

KBPH is the second busiest commercial harbor in the state and serves as the primary 'bulk' harbor for liquid-bulk (i.e., petroleum products, biofuels and asphalt) and dry-bulk (i.e., coal, cement, sand and aggregate) cargos. KBPH also serves as the primary distribution point for finished petroleum and non-petroleum products to all Hawaiian Islands beyond O'ahu. KBPH is connected to the only refineries in the state, and to off-site storage, through a system of fuel transmission pipelines that extends to Honolulu Harbor. In recent years, KBPH cargo berths at Piers 5 and 6 have become increasingly congested and conflicts occur between liquid- and dry-bulk shipments. Potential market changes in Hawai'i's energy market could dramatically increase waterborne movement of fuels. The proposed project will add berthing space and improve cargo handling efficiencies at KBPH.

An analysis of 2012 berthing activity at KBPH revealed Piers 5 and 6 were occupied approximately 45 percent of the time, and Pier 7 occupied 55 percent of the time, on a linear foot per hour basis. Industry standards consider a berth fully utilized when it reaches 50 percent for berthing. Dry- and neo-bulk cargos can take from 12 hours to eight days to unload a single vessel. Active fuel transfers require a safety zone (typically 100 feet) that encircles the vessel and extends to the pier in which no cargo handling or transit of people can occur. Inter-island barges making weekly port calls to transport concrete and fuel to the Neighbor Islands compete for berth space with overseas ships unloading commodities at KBPH.

Previous harbor master plans have recommended construction of a dedicated Fuel Pier at KBPH. The *Statewide Fuel Facilities Development Plan* (2009) evaluated seven commercial harbors in the state for improved fuel facilities. KBPH's Piers 3 and 4 were determined to have the highest priority for development. Currently Pier 3 is leased by a private company providing maritime support services. Relocating the tenant to Pier 9 and consolidating the company's operations with its dry dock (currently at Pier 9) would allow development of Piers 3 and 4 for liquid-bulk cargo berthing. Construction of supporting infrastructure, including pipelines to convey fuels to off-site refineries and storage, will create a modern fuel hub for the state's energy market.

The Proposed Action will create a dedicated Fuel Pier at Piers 3 and 4 within KBPH, adding 1,325 lineal feet of berth space with industry-standard infrastructure to modernize the facility. Separation of liquid- and dry-bulk cargo transfers will improve efficiency and enhance safety. Fuel Pier development will displace an existing tenant from Pier 3, and will require demolition of a Finger Pier used for harbor support vessels. Relocation of the tenant to Pier 9 and construction of a pier at Pier 8 for support vessels are proposed as part of the Fuel Pier project. Improvements unrelated to Fuel Pier development and identified in the concurrent *Kalaeloa Barbers Point Harbor 2040 Master Plan* are independent actions. These are described on page 6, and indicated on *Figure 2*.



KALAELOA BARBERS POINT HARBOR FUEL PIER & HARBOR IMPROVEMENTS
ENVIRONMENTAL IMPACT STATEMENT PREPARATION NOTICE

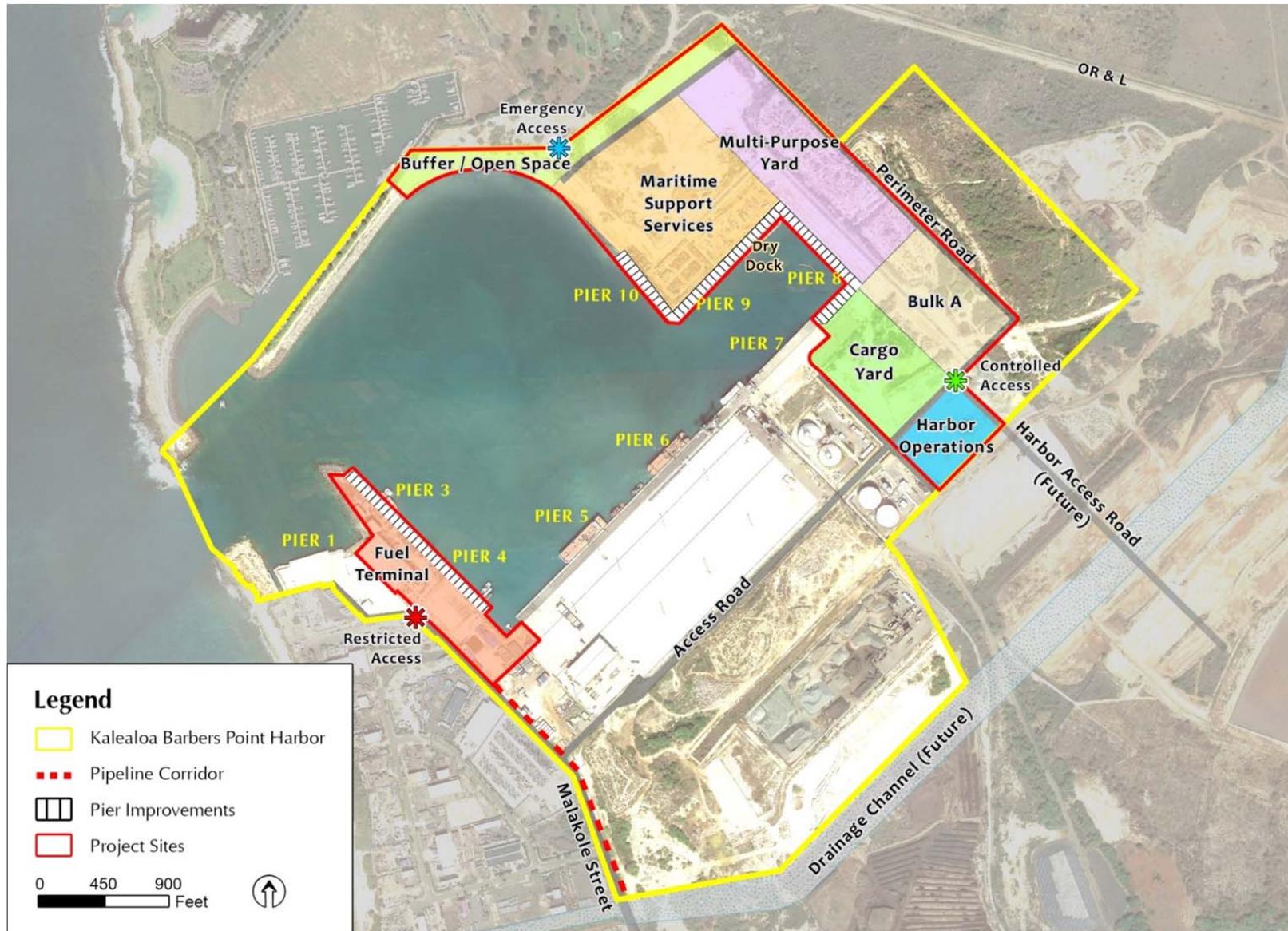


Figure 2 – Proposed Future Conditions



2.1 Purpose and Need for the Action

Initially developed as a reliever harbor to augment Honolulu Harbor's cargo capacity, KBPH has become the state's second busiest harbor in terms of cargo tonnage. Specialized offloading equipment for both liquid-bulk and dry-bulk cargo has been installed, allowing efficient movement of commodities between the harbor and neighboring industrial facilities for distribution throughout the state. KBPH surpasses Honolulu Harbor in liquid-bulk cargo volume, and acts as the state's fuel supply hub. Fuel pipelines convey a variety of petroleum products between off-site storage, Hawai'i's two refineries, and tanker vessels that bring petroleum products to Neighbor Islands.

Undeveloped areas within KBPH offer potential for expanded berth space to accommodate projected increases in waterborne movement of liquid- and dry-bulk cargos through the year 2040. DOT-H has planned for O'ahu's commercial harbors as interdependent entities in the *O'ahu Commercial Harbors 2020 Master Plan*. Expansion of facilities for overseas containerized cargo is underway at Honolulu Harbor, and additional dry- and liquid-bulk berths were identified as priority for KBPH. A 2009 evaluation of existing and potential harbor capacities throughout the state's commercial harbors system specific to petroleum fuels identified KBPH as the harbor best suited to accommodate changes in imported fuels and inter-island shipments. Roughly 65 percent of fuel in the state is consumed on O'ahu, and the remaining distributed to the Neighbor Islands.

Hawai'i's energy market is dynamic and changes could impact demand for berth space at KBPH. Currently, 93 percent of Hawai'i's energy needs are served through imported energy products. The Hawai'i Clean Energy Initiative (HCEI), a partnership launched in 2008 between the State of Hawai'i and the U.S. Department of Energy, set a goal to fulfill 70 percent of Hawai'i's energy demand using renewable sources and energy efficiency measures by 2030. Since HCEI's inception, many renewable energy pilot projects and several utility-scale facilities have come online, and Hawai'i has become a national leader of renewable energy application. However, even with aggressive development of alternative fuels and renewable energy, Hawai'i's utilities maintain that the state cannot stop its dependency on oil "overnight".

Decreased fuel oil demand for power generation is expected to come from both conservation initiatives and replacement fuels. Such decreased demand locally for refined fuel products could result in an unsustainable market for the two refineries currently in operation in the state. Recent studies indicate high crude costs, the relatively small scale of production, and new regulations related to emissions could trigger refinery closures at any time. In the event one or both refineries close, increased volumes of liquid-bulk fuels will need to be imported, resulting in increased fuel transfer activity at KBPH. Projections for increased vessel activity vary with potential for up to 17 additional port calls monthly.

The purpose of the Proposed Action is to add berthing space and optimize cargo handling efficiencies at KBPH, including modernization of the liquid-bulk cargo facilities.

The Proposed Action is needed to:

- Reduce berthing conflicts at KBPH Piers 5 and 6 by providing additional ship berth areas.
- Expand specialized bulk cargo systems at KBPH to meet projected demand through the year 2040.
- Utilize and enhance existing fuel distribution infrastructure near largest demand area.
- Increase vessel layberth commensurate with projected increase in vessel calls.



- Separate dry- and liquid-bulk cargo operations for improved safety and efficiency.
- Increase flexibility to handle fuel types expected in the reasonably foreseeable future.
- Improve harbor infrastructure to support maritime-related tenants and workers utilizing KBPH (potable water, power, roadways, and emergency response).
- Add to O'ahu's liquid-bulk redundancy systems and emergency preparedness.

Given the changing energy landscape stemming from national and state clean energy goals, increased demand for waterborne movements of liquid-bulk products into 2040 could be significant. Hawai'i's dependence on imports for fuels and goods, and KBPH's role as a statewide hub for bulk cargo transfer, makes efficiency in cargo movements imperative.

2.2 Proposed Action

The Proposed Action will add 1,325 lineal feet of berth space as a dedicated Fuel Pier at Piers 3 and 4 within KBPH. Industry-standard infrastructure will be installed on fastland at Piers 3 and 4 and will modernize the Fuel Pier facility. An existing tenant at Pier 3 will be relocated to Pier 9, and building construction on fast land is needed to continue marine service operations. Construction of a pier structure at Pier 8 will serve as layberth for harbor support vessels displaced by demolition of the Finger Pier at Pier 4. Near-term improvements identified in the concurrent *Kalaeloa Barbers Point Harbor 2040 Master Plan* are proposed as actions independent of Fuel Pier development; these actions add berth space and optimize harbor efficiency by extending infrastructure such as shoreside electrical power, potable water, communications systems, and lighting and fencing improvements.

Specific components of the Proposed Action include:

Dedicated Fuel Pier at Piers 3 and 4

- Demolish or reconfigure existing buildings at Pier 3 and prepare site for fastland improvements required for Fuel Pier.
- Evaluate relocation impacts for tenant move from Pier 3 to Pier 9 by conducting environmental analysis of fastland and submerged land improvements for operations at the Pier 9 location, and provide utility sources (electrical power and potable water) for the site.
- Construct a dedicated Fuel Pier with integrated fuel transfer infrastructure and safety features land-side (total addition of 1,325 berth feet).
- Provide new layberth at Pier 8 for marine support vessels displaced from the Finger Pier at Pier 4 (addition of approximately 410 berth feet).

Independent Harbor Improvements

- Provide new layberth at Pier 10 of approximately 525 berth feet.
- Extend Pier 7 approximately 225 feet.
- Expand Pier 7 cargo yard approximately 10 acres contiguous with the Pier 6 cargo yard.
- Construct Harbor Operations building at planned Kalaeloa Harbor Access Road entrance.
- Extend electrical power, communication systems, potable water and fire hydrants to northern harbor area to support maritime tenants and harbor users.
- Provide shoreside electrical power and potable water at key sites along piers.
- Remove remnant dredged coral stockpiles as needed for improvements.



2.3 Background

Construction of a dedicated Fuel Pier at KBPH has been in the planning stages for more than 30 years. As early as 1983, improvements to Pier 3 to accommodate a 700-foot LOA petroleum ship was included in the *Development Plan for Barber's Point Harbor* by DOT-H. It was not until 2008 that the Hawai'i State Legislature appropriated funds to implement the state's *Harbors Modernization Plan*. This plan, prepared by DOT-H in partnership with the Hawai'i Harbors User Group (HHUG), included funds for a new dedicated Fuel Pier at KBPH Piers 3 and 4. The project is now being implemented to address potential fuel demand scenarios due to a changing energy market, as well as to meet increased Neighbor Island demand in keeping with projected growth.

The *Statewide Fuel Facilities Development Plan* was published in 2009, and provided a 10 percent Fuel Pier design for KBPH's Piers 3 and 4. The design includes fuel pipelines to convey liquid-bulk fuel to off-site storage and refineries. The *Kalaeloa Barbers Point Harbor Fuel Pier Development Plan* (FPDP), currently being finalized by DOT-H, details the energy scenarios Hawai'i harbors will need to accommodate. Consultation with businesses, agencies and community members provided input for the proposed Fuel Pier. Design options for a new dedicated Fuel Pier and supporting infrastructure are also detailed in the FPDP, and form the basis for the Proposed Action to be evaluated in the Environmental Impact Statement (EIS).

2.4 Alternatives Considered

The EIS will only evaluate alternatives that meet the project's Purpose and Need, and which consider operational constraints, location, and pier design. Alternatives considered include:

- Pier Design
- Location
- Bulk Liquefied Natural Gas
- No Action

2.4.1 Pier Design

Preliminary design alternatives have been developed to allow analysis of potential environmental impacts and to develop relative project costs. Three alternatives have been identified for Fuel Pier design, and three alternative berth types have been identified for Piers 7 – 10.

Fuel Pier Design Alternatives

Three design alternatives have been identified for the dedicated Fuel Pier.

Alternative Design A: Segmented Partial Piers

Alternative A utilizes a protruding segmented pier configuration, composed of a series of pile-supported fuel transfer platforms and breasting dolphins. The structure would be located approximately 35 to 60 feet offshore. Fuel vessels would rest against two breasting dolphins while a fuel transfer is conducted. Mooring bollards would be positioned on the pier and on breasting dolphins for secured berthing. The pier itself would consist of 18-inch thick precast planks supported by 20-inch square reinforced concrete piles (approximately 124 pre-drilled), topped with 6-inch thick reinforced concrete planks (*Figure 3*).

Catwalks would be located between breasting dolphins and shore-side for access; rubber fenders would be affixed to the pier front. Landing for gangways would be suspended between two breasting dolphins. The dolphins would be constructed with a rail fulfilling Occupational Safety and Health Administration (OSHA) requirements for forklift access. The fuel transfer platform would house manifolds for fuel hose hook-up and shore-side access for a maintenance truck. Fuel barges or tank ships would position onboard fuel pipelines (located amidships) in range of manifolds for fuel transfer operations. The segmented pier system would be dedicated solely to fuel transfer, and would not support bulk cargo or container shipments.

Phased construction of the segmented partial pier design enables retention of the Finger Pier until the full build-out of the Fuel Pier is completed.

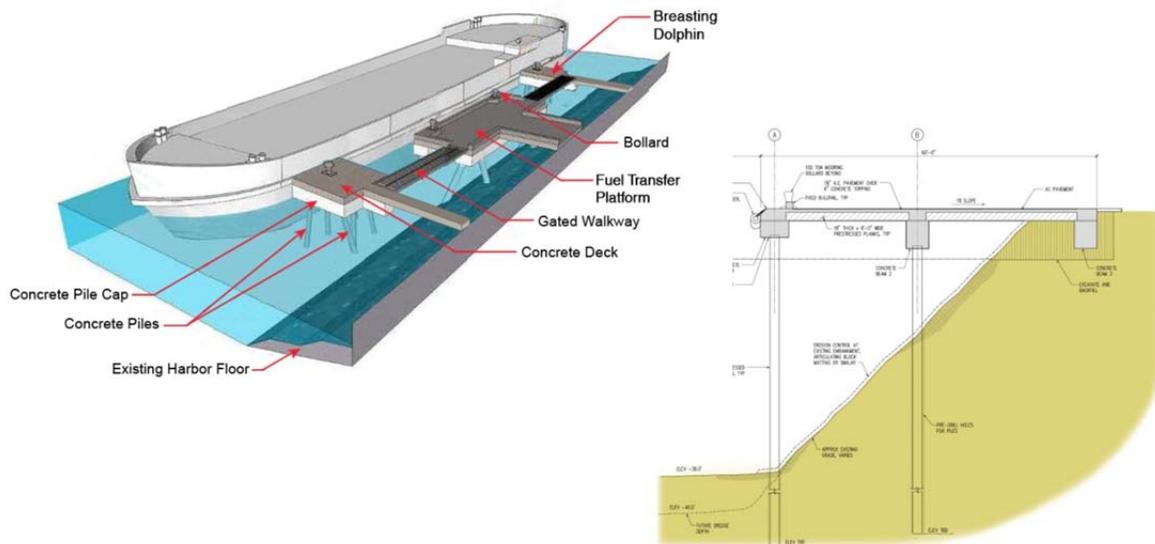


Figure 3 – Alternative A: Segmented Partial Piers Concept

Alternative Design B: Continuous Pile-Supported Platform Wharf

Alternative B is a full length pile-supported wharf structure. This common type of wharf structure consists of concrete slabs spanning between concrete (cap) beams supported by precast, pre-stressed concrete piles driven into the harbor floor (*Figure 4*).

This alternative would provide for a continuous operational platform equipped with mooring bollards and berthing fenders and other features required to service and support the berthed vessels. A continuous wharf could be used for offloading cargo, if the structure is designed for the appropriate loads. Fuel manifolds to receive flexible hoses from the ships would be positioned to optimize berthing flexibility. Phased construction would be possible.



A continuous sheet pile bulkhead would provide additional potential function for loading and offloading cargo, such as shipping containers, if the bulkhead structure is designed for the appropriate loads. Fuel manifolds to receive flexible hoses from the ships would be positioned to optimize berthing flexibility. Phased construction would also be possible with this option.

Berth Design Alternatives at Piers 7, 8, 9 and 10

Three berthing design alternatives will be considered to create layberth at Piers 8 and 10, and for improvements to Piers 7 and 9.

Alternative Design 1: Pile Supported Pier Concept

Pile supported structures can be used with continuous or segmented piers. The pier and associated apron can be designed at varying widths appropriate to the type of cargo. Dry-bulk cargo requires a continuous pier with adjacent apron area to allow offloading or loading of uncontained material. The pile supports and pier structure must be designed to withstand the expected loads; for containers and loading equipment, structural loads would be higher than for layberth.

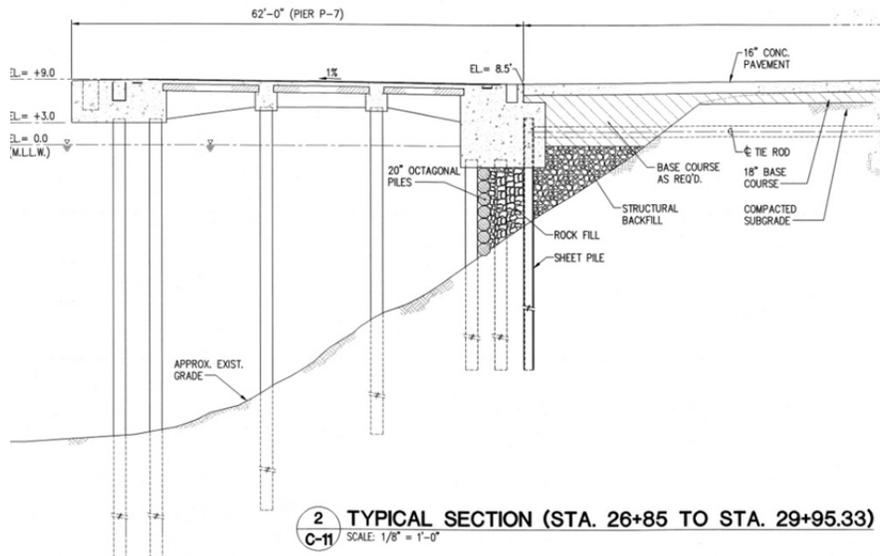


Figure 6 – Pile Supported Pier Concept

Alternative Design 2: Sheet Pile Bulkhead Concept

This alternative has an added benefit of hardening the harbor edges to reduce erosion. Interconnected sheet pile (either steel or concrete) would be restrained from outward movement by installing steel anchor rods and concrete deadman anchors; the space between the shoreline and the bulkhead would be backfilled with coarse aggregate material. The area would be topped with asphalt concrete or other suitable material to provide an appropriate pier surface. See *Figure 7*.



2.4.2 Location

Operational considerations require a deep-draft harbor capable of accommodating 36-foot draft vessels, with proximity to land-side fuel infrastructure sited near the largest demand population. These considerations strictly limit the potential alternative sites to the Island of O‘ahu. KBPH specialized infrastructure to load and unload liquid- and dry-bulk cargo has been installed over the past 25 years by industry, creating a hub for commodities refined or completed on O‘ahu and shipped to Neighbor Islands. The installation of a dedicated Fuel Pier at KBPH aligns with past strategic development and supports significant industry investment in fuels refining and storage facilities nearby. Considerations for selecting the Fuel Pier site within KBPH will be documented in the EIS.

2.4.3 Bulk Liquefied Natural Gas (LNG)

The potential for bulk LNG import to KBPH has been intensively studied by industry representatives. By some estimates, it would take at least seven years to complete supply agreements, planning, environmental studies, Federal Energy Regulatory Commission (FERC) permitting, and infrastructure development. There are a multitude of options for on-shore and off-shore locations for bulk LNG transfer and storage on O‘ahu. Due to the uncertainty of facility siting, scale, and long lead times for permitting and development, LNG at KBPH is not reasonably foreseeable at this time.

2.4.4 No Action

In the No Action alternative, existing facilities and infrastructure would remain at the same scale and existing conditions. Under this alternative, none of the planned improvements would be realized. Berth utilization at KBPH would continue to be inefficient, with projected increases in both liquid- and dry-bulk cargo causing longer delays for vessels waiting to on-load and off-load cargo. This alternative would not support the state’s initiatives for developing fuel support facilities to meet anticipated growth on O‘ahu and the Neighbor Islands.

2.5 Project Schedule

Following EIS acceptance, the Fuel Pier and other improvements will advance to final design. With completed construction-level plans, DOT-H will secure construction approvals and permits. Implementation depends upon capital improvement project funding allocation, as approved by the Hawai‘i State Legislature and the priorities of DOT-H. It is anticipated that the design, permitting and development process is estimated to take between three and five years to complete. Construction and completion of Fuel Pier and harbor improvements are estimated to take approximately ten years – to 2025.



2.6 Required Permits and Approvals

Development of the Fuel Pier at the Kalaeloa site will require entitlements and approvals from federal and state agencies and entities. DOT-H is exempt from City and County of Honolulu permits under HRS Chapter 266-2(b). Improvements planned by individual tenants at KBPH are not exempt. Permits or approvals listed below are organized by federal and state requirements. Compliance with established plans and policies of federal, state and county agencies is discussed further in Section 5.0 of this EISPN, and will be further evaluated in the EIS.

Table 1. Environmental Permits, Compliance and Approvals

Approving Authorities	Permit or Approval
Federal	
Department of the Army U.S. Army Engineer District, Regulatory Branch	Department of the Army Permit (DA Permit) <ul style="list-style-type: none"> • Rivers and Harbors Act, Section 10 • Discharge of Dredged Materials, Section 404 • Marine Protection, Research and Sanctuaries Act (MPRSA), related to disposal of dredge materials (Section 102, 103 & 108)
Hawai'i Coastal Zone Management Program State Office of Planning	Coastal Zone Management Act <ul style="list-style-type: none"> • Federal Consistency Determination
U.S. Fish and Wildlife Service	Endangered Species Act Consultation, Section 7 Fish and Wildlife Coordination Act
NOAA National Marine Fisheries Service	Endangered Species Act Consultation, Section 7 Marine Mammal Act Consultation
State	
Department of Health Office of Environmental Quality Control Accepting Authority Office of the Governor	Hawai'i Admin Rules (HAR) Chapter 200 (EIS Rules) <ul style="list-style-type: none"> • Adequacy Determination Hawai'i Revised Statutes (HRS) Chapter 343 (EIS) <ul style="list-style-type: none"> • Acceptability Determination
Department of Health Clean Water Branch (For U.S. Environmental Protection Agency)	Clean Water Act <ul style="list-style-type: none"> • Water Quality Certification, Section 401 • National Pollutant Discharge Elimination System (NPDES), Section 402 • Community Noise Permit for Construction Activities
Department of Land and Natural Resources Historic Preservation Division	Historic Preservation Review <ul style="list-style-type: none"> • Chapter 6E-42
City and County of Honolulu	
Department of Planning and Permitting Building Permit Special Management Area Permit	Exempt as per HRS Chapter 266-2(b) Exempt as per HRS Chapter 266-2(b)



3.0 ENVIRONMENTAL SETTING

The EIS will discuss the relationship of the Proposed Action to land use plans, policies, and controls for the affected project area. The EIS will also identify and evaluate potential impacts of the Proposed Action and its alternatives (including no action) and propose mitigation measures to avoid or minimize any adverse impacts. Preliminary information about relevant resource areas is summarized below.

3.1 Natural Environment Conditions

Climate and Climate Change

The climate is dry and arid with temperature ranges from 67 to 90 degrees Fahrenheit. Mean average rainfall is approximately 20 inches annually. Prevailing winds are from the east-north-east and average 11-23 miles per hour. There are periodic winter storms.

In consideration of policy recommendations and DOT's goal of developing resiliency to global climate change in transportation systems, a projection of one-foot sea level rise by 2050 will be incorporated into the Fuel Pier design. The EIS will evaluate appropriate pier and mooring design to provide additional berth capacity in the vicinity of Piers 7, 8, 9 and 10.

Natural Hazards

Flood Hazard: According to the Flood Insurance Rate Map prepared by the Federal Emergency Management Agency, the project is located in Zone "D", an area of undetermined flood hazard.

Tsunami: The tsunami evacuation zone includes the Piers 1, 3 and 4 area, and the jetty separating KBPH from Ko 'Olina Marina. The Pacific Tsunami Warning Center forecasts potential tsunami arrival times and wave heights for the affected shores, allowing for flooding preparation in areas of potential inundation. The nearest Tsunami Refuge Center is Makakilo Community Park, located about 5.3 miles inland.

The U.S. Coast Guard has established a water evacuation zone to allow for closure of the harbor and an evacuation order if deemed necessary by the Captain of the Port. This is intended to prevent damage to vessels and harbor resources, and to prevent blockage of the harbor from a destructive wave.

Seismic Hazard: The seismic risk classification for the island of O'ahu is Seismic Zone 2A, which suggests the entire island is subject to minor earthquake damage. Piers and shoreside facilities will incorporate relevant design features as guided by appropriate building codes.

Hurricane: The Central North Pacific hurricane season is June through November. Hurricanes are considered infrequent events in Hawai'i. Hurricanes are predicted to have wind speeds between 75 and 115 mph.

Materials used in the Fuel Pier will be suitable for salt-water exposure. Systems will include safety shut-offs and valves that can be closed in the event of potential storm surge and high waves associated with hurricane conditions.



Terrestrial Environment

Geology and Soils: The project area is located on the 'Ewa plain, an emergent ancient coral-algae calcareous reef formed during the Pleistocene Period. According to the Natural Resources Conservation Service WebSoil Survey, the project area is situated in a coastal area of land-type classified as coral outcrop, and consists of coral or cemented calcareous sand. The soil type is described as excessively drained, with a rare frequency of flooding. The typical profile from 0 to 60 inch depth is bedrock. The terrestrial project sites consist of coral fill dredged from the expansion of the harbor, completed in 2000.

Topography and Hydrology: Topography - The natural topography of the project area is generally level; elevation is approximately 10 feet above mean sea level. The project area slopes from north to south with an average slope of approximately one percent. Elevation along the existing harbor edge of Piers 3 and 4 ranges from approximately 12.5 feet at Pier 3, to just under 8 feet in the vicinity of the Finger Pier. No changes to topography will occur as a result of the proposed project.

Hydrology - There are no perennial streams near the project site; rainfall is limited and storm water runoff is usually absorbed by the porous coral substrate. The property overlies the 'Ewa aquifer system of the Pearl Harbor aquifer sector, which contains two aquifer types. Groundwater in these aquifers is basal; it is not used for drinking. No changes to hydrology are anticipated as a result of the proposed project.

Terrestrial Biological Resources: A botanical survey conducted in July 2013 characterized vegetation in the undeveloped areas of KBPH as typical of the highly altered, dryland area. Where vegetation exists in the largely barren area, plants not native to Hawai'i dominate. Three common native species were identified, and no state or federally listed plant species were observed.

A faunal survey was prepared for KBPH in 1991 as part of a Final Supplemental EIS to expand the harbor basin. The survey found the area contained the usual mix of introduced birds that would be expected in a second growth lowland habitat on O'ahu. The only feral mammals recorded were the small Indian Mongoose (*Herpestes aurpunctetus*) and cats. An unconfirmed sighting of the native Hawaiian short-eared owl (pueo; *Asio flammeus*) was made during the 2013 botanical survey. KBPH lacks suitable nesting area, and the presence of predatory rats, cats, and mongoose make it highly unlikely the project area provides any habitat for this mobile species.

Terrestrial Threatened and Endangered Species: No state or federally listed plant species were observed during the recent survey nor are reported to exist at KBPH. A plant species previously reported from the KBPH region and listed as Endangered in 1982, *Euphorbia skottsbergii* var. *kalaeloana*, was included in proposed critical habitat by the U.S. Fish and Wildlife Service (USFWS) in 2012. Under a request from DOT-H, USFWS re-surveyed the reported habitat near KBPH. USFWS determined the area was not essential to conservation of the species, and it was removed from consideration as critical habitat.



Marine Environment

Bathymetry and Marine Sediments: Initially dredged in 1961 as a small barge harbor for industrial activities at adjacent James Campbell Industrial Park, KBPH entrance and basin were expanded in 1985 to serve as a second port for Honolulu and to support the industrial region of west O'ahu. The main basin is 38 feet deep and approximately 2,300 feet long by 1,800 feet wide, covering an area of 92 acres. The basin was extended in April 2000 to the northeast, with excavation of a rectangular section 600 feet wide by 1,100 feet in length and to a depth of 38 feet.

The submerged harbor walls and harbor floor consist of a pocked surface covered with a thin layer of deposited fine-grained sediment. A preliminary screening of sediment composition was conducted at three locations along Piers 3 and 4. Preliminary analyses revealed detectable concentrations of oil and grease, and some metals (chromium, copper, and zinc). Several semi-volatile organic compounds were detected, and no organotins, organochlorine pesticides, or PCBs were detectable. The preliminary sediment testing results serve as a baseline for a comprehensive sediment assessment program.

Minor maintenance dredging at Piers 3 and 4 is needed to remove accumulated soft sediments to regain original harbor depths. The initial estimate of material to be removed is 600 cubic yards.

Water Quality: Samples for water chemistry analysis were taken in 2014 at 12 stations in the basin and entrance channel as part of the initial assessment of harbor conditions. The overall results indicate a small input of fresh water, likely from groundwater discharge. Groundwater contains higher concentrations of inorganic plant nutrients (nitrate nitrogen and orthophosphate phosphorus), though concentrations of these constituents are not substantially elevated in KBPH. Ammonium nitrogen, a byproduct of biotic metabolism, and chlorophyll-a values exceed some State of Hawai'i Department of Health (DOH) standards. These results indicate that there is a long residence time of water within the harbor basin sufficient to allow uptake of inorganic nutrients by plankton populations. Input of inorganic particulates, including dust deposited from wind transport and soil from storm water drainage, result in high turbidity of harbor waters.

Marine Biological Resources: A field investigation of resources in the Fuel Pier area was conducted, and will be expanded to the Piers 7, 8, 9 and 10 areas for the EIS analysis. Sub-optimal conditions occur in the harbor for coral colonies. Approximately 120 coral colonies were documented in the area of Piers 3 and 4, and were essentially small, isolated colonies located in a narrow band at the base of the excavated shoreline. All colonies were less than 80 cm in diameter, with 32 percent observed in the 20 to 40 cm size range and 22 percent in the 40 to 80 cm range. No multi-colony aggregates that typify reefs were observed. A single colony (less than 5 cm size) of a coral species considered a candidate for endangered species status was identified within the Piers 3 and 4 project area.

Populations of reef fish were observed near the channel entrance. Overall, the numbers and biomass were relatively low, with no community components representing a substantial recreational or valued resource. The EIS will summarize fish observations from the field investigations.

Endangered Fish Habitat (EFH) designation for KBPH includes the entrance channel and the Pier 1 area. Initial consultation with the National Oceanographic and Atmospheric Administration (NOAA) Pacific Islands Regional Office's Habitat Conservation Division reveals the proposed



harbor improvements are outside the EFH. NOAA will review the marine report prepared for the EIS and provide further guidance on EFH and Fish and Wildlife Conservation Area issues. The outcome will be included in the EIS.

Marine Threatened and Endangered Species: No threatened or endangered species were observed during the initial marine survey. The EIS will include any reported sightings of species that may enter the harbor on occasion: the threatened green sea turtle (*Chelonia mydas*); the endangered hawksbill turtle (*Eretmochelys imbricata*), which is an infrequent visitor to Hawaii; and the endangered Hawaiian monk seal (*Monachus schauinslandi*). The proposed project area does not provide habitat or suitable haul-out areas for these species.

3.2 Human Environment Conditions

Archaeological, Historic, and Cultural Resources

A Cultural Impact Assessment was completed for the project, and an initial archaeological assessment was conducted for a portion of the project area. Kalaeloa was a culturally significant area with natural resources that supported traditional subsistence activities such as the gathering of *limu* (seaweed) and fishing. The knowledgeable informants noted the unique karst system and hydrology supported agricultural endeavors of residents. These informants also shared information and personal recollections of the historic ranching and military uses of the area following European contact in Kalaeloa and Barbers Point. They discussed present-day Kalaeloa and restoration efforts of the area's cultural and natural landscapes. The information gathered related to the larger Honouliuli *ahupua'a* (region); no reference specific to the proposed Fuel Pier area was identified.

The initial Archaeological Assessment for the project areas will be expanded and include further evaluation as an Archaeological Inventory Survey. Findings will be reported in the EIS. The State Historic Preservation Division established Barbers Point Archaeological District in 1977. Identified as State Inventory of Historic Properties #50-80-12-2888, it encompasses the entire harbor and is listed on the National Historic Register. Much of the archaeological resources documented in the District were destroyed when the deep draft harbor was initially dredged and expanded.

The Archaeological Assessment prepared for the project did not identify any historic or archaeological resources within the proposed project area. The area was visually inspected; no surface archaeological remains were seen. No evidence of human burial remains was found, and lack of soil development and the absence of surface evidence of sinkholes or caves make burials unlikely. However, it is possible that construction activities could impact archaeological resources; historic preservation rules dictate procedures should such findings occur.

Recreational Resource

Public access is restricted within commercial harbors. Fishing is prohibited from all piers and wharves in KBPH, including fishing with nets. However, it appears undeveloped areas of the harbor are currently used occasionally for fishing. Development of these areas, and new security fencing and access control measures will restrict fishing access within the harbor basin.

Public shoreline access and public beach parks exist along the coast both north and south of KBPH. One public shoreline right-of-way is managed by the City and County of Honolulu.



Accessible from the end of Kaiholo Street off Malakole Street, this right-of-way leads to the public shoreline all the way to the mouth of KBPH.

Noise

The project area is subject to noise from harbor shipping and surrounding industrial, aviation, and motor vehicle activity. A noise assessment will be conducted for the EIS.

Air Quality

The local air quality of the project area is frequently affected by motor vehicles and industrial activities in the area. Throughout much of the year, the northeast trade winds blow pollutants from the inland areas out to sea, which results in generally good air quality in the vicinity of the harbor. Temporary decreases in air quality may occur during “Kona” wind conditions. Air quality data from DOH monitoring station at Kapolei indicates that national and state ambient air quality standards are being met in the vicinity of the project. An air quality assessment will be conducted for the EIS.

Hazardous Materials

A Phase I Environmental Site Assessment was performed for the EIS. None of the hazardous substances and/or petroleum products onsite nor activities associated with such substances observed during the site reconnaissance appeared to be causing or contributing to any site contamination. However, large quantities of petroleum products onsite represent threat of a release with the potential to negatively impact the site. No indicators of contamination, such as odors, pools, or stained soil or pavement were observed. The EIS will identify the recognized environmental conditions related to vessel maintenance and repair.

Emergency Response

Spill Response: In Hawai'i, several oil spill response organizations (OSRO) partner 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. Currently at Piers 5 and 6, containment boom is maintained under the pier for ease of attaching additional boom to surround vessels prior to fuel transfer. A local OSRO maintains spill response materials at KBPH. The EIS will describe spill prevention and response related to new facilities at the proposed Fuel Pier.

Fire: Honolulu Fire Department's Operations bureau is responsible for multi-mission, emergency response on the island of O'ahu. Emergencies include marine vessel fires, trauma medical calls, hazardous materials incidents, natural disasters, and technical rescues (including ocean and confined space). The Kapolei Fire Station is located within four miles of KBPH. The EIS will provide plans for improved fire suppression infrastructure to be installed at KBPH as part of the Proposed Action, and will outline emergency procedures and list responding agencies.



3.3 Infrastructure and Utilities

Harbor Operations

Currently at KBPH, utilization of berth space for cargo transit occasionally exceeds capacity, resulting in cargo loading delays. Vessels must wait offshore for berthing space, burning costly fuel and operations time. With anticipated increases in trans-shipment to Neighbor Island ports and potential changes to Hawai'i's requirements for fuel imports, congestion in KBPH is expected to intensify unless changes are made to berth utilization.

Potential changes in ship activity related to fuel throughput at KBPH was calculated based on the various future fuel scenarios through 2040. Hawai'i's energy market is dynamic and has the potential to impact KBPH's capacity. Decreased fuel oil demand for power generation is expected to come from both conservation initiatives and replacement fuels. Decreased local demand for refined fuel products could result in an unsustainable market for the two existing refineries. Recent studies indicate high crude costs, the relatively small scale of production, and new regulations related to emissions could trigger refinery closures at any time. In the event one or both refineries close, increased volumes of liquid-bulk fuels will need to be imported, resulting in increased fuel transfer activity at KBPH.

Projections for increased vessel activity vary from 2 to 17 additional port calls monthly. Vessel types would remain those currently utilizing KBPH – fuel barges (used interisland) and tank ships (typically from overseas, either domestic or foreign).

Roadways and Traffic

A traffic impact assessment will be prepared for the EIS to address the Fuel Pier and harbor improvements. Traffic in the area is primarily from commercial and industrial activity. Access to James Campbell Industrial Park and KBPH is via Kalaeloa Boulevard, a divided four-lane highway, with two lanes in each direction. The two-lane Malakole Road intersects Kalaeloa Boulevard and serves as the main access to KBPH. Hanua Street, a second major road serving KBPH, is currently unpaved. The neighboring property developer is tasked with paving and connecting Hanua Street with the Kapolei Parkway extension, and will re-route the alignment.

Infrastructure

Drainage and Storm Water Runoff: The project site is presently natural slope drained, and there is no onsite flooding. The existing drainage system for the project area consists of dry wells and surface outfalls, filtered by absorbent materials to capture debris. The drainage pattern for the project area retains stormwater runoff on harbor property. The Pier 3 tenant captures and directs runoff to a discharge outlet under a National Pollutant Discharge Elimination System Permit. The EIS will describe drainage plans related to the Proposed Action within the project areas.

Wastewater: The existing wastewater infrastructure in the project area consists of an individual wastewater system (IWS) serving the offices and warehouse near Pier 3. The existing 3-story office and warehouse IWS consists of a septic tank and leach field. The current tenant and builder of the office and warehouse, Marisco Ltd., constructed the IWS prior to requirements to obtain a DOH permit. Therefore, no records of the IWS are available from the DOH Waste Water Branch.



Relocation of the tenant will require wastewater infrastructure in the Pier 9 area. The EIS will describe infrastructure needs and plans for the project areas.

Water Supply: Honolulu Board of Water Supply provides water service to the Harbor property from a meter located along Malakole Street east of Access Road. A 4-inch water line provides water to Piers 3 and 4, where the line splits to provide water for Finger Pier users through spigots, and to the Marisco warehouse. Marisco's water use is sub-metered by DOT-H. The EIS will propose expanded distribution of potable water for use near Piers 8, 9 and 10 as part of the Proposed Action.

Solid Waste Disposal: General municipal refuse is placed into dumpsters located on the project site. Solid waste for the harbor property is collected and transported by a branch of DOT-H. Tenants are responsible for solid waste disposal under the lease terms, and use various private contractors. The EIS will discuss potential changes in solid waste disposal under the Proposed Action.

Power and Communications: Electricity to KBPH is currently provided by Hawaiian Electric Company (HECO) through a 46 kilovolt (kV) feeder along Hanua Street, and a 12 kV Malakole Street. An existing HECO substation is located within the DOT-H property leased by Hawaiian Cement. Hawaiian Telcom provides telephone service to the existing harbor facilities. An electrical power assessment is being conducted for the EIS.

Visual and Aesthetic Resources

KBPH is zoned for waterfront industrial and has an industrial appearance: storage yards, stockpiles, dry bulk unloader, dry dock, cement storage domes, piers and vessels. Nearly 2,000 acres of industrial (both heavy and light) and business parks flank KBPH, including two oil refineries and two electric generation facilities. Northwest of the harbor, Ko 'Olina Resort has a cultivated appearance, with resort hotels, landscaping, golf course, marina and beach lagoons. KBPH and its associated structures can be seen from locations along Farrington Highway, from nearby residential communities, and from sections of Ko 'Olina Resort. At some of these locations, the view of the harbor is blocked by kiawe forest and mounds of stockpile material. The EIS will describe anticipated changes to visual and aesthetic conditions.

Socio-Economic Conditions

Hawai'i's resident population is expected to grow from 1,363,621 to 1,708,900 between 2010 and 2040, an increase of 25 percent (DBEDT, 2012). The corresponding increase in shipments of construction and energy materials will exert pressure on the state's commercial harbors. This trend is expected to continue as the population and economy grows. There has also been continuing growth in fuel imports. An analysis of the project's anticipated economic and fiscal impact will be conducted for the EIS.



4.0 PROBABLE IMPACTS AND MITIGATIVE MEASURES

Adverse impacts resulting from the construction and operation of the Fuel Pier project may be unavoidable. Mitigation measures will be discussed and developed with regulatory agencies to minimize project impacts.

The EIS will discuss probable impacts, both short- and long-term, and propose appropriate mitigation actions that can minimize potentially adverse effects. Short-term impacts are generally associated with construction, and prevail only for the duration of the construction period. Long-term effects would be those which continue after the construction period.

4.1 Short-Term Impacts

Construction-related activities will create noise, dust, air pollution, traffic and altered views due to vehicles and equipment operations. Construction activities may result in short-term adverse impacts to the environment, such as marine water quality. However, construction will be completed in accordance with federal, state and county regulations and employ Best Management Practices to minimize temporary impacts.

Numerous jobs will be created during the construction period for the overall site development, and off-site improvements. This will result in short-term positive impacts to employment conditions within the area. Construction workers are expected to commute to the site from various parts of O'ahu.

4.2 Long-Term Impacts

The EIS will include an analysis of the potential long-term impacts to natural and human environments resulting from development and operation of the Fuel Pier and harbor improvements. The Fuel Pier and harbor improvements are expected to relieve congested berthing conditions. Implementation of the project will support the state's energy and economic goals by providing for anticipated changes in waterborne movements of fuel and projected growth.

Potential increases in air emissions, noise levels, and demands on public services and facilities will be explored in the EIS, as will anticipated benefits of increased employment and government revenues from taxes. Long-term effects to the harbor environment may include limited loss of benthic habitat.

Cumulative impacts of the Fuel Pier and harbor improvements with planned developments in the surrounding 'Ewa region will be identified in the EIS. Continued harbor-related industrial use of the area is consistent with the 'Ewa Development Plan land use policies, which identifies the region as an area of directed growth area for O'ahu.

4.3 Significance Criteria

The EIS will assess the overall impact on the environment based on criteria established in HRS Chapter 343, and HAR Chapter 200 (Environmental Impact Statement Rules). In determining whether an action may have a significant effect on the environment, the EIS will consider every phase of the Proposed Action and the expected consequences (primary, secondary and



cumulative, as well as short-term and long-term). Thirteen categories of Significance Criteria are identified in HAR Chapter 200. The EIS will assess whether the Proposed Action will result in the following statements representing significant impact. A brief introduction to the anticipated assessment findings follows.

Involves an irrevocable commitment to loss or destruction of any natural or cultural resource;

The site has been extensively modified as a result of harbor development and prior land use. Field studies of natural (both terrestrial and marine) and cultural (including archaeological and historic) resources will be conducted for the project areas. The outcome of these studies will inform appropriate protection of natural and cultural resources, and advise appropriate mitigation measures. The EIS will detail the findings and recommendations.

Curtails the range of beneficial uses of the environment;

Development of the Fuel Pier and harbor improvements will expand beneficial use of KBPH to efficiently accommodate essential dry- and liquid-bulk cargo for the state's residents. The EIS will detail how harbor improvements will fulfill DOT-H's mission to effectively manage and operate a statewide commercial harbors system that facilitates the efficient movement of people and goods to, from and between the Hawaiian Islands.

Conflicts with the State's long-term environmental policies or goals and guidelines as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders;

The EIS will expand on the project's conformance with land use plans, policies and controls highlighted in this EISPN's Section 5.0. The proposed harbor improvements support the state's energy policy and its *Statewide Transportation Plan*, and the actions are in fulfillment of the state's harbor modernization effort.

Substantially affects the economic or social welfare of the community or State;

The Fuel Pier development will improve the economic and social welfare of the state through commercial expenditures associated with project development, as well as the long-term impact of facilitating lower energy costs through efficiency in harbor operations. Construction of the project will provide both short-term construction jobs and long-term jobs in the industrial sector. An economic assessment will be provided in the EIS.

Substantially affects public health;

DOT-H intends to construct and operate the Fuel Pier and harbor improvements in compliance with all applicable rules, regulations and laws. No significant effects on public health are anticipated.

Involves substantial secondary impacts, such as population changes or effects on public facilities;

The improvements are needed to efficiently handle anticipated increased demand for materials in alignment with projected population growth. The project is not expected to increase population in the KBPH area. Secondary impacts will be addressed in the EIS.



Involves a substantial degradation of environmental quality;

The Fuel Pier and harbor improvements will occur in an industrial area currently zoned and used for the proposed activities. Equipment and operational standards designed to comply with federal and state regulations to protect environmental quality will be incorporated. The EIS will evaluate short- and long-term environmental impacts and recommend appropriate actions to reduce or mitigate potential degradation.

Is individually limited but cumulatively has a considerable effect upon the environment or involves a commitment for large actions;

The Fuel Pier and harbor improvements to be described in the EIS represent reasonably foreseeable projects by DOT-H for KBPH. These projects will serve harbor users, who were consulted in development of the Kalaeloa Barbers Point Harbor 2040 Master Plan. The EIS will identify other known development projects planned for the greater 'Ewa watershed which have the potential to add impacts, and explore whether those will have a cumulative effect.

Substantially affects a rare, threatened, or endangered species, or its habitat;

Previous and current surveys of terrestrial plants and animals reveal no habitat for rare, threatened or endangered species. Potential presence of bird species with state or federal status will be identified in the EIS. Preliminary marine biological surveys indicate harbor waters provide poor habitat for corals, though corals exist in the proposed project areas. A summary and interpretation of coral species, benthic biota, and fishes – including any with Federal status – will be detailed in the EIS.

Detrimentially affects air or water quality or ambient noise levels;

Impacts associated with construction are anticipated to affect air, water quality and noise levels for the short-term. Characterization of air and water quality, and a Noise Impact Assessment, will be conducted for the EIS.

Affects or is likely to suffer damage by being located in an environmentally sensitive area such as a flood plain, tsunami zone, beach, erosion-prone area, geologically hazardous land, estuary, fresh water, or coastal waters;

Fuel Pier and harbor improvements will be designed to withstand the harsh saltwater environment of KBPH. The harbor was originally dredged from fastlands, and no major freshwater features are associated with the area. The project areas are within the nearshore tsunami inundation zone. Design measures will include features to minimize potential damage from tsunami inundation or seismic events.

Substantially affects scenic vistas and view planes identified in county or state plans or studies;

The Coastal View Study (City and County of Honolulu, 1987) indicates no significant views near the project site. The harbor is located in an industrial park district, and improvements are not anticipated to affect scenic view planes.

Requires substantial energy consumption.

The development of the Fuel Pier and harbor improvements do not represent a fundamental change in energy demand for the area. Facility design incorporating energy efficiency will be utilized where practical. The EIS will describe expansion of infrastructure, including electrical power, in support of harbor improvements.



4.4 Reason for Preparation of an EIS

The Proposed Action will use state funds and state lands, triggering HRS Chapter 343 requirements. DOT-H, through its judgment and experience, has elected to conduct an EIS-level assessment. This Environmental Impact Statement Preparation Notice has been prepared pursuant to HRS Chapter 343 and HAR Chapter 200, and replaces a previous version published August 8, 2013 in *The Environmental Notice* of the Office of Environmental Quality Control. Following the 30-day public review period, work on the EIS was initiated. In defining the Proposed Action, it became evident that additional actions were required outside of the the originally defined project site. DOT-H determined that a revised EISPN should be published to identify associated harbor improvements required to facilitate development of a Fuel Pier at KBPH.

The appropriate environmental documents will be prepared and processed in accordance with Chapter 343. DOT-H will serve as the Proposing Agency.

Consultants

The following is a list of studies consigned to evaluate current conditions and analyze the potential impacts of the improvements. The EIS will summarize study findings and analyses; the reports will be included as appendices.

Civil Engineering / Infrastructure Analysis
Group 70 International, Inc.

Cultural & Archaeological Impact Assessment
Keala Pono, Inc.

Harbor Operations
Amergent Techs

Marine Biology & Water Quality
Marine Research Consultants

Energy Systems
Facts Global Energy

Terrestrial Resources Study
Hui Kū Maoli Ola

Structural Engineering
Kai Hawai'i Inc.

Noise Impact Assessment
Y. Ebisu and Associates

Geotechnical Engineering
Geolabs, Inc.

Air Quality Study / Fuel Systems Engineering
Arcadis

Coastal Engineering
Sea Engineering, Inc.

Hazardous Materials Assessment
Enpro Environmental

Electrical Analysis
Douglas Engineering Pacific, Inc.

Economic and Fiscal Impact Analysis
Plasch Econ Pacific LLC

Topography Survey
Austin Tsutsumi Associates, Inc.

Cost Estimating
Rider Levett Bucknall



5.0 CONFORMANCE WITH LAND USE PLANS, POLICIES AND CONTROLS

Relevant plans and policies are set forth in the following lists. Anticipated federal and state permits and approvals are listed in Section 2.5. Conformance of the proposed Fuel Pier and harbor improvements with applicable land use policies will be identified in the EIS.

Federal approvals, including a Department of the Army permit from the U.S. Army Corps of Engineers (USACE) will be required for in-water construction work. The permit will require additional construction-level design plans, and will be sought following completion of this HRS 343 EIS. USACE will utilize relevant information from this EIS to prepare a National Environmental Policy Act (NEPA)-compliant evaluation of project impacts based on further design details.

Federal

Rivers and Harbors Act Section 10 - All Structures and Work

Rivers and Harbors Act Section 408 - Taking, Possession of, Use of, or Injury to Harbor or River Improvements

Marine Protection, Research and Sanctuaries Act (MPRSA) Section 102 - Environmental Protection Agency Designation of Ocean Disposal Sites

MPRSA Section 103 - Ocean Discharge of Dredge Materials

MPRSA Section 108 - Regulations

Migratory Bird Species Act - 16 U.S.C. 703-711

Endangered Species Act Section 7 - Consultation

Clean Water Act Section 401 and 402 – see State of Hawai'i

Clean Water Act Section 404 - Dredge/Fill

Clean Air Act

Coastal Zone Management Act

National Historic Preservation Act Section 106

Fish and Wildlife Coordination Act

RCRA / CERCLA / TOSCA

Noise Control Act

State of Hawai'i

Department of Health (DOH) 401 Water Quality Certification

DOH National Pollutant Discharge Elimination System Permit

DOH Hazardous Waste Treatment, Storage, and Disposal Permit

Chapter 6E-42 Historic Preservation Review

Hawai'i State Plan

Hawai'i State Functional Plans

Coastal Zone Management Program

State Land Use Law

O'ahu Commercial Harbors 2020 Master Plan

Executive Orders 3383 and 3644

City and County of Honolulu

City and County of Honolulu General Plan

'Ewa Development Plan



6.0 ANTICIPATED DETERMINATION

In 2012, Act 172 (initiated as Senate Bill 2281 of the Twenty-Sixth Legislature) was signed into law. The Act allows a proposing agency to elect to prepare an Environmental Impact Statement without first preparing an Environmental Assessment. This EIS Preparation Notice initiates the process, as provided by the rules. In fulfillment of Hawai'i's Environmental Impact Statement process, public review and comments relevant to the Fuel Pier and harbor improvements will be addressed in the EISPN and subsequent Draft EIS. It is anticipated the Final EIS will be accepted by the Office of the Governor, the Accepting Authority for DOT-H's Proposed Action.



7.0 AGENCY CONTACT AND PUBLIC OUTREACH

This EISPN describes proposed improvements in two project areas at KBPH (*Figure 2*). A previous EISPN for development of the Fuel Pier at KBPH was published in August 2013, and was withdrawn in June 2014. DOT-H determined a revised EISPN should be published as the originally defined project site did not encompass improvements required at Piers 8 and 9 to accommodate Pier 3 and 4 users displaced by development of the Fuel Pier.

Early consultation for Fuel Pier development was conducted with various agencies and stakeholder groups as part of initial project scoping. A planning workshop was held on July 18, 2013 for harbor users and stakeholders, to provide information about the Proposed Action and to provide a venue for input. Public meetings, detailed in a following section, are a venue to inform the community regarding proposed KBPH development. These interactions have obtained substantive input from agencies and the public, and subsequent consultations and public review periods will provide additional opportunity for industry, harbor users, and community members to identify relevant issues to be evaluated in the EIS.

Parties contacted in preparation of the EIS and the DOT-H Public Informational Meeting are listed in the following sections.

7.1 Agencies and Parties Contacted in Preparation of the EISPN

The following governmental agencies and stakeholder groups were contacted for the previous EISPN preparation and will receive notification of the current EISPN with expanded proposed project area:

Federal Agencies

U.S. Department of the Army, Corps of Engineers, Honolulu District
U.S. Department of Homeland Security, 14th Coast Guard District

State Agencies

Department of Business, Economic Development & Tourism

City and County of Honolulu

Board of Water Supply

Stakeholders

AES Hawai'i	Hawai'i Independent Energy
Aloha Consulting, LLC	Hawai'i Port Pilots Association
Aloha Petroleum, Ltd.	Hawai'i Stevedores, Inc.
Ameron Hawai'i	Hawaiian Cement
Asphalt Hawai'i	Hawaiian Electric Company, Inc. (HECO)
BAE Systems Hawai'i Shipyards	Hawaiian Tug & Barge / Young Brothers
Chevron	Healy Tibbitts Builders, Inc.
Clean Islands Council	International Longshore and Warehouse Union
Daehan Shipping Agency	Kalaeloa Properties, LLC
Grace Pacific Corp.	Kirby Offshore Marine
Hawai'i Gas	Marine Cargo Surveys of Hawai'i



Stakeholders, Con't

Marisco, Ltd.
Maritime Licensing Center
Matson Navigation Co.
McCabe, Hamilton & Renny Co., Ltd.
Mid-Pacific Petroleum
National Cargo Bureau Inc.
O'ahu Gas Service

Pacific Environmental Corporation (PENCO)
Pasha Hawai'i
Petrospect
Sause Bros., Inc.
Tesoro Hawai'i Corporation
Transmarine Navigation Corporation
Waldron Norton Lilly International, LLC
Zilkha Biomass Fuels LLC

7.2 Public Informational Meetings

DOT-H held a public meeting on September 3, 2013 to inform the community regarding proposed Fuel Pier development. A second Public Informational Meeting regarding the expanded EISPN will be held in Kapolei and is currently scheduled for October 2014. Notice will be provided via mailed invitations to agencies and stakeholders, flyers posted in public spaces, public notice in a major local newspaper, and public announcements from a local radio station. The meetings offer the public opportunity for input regarding resources and issues of concern which should be addressed in the EIS. Attendees are encouraged to provide both oral comments and written input.

7.3 Agencies and Parties to be Contacted in Preparation of the EIS

Governmental agencies, elected officials, media, and special interest/stakeholder groups who will be provided a copy of the Environmental Impact Statement Preparation Notice are listed in Section 7.1 and in the following.

Elected Officials

U.S. Senator Brian Schatz
U.S. Senator Mazie Hirono
U.S. Representative Tulsi Gabbard, Congressional District 2
Senator Donna Mercado Kim, Senate President
Senator Kalani English, Senate Transportation and International Affairs Committee Chair
Senator Mike Gabbard, District 20
Representative Joseph Souki, Speaker of the House
Representative Karen Awana, District 43
Representative Jo Jordan, District 44
Representative Ryan Yamane, House Committee on Transportation Chair
City and County of Honolulu Mayor Kirk Caldwell
Honolulu Councilmember Kymberly Marcos Pine, District 1
Neighborhood Board # 34 (Makakilo/Kapolei and Honokai Hale)

City and County of Honolulu

Department of Design and Construction	Department of Environmental Services
Department of Facility Maintenance	Department of Parks and Recreation
Department of Planning and Permitting	Department of Transportation Services
Honolulu City Council	Honolulu Fire Department
Honolulu Police Department	
H-Power Plant (Covanta Honolulu Resource Recovery Venture)	



Federal Agencies

Customs Border Protection
Fish and Wildlife Service
Department of Agriculture, Natural Resources Conservation Service, Pacific Islands Area Office
Department of Commerce, National Marine Fisheries Service, Pacific Islands Regional Office
Department of the Interior, Geological Survey, Pacific Islands Water Science Center
Department of the Interior, National Parks Service, Pacific Islands Support Office
Department of the Navy Pacific Division, Naval Facilities Engineering Command
Department of Transportation, Maritime Administration
Environmental Protection Agency, Region IX, Pacific Islands Contact Office
EPA, Region IX, San Francisco Contact Office
Federal Aviation Administration
National Oceanic and Atmospheric Administration, National Marine Fisheries Service, PIRO

State Agencies

Department of Accounting and General Services
Department of Agriculture
Department of Business, Economic Development & Tourism (DBEDT)
DBEDT, Hawai'i State Energy Office, Hawai'i Clean Energy Initiative
DBEDT, Office of Planning
DBEDT, Office of Planning, Coastal Zone Management
DBEDT, Research Division Library
DBEDT, Strategic Industries Division
Department of Defense, Civil Defense
Department of Hawaiian Home Lands
Department of Health (DOH)
DOH, Clean Air Branch
DOH, Clean Water Branch
Department of Labor and Industrial Relations
Department of Land and Natural Resources (DLNR)
DLNR, Division of Aquatic Resources
DLNR, Land Division
DLNR, State Historic Preservation Division
DLNR, Office of Conservation and Coastal Lands
Department of Transportation (DOT)
DOT, Airports Division
DOT, Highways Division
DOT, Statewide Transportation Office
Department of Commerce and Consumer Affairs, Hawai'i Refinery Task Force
Hawai'i Community Development Authority (Kalaeloa)
Office of Environmental Quality Control
Office of Hawaiian Affairs
Public Utilities Commission
University of Hawai'i (U.H.) Economic Research Organization
U.H. Energy Policy Forum
U.H. Environmental Center
U.H. Marine Option Program
U.H. Water Resources Research Center



Libraries

City and County of Honolulu Department of Customer Services Municipal Library
Kapolei Library
Legislative Reference Bureau Library
State of Hawai'i Department of Education (DOE), Hawai'i State Library, Hilo Regional Library
State of Hawai'i DOE, Hawai'i State Library, Līhu'e Regional Library
State of Hawai'i DOE, Hawai'i State Library, Kāne'ohe Regional Library
State of Hawai'i DOE, Hawai'i State Library, Hawai'i Kai Regional Library
State of Hawai'i DOE, Hawai'i State Library, Kahului Regional Library
State of Hawai'i DOE, Hawai'i State Library, Kaimukī Regional Library
State of Hawai'i DOE, Hawai'i State Library, Pearl City Regional Library
State of Hawai'i DOE, Hawai'i State Library, Hawai'i Documents Center
University of Hawai'i (U.H.) at Hilo, Edwin H. Mo'okini Library
U.H. Thomas H. Hamilton Library
U.H. Kaua'i Community College Library
U.H. Maui College Library

News Media

Hawai'i Tribune Herald	Honolulu Star Advertiser
Maui News	Moloka'i Dispatch
The Garden Island	

Special Interest and Stakeholders Groups

Aala Ship Service	Hawai'i Natural Energy Institute
Aina Koa Pono	Hawai'i Pacific Export Council
'Ahahui Siwila Hawai'i o Kapolei	Hawai'i Public Policy Advocates
Ali'i Gas, Inc	Hawaiian Crane & Rigging
All Ship and Cargo Surveys	Hidden Villa Ranch
Aloha Cargo Transport	Hoku Kai Biofuels - Summit Biofuel LLC
Aluvion Energies, LLC	Honolulu Disposal
American Bureau of Shipping	Honolulu Ship Supply Company
American Marine Service Group	Horizon Lines LLC
Association of Hawaiian Civic Clubs	Ihalani Resort
Atlantis Adventures	Inchcape Shipping Services
Aulani Resort (Disney)	Kalaeloa Partners LP
Blue Planet Foundation	Kapolei Properties, LLC
Chamber of Commerce of Hawai'i	Kinder Morgan Terminals
Chamber of Commerce of Kapolei	Ko 'Olina Beach Villas
Enterprise Honolulu	Ko 'Olina Ocean Marina LLC
Foreign Trade Zone	Nānāikapono Hawaiian Civic Club
Hawai'i Asphalt Paving Industry	Neighborhood Commission Office
Hawai'i Bioenergy ,LLC	North West & Canada Cruise Association
Hawai'i Business Roundtable	Norko Marine Agency
Hawai'i Fueling Facilities Corporation / ASIG	Norwegian Cruise Line
Hawai'i Harbor User's Group	
Hawai'i Institute for Public Affairs	
Hawai'i Marine Resources, LLC (aka P&R Water Taxi)	



Interest and Stakeholders Groups, con't

Pacific Shipyards International
Par Petroleum Corporation
Schnitzer Steel
Sierra Club, Hawai'i Chapter
Star of Honolulu Cruises & Events
The Phoenician, LLC
Trouble Free Corp

United Steel Workers
Wespac Energy Group
West Hawai'i Today
West O'ahu Economic Development
Association
Western Petroleum Marketers Association
Western States Petroleum Association
(WSPA)



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