



**US Army Corps  
of Engineers**

---

Defense Environmental Restoration Program  
For  
Formerly Used Defense Sites

# FINDINGS AND DETERMINATION OF ELIGIBILITY

## Makalapa Crater Navy Salvage Yard

Halawa, District of Ewa, Island of Oahu County, HI  
Property No. H09HI0484

September 2015

Prepared by  
U.S. Army Corps of Engineers St. Louis District  
for the  
U.S. Army Corps of Engineers Honolulu District

---



DEPARTMENT OF THE ARMY  
PACIFIC OCEAN DIVISION, U.S. ARMY CORPS OF ENGINEERS  
FORT SHAFTER, HAWAII 96858-5440

CEPOD-PDM

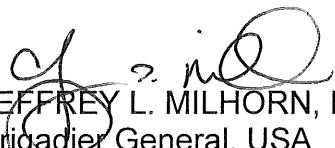
23 SEP 2015

MEMORANDUM FOR Commander, Honolulu District (CEPOH-PP-E/L. Wong), Fort Shafter, HI 96858-5440

SUBJECT: Defense Environmental Restoration Program – Formerly Used Defense Sites (DERP-FUDS) Inventory Project Report for Makalapa Crater Navy Salvage Yard, Property No. H09HI0484, Halawa, District of Ewa, Island of O'ahu, Hawai'i

1. References:

- a. Memorandum, POH, CEPOH-PP-E, 19 Sep 2015, subject: SAB.
  - b. ER 200-3-1 (Formerly Used Defense Sites (FUDS) Program Policy), 10 May 2004.
2. Based on the information provided in reference 1.a., the recommendation to add a new Hazardous, Toxic and Radioactive Waste (HTRW) project has been determined to be in accordance with 1.b. and is approved.
3. As a follow up, POH shall ensure the following in accordance with reference 1.b.:
- a. The CTC estimate is prepared and the property and project information, including schedules and CTC requirements, are entered in the FUDS Management Information System (FUDSMIS).
  - b. The current landowner is sent a letter summarizing the results of the INPR. A copy of this notification will be sent to POD.
  - c. The Environmental Protection Agency (EPA) and the State of Hawai'i Department of Health (DOH) is forwarded a copy of the INPR.
  - d. The completed INPR and supporting worksheets are uploaded onto the permanent Property File in the FUDS Records Management Database (FRMD).
3. Point of contact for this memorandum is Mr. Hudson Kekaula, POD FUDS Program Manager, (808)835-4632, or email, Hudson.W.Kekaula@usace.army.mil.

  
JEFFREY L. MILHORN, P.E.  
Brigadier General, USA  
Commanding



DEPARTMENT OF THE ARMY  
PACIFIC OCEAN DIVISION, U.S. ARMY CORPS OF ENGINEERS  
FORT SHAFTER, HAWAII 96858-5440

3 AUG 2015

CEPOD-PDM

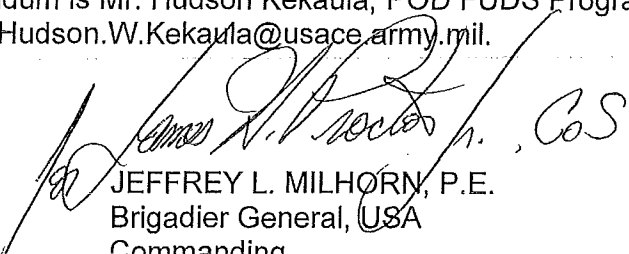
MEMORANDUM FOR Commander, Honolulu District (CEPOH-PPE/Ms. Lori Wong),  
Fort Shafter, HI 96858-5440

SUBJECT: Defense Environmental Restoration Program – Formerly Used Defense  
Sites (DERP-FUDS) Findings and Determination of Eligibility for Property No.  
H09HI0484, Makalapa Crater Navy Salvage Yard, Halawa, District of Ewa, Island of  
O'ahu, Hawai'i

1. References:

- a. Memorandum, POH, CEPOH-PP-E, 16 Jul 15, subject: SAB.
  - b. ER 200-3-1 (Formerly Used Defense Sites (FUDS) Program Policy), 10 May 2004.
2. Based on the information provided in references 1.a. and 1.b., I concur that the property is eligible for inclusion in the DERP-FUDS program and have therefore signed and approved the enclosed Findings and Determination of Eligibility (FDE).
3. Point of contact for this memorandum is Mr. Hudson Kekaula, POD FUDS Program Manager, (808) 835-4632, or email, Hudson.W.Kekaula@usace.army.mil.

Encl  
FDE

  
JEFFREY L. MILHORN, P.E.  
Brigadier General, USA  
Commanding



DEPARTMENT OF THE ARMY  
HONOLULU DISTRICT, U.S. ARMY CORPS OF ENGINEERS  
FORT SHAFTER, HAWAII 96858-5440

76 JUL 2015

CEPOH-PP-E

MEMORANDUM FOR Commanding General, Pacific Ocean Division, U.S. Army Corps of Engineers (CEPOD-PDC/H. Kekaula), Bldg 525, Fort Shafter, HI 96858-5440

SUBJECT: Defense Environmental Restoration Program - Formerly Used Defense Sites Findings and Determination of Eligibility for Makalapa Crater Navy Salvage Yard, Property No. H09HI0484, Halawa, District of Ewa, Island of Oahu, Hawaii

1. Reference Engineer Regulation 200-3-1, CEMP-D, 10 May 2004, Environmental Quality - Formerly Used Defense Sites (FUDS) Program Policy.
2. This memorandum transmits the recommended Findings and Determination of Eligibility (FDE) determining the subject property to be eligible for the FUDS program. The former Makalapa Crater Navy Salvage Yard is located on the northeast side of the Makalapa Crater on the east side of Pearl Harbor in the City and County of Honolulu, island of Oahu, Hawaii. The property consists of four parcels of land comprising 19.2705 acres, immediately east of Interstate H-1 and Naval Station Pearl Harbor, which is part of the active Joint Base Pearl Harbor-Hickam. The four parcels are currently covered by athletic fields and parking for Radford High School, playground fields for Makalapa Elementary School, and a portion of H-1 and Bougainville Drive.
3. At the request of the Naval Facilities Engineering Command (NAVFAC) - Hawaii, the Honolulu District, U.S. Army Corps of Engineers (POH) examined the former Makalapa Crater Navy Salvage Yard for eligibility in the FUDS program. The recommended FDE is based on real property records and other historic documentation obtained through research at the National Archives in College Park, Maryland and coordination with NAVFAC-Hawaii.
4. POH Office of Counsel and Real Estate have reviewed the recommended FDE and supporting documentation, and concur with this recommendation.
5. I recommend the Pacific Ocean Division sign the enclosed FDE, determining the former Makalapa Crater Navy Salvage Yard to be eligible for the FUDS program. Please contact me directly if I can be of further assistance. Detailed information desired by your staff can be obtained by contacting Ms. Lori Wong, Project Manager of my Environmental Programs Branch, at (808) 835-4090 or e-mail [lori.l.wong@usace.army.mil](mailto:lori.l.wong@usace.army.mil).

Encl  
FDE

  
CHRISTOPHER W. CRARY  
LTC, EN  
Commanding

DEFENSE ENVIRONMENTAL RESTORATION PROGRAM  
FOR  
FORMERLY USED DEFENSE SITES  
FINDINGS AND DETERMINATION OF ELIGIBILITY

Makalapa Crater Navy Salvage Yard  
FUDS Property Number H09HI0484

Halawa, District of Ewa, Island of Oahu, Hawaii

FINDINGS OF FACT

1. The former Makalapa Crater Navy Salvage Yard is located on the northeast side of the Makalapa Crater on the east side of Pearl Harbor in the City and County of Honolulu, island of Oahu, Hawaii (Figure 1). The property consists of four parcels of land comprising 19.2705 acres immediately east of Interstate H-1 (H-1) and Naval Station Pearl Harbor, which is part of the active Joint Base Pearl Harbor Hickam (Figure 2). The legal descriptions of the parcels are as follows:

a. Parcel 1. Being Lot B-3-B-2, containing 6.591 acres, as shown on Map 24 filed with the Assistant Registrar of the Land Court of the State of Hawaii with Land Court Application 966, and being a portion of the land described in Land Court Certificate of Title No. 20890 issued to the United States of America (Attachments 1 and 2).

b. Parcel 2. Being a portion of Royal Patent 6717, Land Commission Awards 7712 and 8516-B to M. Kekuanaoa and Kamaikui, and containing an area of 8.409 acres, the same being a portion of the land described in that certain "Order Amending Description of Real Estate Condemned" as Parcel 4-B, acquired by the United States of America in Civil Action No. 416 in the United States District Court in the State of Hawaii (Attachments 1, 3, 4, and 5). The full metes and bounds description is contained in Attachment 1.

c. Parcel 3. Being all of Lot 190 containing 3.577 acres, as shown on Map 124 of Land Court Application 966, and being a portion of the land described in Transfer Certificate of Title No. 20,890 issued to the United States of America (Attachments 6 and 7).

d. Parcel 4. Being a portion of Royal Patent 6717, Land Commission Awards 7712 and 8516-B to M. Kekuanaoa and Kamaikui (Exclusion 9 of Land Court Application 966), containing an area of 0.6935 acres (Attachment 8). The full metes and bounds description is contained in Attachment 8.

2. There are other adjacent and nearby former Navy properties, mostly underlying existing transportation corridors, and a portion of the former Aliamanu Military Reservation is immediately adjacent to Parcel 4. However, those properties are not addressed in this determination.

3. The Navy acquired Parcels 1, 2, and 3 to extend and expand the Pearl Harbor Navy Yard. During World War II, the Navy operated a salvage area and a trash burning dump

(a.k.a. Makalapa Dump or Pearl Harbor Dump) on the rim of the crater, including portions of the subject property. The War Department (Army) acquired Parcel 4 to provide transportation access to and from the Aliamanu Military Reservation. The Army later transferred a portion of that tract, with no buildings or improvements, to the Navy. The four parcels comprise the FUDS-eligible property and are currently covered by athletic fields and parking for Radford High School, playground fields for Makalapa Elementary School, and portions of H-1 and Bougainville Drive (Figure 3).

#### 4. Property Transfer History

a. Parcel 1. By Order on Declaration of Taking filed 30 October 1939 in Civil No. 416 in the United States District Court for the Territory of Hawaii (Attachment 3), and amended on 5 August 1941 (Attachment 4) and 2 November 1944 (Attachment 5), the Navy acquired in fee simple a parcel comprising 30.388 acres of land of the Estate of (Queen) Emma Kaleleonalani. The Order identifies the parcel as Parcel 1-C, being Lot B-3-B of Land Court Application 966. Lot B-3-B was subdivided into Lots B-3-B-1 and B-3-B-2 as shown on Land Court Application 966, Map 24, dated 23 January 1956 (Attachment 2). By Quitclaim Deed dated 5 March 1962, the United States of America conveyed Parcel 1, being the 6.591-acre Lot B-3-B-2, to the City and County of Honolulu for educational purposes (Attachment 1). This instrument also conveyed Parcel 2, for a total disposal area of 15 acres (Attachment 9, Estates Disposed of by U.S.A., Item 1).

b. Parcel 2. By Order on Declaration of Taking filed 30 October 1939 in Civil No. 416 in the United States District Court for the Territory of Hawaii (Attachment 3), and amended on 5 August 1941 (Attachment 4) and 2 November 1944 (Attachment 5), the Navy acquired in fee simple a parcel comprising 166.812 acres of land of the Estate of Bernice P. Bishop. The Order identifies the parcel as Parcel 4-B, being a portion of Royal Patent 6717, Land Commission Awards 7712 and 8516-B to M. Kekuanaoa and Kamaikui. By Quitclaim Deed dated 5 March 1962, the United States of America conveyed Parcel 2, being an 8.409-acre portion of Parcel 4-B, to the City and County of Honolulu for educational purposes (Attachment 1). This instrument also conveyed Parcel 1, for a total disposal area of 15 acres (Attachment 9, Estates Disposed of by U.S.A., Item 1).

c. Parcel 3. By Order on a Declaration of Taking filed 30 October 1939 in Civil No. 416 in the United States District Court for the Territory of Hawaii (Attachment 3), and amended on 5 August 1941 (Attachment 4) and 2 November 1944 (Attachment 5), the Navy acquired in fee simple a parcel comprising 30.388 acres of land of the Estate of (Queen) Emma Kaleleonalani. The Order identifies the parcel as Parcel 1-C, being Lot B-3-B of Land Court Application 966. Lot B-3-B was subdivided into Lots B-3-B-1 and B-3-B-2 as shown on Land Court Application 966, Map 24, dated 23 January 1956 (Attachment 2). Lot B-3-B-1 was subdivided into Lots 188, 189, and 190 as shown on Land Court Application 966, Map 124 dated 1 November 1973 (Attachment 6). By Quitclaim Deed dated 10 November 1975, the United States of America conveyed Parcel 3, being all of Lot 190 containing 3.577 acres, as shown on Map 124 of Land Court Application 966, to the State of Hawaii for educational purposes (Attachment 7 and Attachment 9, Estates Disposed of by U.S.A., Item 8).

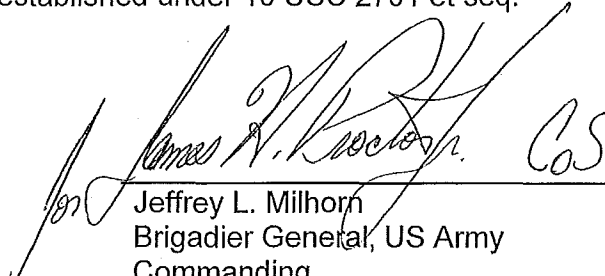
d. Parcel 4. By Order of Condemnation dated 19 October 1916 in Civil No. 87 in the United States District Court for the Territory of Hawaii, the Department of the Army acquired 42.493 acres in fee simple (Exhibit 4 to Attachment 10). The Army transferred a 1.092-acre portion of that land, with no buildings or improvements, to the Navy on 1 October 1957 (Attachment 11). By Quitclaim Deed dated 17 April 1985, the United States of America conveyed a portion of that parcel, being a portion of Exclusion 9 of Land Court Application 966 containing 0.6935 acre, to the State of Hawaii (Attachment 8). This instrument also conveyed a parcel that is not addressed in this determination (Lot 378), for a total disposal area of 0.8235 (Attachment 9, Estates Disposed of by U.S.A., Item 12)

5. In December 2013, the State of Hawaii Department of Education encountered buried debris, including munitions debris, during excavation work to replace Radford High School's running track and field. Because the former Makalapa Crater Naval Salvage Yard was not in the FUDS inventory at that time, and considering the exigency of situation, the Deputy Assistant Secretary of the Army for Environment, Safety and Occupational Health, the Navy, and the U.S. Army Corps of Engineers agreed that the Navy would address the immediate concerns at the site. Accordingly, beginning in August 2014, NAVFAC Hawaii conducted a time-critical removal action to address potential explosive hazards at the site.

6. Under Engineer Regulation (ER) 200-3-1 (10 May 2004), paragraph 3-1.5.3.10, properties where restoration has already been initiated, including formerly used defense sites at which a Department of Defense component has already initiated environmental restoration activities, are categorically ineligible for action under the FUDS program. However, because the Navy agreed to undertake the time-critical removal action with the understanding that it would not affect the properties' potential FUDS eligibility, the policy at ER 200-3-1 (10 May 2004), paragraph 3-1.5.3.10 does not apply to this determination of FUDS eligibility (Attachment 12).

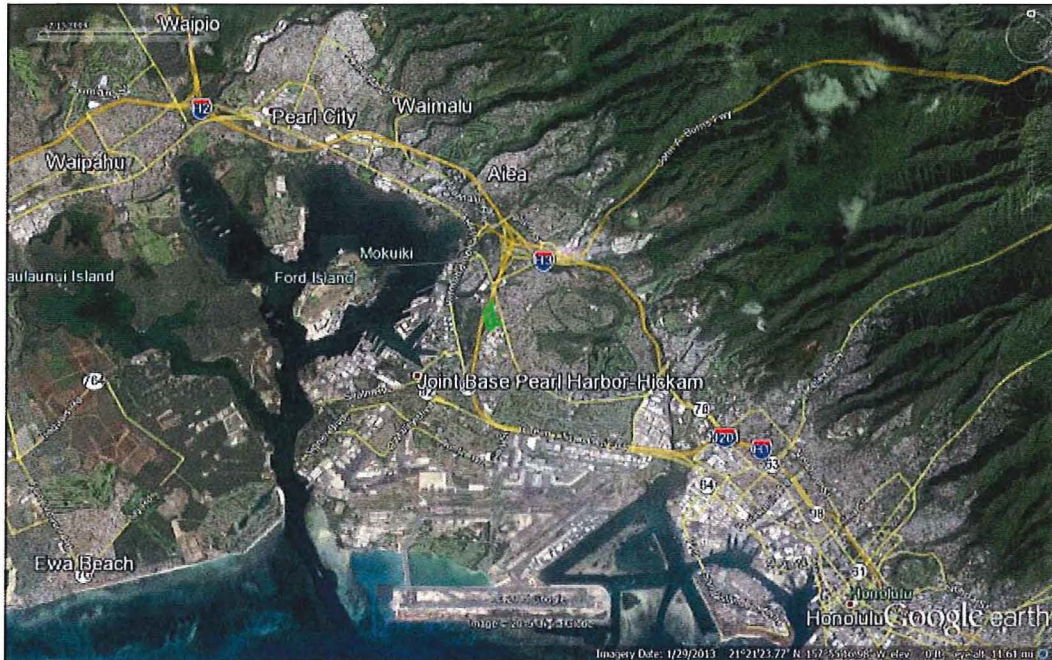
#### DETERMINATION

Based on the foregoing findings of fact, the property has been determined to have been under the jurisdiction of the Secretary of Defense and owned by, leased to, or otherwise possessed by the United States prior to 17 October 1986. This property is therefore eligible for inclusion into the Defense Environmental Restoration Program – Formerly Used Defense Sites established under 10 USC 2701 et seq.

  
Jeffrey L. Milhorn  
Brigadier General, US Army  
Commanding

9 AUG 2015





**Figure 1 – Vicinity Map Makalapa Crater Navy Salvage Yard, H09HI0484**



**Figure 2 – Location Map Makalapa Crater Navy Salvage Yard, H09HI0484**  
 N21° 21' 34", W157° 55' 46", - approximate property center

**Legend**



Confirmed FUDS Property No. H09HI0484





**Figure 3 – Land Use Map Makalapa Crater Navy Salvage Yard**

**Legend**

- Confirmed FUDS Property No. H09HI0484
- Joint Base Pearl Harbor Hickam (JBPHH)
- Radford High School (including FUDS and non-FUDS portions)
- Makalapa Elementary School (including FUDS and non-FUDS portions)

## Inventory Project Report (INPR) Checklist

<b>Checklist Preparer:</b>		Date: 26 August 2015	
Name: Randy Curtis		Title: Chief, Research and Technical Services Section (EC-ER)	
District: St. Louis (CEMVS-EC-ER)		Phone Number: 314-331-8786	
Email address: Randal.S.Curtis@usace.army.mil			
<b>Property Information:</b>			
Property Name: Makalapa Crater Navy Salvage Yard			
Property Number: H09HI0484			
Previous Names, if any: Makalapa Dump or Pearl Harbor Dump			
Former Service: Navy			
<b>Property Location:</b>			
Street: 4435 and 4361 Salt Lake Blvd (Makalapa Elementary School and Radford High School respectively)			
City: Honolulu		County: Honolulu	State: HI
Latitude: N21° 21' 34"		Longitude: W157° 55' 46" - approximate property center	
<b>Property Owner Information:</b>			
Name: State of Hawaii Department of Education (DOE)			
Address (if other than above):			
Street:			
City:			
Phone Number:		County:	State:

Indicate the status of the following checklist items in determining the completeness of the INPR. Provide a narrative in the comments section below to explain, and keyed to, the shaded boxes checked:

	Yes	No	NA
<b>Property Document Search:</b>			
<input checked="" type="checkbox"/>	Were the following records available and used in the preparation of the INPR?		
1.	Archive records	X	
2.	Site maps, including facility as-built drawings	X	
3.	Aerial or ground photographs	X	
4.	Prior studies, documents, reports, property contamination records, or public/private sampling data	X	
5.	Compliance orders issued to current or past owners/operators		X
6.	Real estate records, deeds, or property transfer records	X	
7.	Local historical societies and public libraries	X	
8.	EPA/State environmental records or reports	X	
9.	EOD incident reports	X	



Indicate the status of the following checklist items in determining the completeness of the INPR. Provide a narrative in the comments section below to explain, and keyed to, the shaded boxes checked:

		Yes	No	NA
10.	Other documentation	X		

Indicate the status of the following checklist items in determining the completeness of the INPR. Provide a narrative in the comments section below to explain, and keyed to, the shaded boxes checked:

		Yes	No	NA
--	--	-----	----	----

**Property Visit:**

<input checked="" type="checkbox"/>	Indicate whether the following have been contacted and interviewed to obtain information.			
11.	Current landowner(s)	X		
12.	Neighbors	X		
13.	Previous landowner(s)	X		
14.	Prior employee(s)	X		
15.	Federal agencies, including regulatory agencies	X		
16.	State agencies, including regulatory agencies	X		
17.	Local agencies, including regulatory and law enforcement agencies	X		
18.	Other available sources	X		
19.	Was access to the property possible (right of entry provided by landowner)?	X		
20.	Was the property physically visited?	X		
21.	Was access sufficient to allow for a thorough property inspection?	X		
22.	Was access sufficient to identify potential hazards?	X		
23.	Did regulatory agencies accompany USACE on the property visit?		X	
24.	Did the landowner accompany USACE on the property visit?		X	
25.	Was there evidence of a release of hazardous material or use/disposal of military munitions during DoD control?	X		
26.	Was there evidence of a release of potential DoD hazardous material into a public or private drinking water supply? <sup>i</sup>		X	
27.	Is there evidence of a release into a public or private drinking water supply due to deterioration of the system through ordinary use?		X	
28.	Is there evidence of a release from products that are part of the structure of, and result in exposure within, residential buildings or		X	

<sup>i</sup> This can be determined by reviewing public water supply sampling data. Provide discussion of how it was determined to be release due to DoD activities rather than by current or past owners/operators.

Indicate the status of the following checklist items in determining the completeness of the INPR. Provide a narrative in the comments section below to explain, and keyed to, the shaded boxes checked:

		Yes	No	NA
	businesses or community structures? <sup>ii</sup>			
29.	Is some other program actively involved with the property (i.e., another Federal, state, or tribal program)?	X		
30.	Is there evidence that activities by non-DoD parties at the property may be the source of potential contamination?		X	
31.	Was information on hazards found at similar types of FUDS properties considered in identifying potential hazards at this property?	X		
32.	Were site maps compared to actual conditions during the site visit?	X		
33.	Were photographs taken?	X		
34.	Were property owners advised to contact USACE if evidence of potential hazards is found later?		X	
35.	Was a trip report of the property visit prepared?		X	
<b>Property Eligibility Determination (refer to Chapter 3)</b>				
36.	Is the property Categorically Excluded?		X	
37.	Are there release, hold harmless, "as-is", or indemnification clauses in deeds or property transfer documents that limit DoD liability?		X	
38.	Is there evidence of this property being a Third Party Site?		X	
39.	Is the property eligible under FUDS?	X		
40.	If necessary, has a " <i>Categorical Exclusion or Ineligible Property</i> " worksheet been prepared (Worksheet B-1)			X
<b>FUDS Property Screening:</b>				
41.	Was a CERCLA Preliminary Assessment completed?	X		
42.	Was a RAC Worksheet prepared for the property?		X	
<b>Project Eligibility Determination (refer to Chapter 3):</b>				
43.	Have all typical hazards been investigated for possible occurrence at this type of property?	X		
44.	Were hazards identified?	X		
45.	Are identified hazards of DoD Origin?	X		
46.	If identified hazards were of non-DoD origin, has the lead regulatory agency been informed? (Provide name, phone number, date)			X

<sup>ii</sup> This question is from the EPA Pre-CERCLIS Screening Assessment Checklist/Decision Form, EPA-540-F-98-039 "Improving Site Assessment: Pre-CERCLIS Screening Assessments."



Indicate the status of the following checklist items in determining the completeness of the INPR. Provide a narrative in the comments section below to explain, and keyed to, the shaded boxes checked:

		Yes	No	NA
47.	Is the current owner under a RCRA or CERCLA clean-up order?		X	
48.	Has the "right of first refusal" been exercised by an adjacent DoD installation?		X	
49.	Is there evidence of beneficial use?		X	
50.	Are there other policy considerations against recommending a project?	X		
51.	Are eligible FUDS projects recommended? (If yes, identify projects below)	X		
<b>INPR Preparation and Review:</b>				
52.	Is the INPR prepared consistent with INPR content Matrix (Table B-2)?		X	
53.	Is the INPR Property Survey Summary Sheet consistent with Table B-3?	X		
54.	Is the Project Summary Sheet(s) consistent with Table B-4?	X		
55.	If appropriate, has a <b>"BD/DR Project Summary Sheet Checklist"</b> been prepared? (see Worksheet B-2)			X
56.	If the INPR recommends a PRP/HTRW project, has the PRP District reviewed the INPR? (See Figure B-1)			X
57.	If the INPR recommends a PRP/HTRW project, has the HTRW Center of Expertise reviewed the INPR? (See Figure B-1)			X
58.	If the INPR recommends a MMRP or PRP/MMRP project, has the MM Center of Expertise reviewed the INPR? (See Figure B-1)			X
59.	Was the draft INPR coordinated with Office of Counsel and Real Estate?	X		
60.	Was the draft INPR shared with the Lead Regulatory Agency after internal USACE review?		X	

**Narrative comments to explain above notations:** (Key your comments to the checklist item number)

1-10 – The Navy has completed extensive investigation of the FUDS, including a Preliminary Assessment for Munitions, Makalapa Crater, May 2011. The USACE FUDS PA is underway currently and will supplement the documentation previously gathered by the Navy.

23, 24 – At the time of the preparation of this INPR, USACE has not conducted a property visit for the FUDS PA; however, the Navy has conducted extensive visits to the site as part of an ongoing TCRA.

25 – The Navy TCRA addressed subsurface soil contamination and debris that was most likely present due to past Navy salvage operations conducted in the area during World War II.

29 – The Navy performed the TCRA because the site is part of the Pearl Harbor Naval Complex National Priorities List site.

34 – The Navy is currently the primary point of contact for this property.

35 – USACE has not yet conducted a property visit.

36 – Under Engineer Regulation (ER) 200-3-1 (10 May 2004), paragraph 3-1.5.3.10, properties where restoration has already been initiated, including formerly used defense sites at which a Department of Defense component has already initiated environmental restoration activities, are categorically ineligible for action under the FUDS program. However, because the Navy agreed to undertake the TCRA with the understanding that it would not affect the property's potential FUDS eligibility, the Chief, HQUSACE DoD Environmental Programs Team, Directorate of Military Programs determined that the policy at (ER) 200-3-1 (10 May 2004), paragraph 3-1.5.3.10 does not apply to this property.

41 – The Navy completed a CERCLA PA in May 2011, and a FUDS PA is currently in progress; the draft is not scheduled to be completed until the end of fiscal year (FY) 2015.

42 – The RAC form is no longer applicable. It is unknown whether the Navy will complete a Munitions Response Site Prioritization Protocol (MRSP) sheet in association with the ongoing TCRA, which located hundreds of pieces of munitions-related items with no explosive hazards.

44, 45 – The subsurface soil contamination and debris is most likely present due to past Navy salvage operations conducted in the area during World War II.

48 – The Navy has not exercised its *"right of first refusal"*.

50 – As per 2004-05-10 ER 200-3-1 Formerly Used Defense Sites (FUDS) Program Policy, property ineligibility was considered under section 3-1.5.3.10 "Restoration Already Initiated. This includes a FUDS at which a Component has already initiated environmental restoration activities." However, based on previous conversations between DASA(ESOH), USACE, and the Navy, the Navy agreed to undertake the TCRA on this site in the interest of public health and safety, with the understanding that the site may be a FUDS and that FUDS eligibility would not be affected by this initial Navy action. This agreement was acknowledged by the Office of the Secretary Defense (email from OSD, Alex Long dated 19 May 2015) and confirmed by Headquarters, U.S. Army Corps of Engineers, Chief, DOD Environmental Programs Team, Directorate of Military Programs (email from Chris Evans dated 20 May 2015).



51 – HTRW – remediating landfill and salvage debris below veneer of soil under athletic fields and playgrounds of Radford High School and Makalapa Elementary School.

52 – INPR is being expedited prior to completion of FUDS PA to identify FUDS-eligible projects where restoration work was initiated by the Navy in FY2015. The INPR is expected to be amended in FY2016 following completion of the FUDS PA currently underway to delineate potential projects at the site.

60 – Because the purpose of this INPR is to only identify FUDS-eligible projects where restoration work was initiated by the Navy in FY2015, a draft was not shared with the lead regulatory agency.

## **Executive Summary of the CERCLA Preliminary Assessment Report**

As of the writing of this INPR, a CERCLA Preliminary Assessment (PA) has been started but has not been completed for the former Makalapa Crater Navy Salvage Yard. Upon completion of the FUDS PA, delineation of the proposed project or additional projects will be considered.

**PROJECT SUMMARY SHEET**  
**FOR**  
**DERP-FUDS HTRW PROJECT NO. H09HI048401**  
**Makalapa Crater Navy Salvage Yard**  
**Property No. H09HI0484**  
26 August 2015

**PROJECT DESCRIPTION:** HTRW – Remediation of contaminated soil and buried debris beneath the top soil under the western portions of Radford High School and Makalapa Elementary School, including the athletic fields and playgrounds. The wastes were deposited during landfill and salvage operations at Makalapa Crater during the 1940s.

Between December 2013 and January 2014, a construction contractor for the State of Hawaii Department of Education (DOE) encountered buried debris and stained soil during excavation work to replace the old cinder running track at Radford High School (RHS) with a new all-weather (synthetic) track. Preliminary data determined that the soil was contaminated, and DOE stopped construction work and closed off the track and field in January, securing the excavated material. Samples collected by DOE found elevated levels of arsenic, lead, mercury, and dioxins in the excavated soil. DOE also found munitions related debris, including a small projectile fuze and expended cartridge cases, in the excavated soil. In March 2014, the DOH conducted sampling of surface soil and bare areas of the RHS campus and Makalapa Elementary School (MES).

On 24 January 2014, the Hawaii Department of Health (DOH) Hazard Evaluation and Emergency Response (HEER) office notified the Navy of the conditions at the school. Subsequently, the Navy contracted for sampling and removal and disposal of stockpiled soil. On 25 August 2014, the Navy received Right of Entry approval and began work that day on the Time-Critical Removal Action (TCRA). The TCRA included:

- **Access Road** - Establishing a temporary access road behind the Navy Hale Keiki School, close to the H-1 Freeway to reduce traffic on school grounds. Completion anticipated 8 September 2015.
- **Track** – Excavation to 1 foot deeper than DOE planned to excavate for the new track followed by placement of an orange geotextile fabric liner and 1 foot of clean fill. Completed 6 March 2015.
- **Football Field** – Removal of top 1 foot of clean soil and an additional 1-3 feet of contaminated soil and debris followed by placement of an orange geotextile fabric liner and 1 foot of clean fill. Completed 6 March 2015.
- **Debris Screening** – Screened all debris in stockpiles and excavated material (~18,690 tons); inspected all metal debris. All munitions related items found during the TCRA (hundreds) were inspected and confirmed safe (no explosive hazard). Completed 4 March 2015.
- **Disposal** – excavated and screened soil and debris were transported to a permitted disposal facility.

- **Miscellaneous** - Placement of concrete cap at former visitor's bleachers and a layer of gravel and gunite (shotcrete) under the home bleachers. Placement of geotextile liner, six inches of top soil and grass at other locations of soil contamination (i.e. north of track).

**PROJECT ELIGIBILITY:** Records indicate the Navy used the property as a salvage area and trash burning dump during World War II. The contamination and debris found at the RHS football field and track, and suspected to be present at the MES playground, are consistent with that former use, which occurred prior to 17 October 1986.

**POLICY CONSIDERATIONS:** Under Engineer Regulation (ER) 200-3-1 (10 May 2004), paragraph 3-1.5.3.10, properties where restoration has already been initiated, including formerly used defense sites at which a Department of Defense component has already initiated environmental restoration activities, are categorically ineligible for action under the FUDS program. However, because the Navy agreed to undertake the TCRA with the understanding that it would not affect the property's potential FUDS eligibility, the Chief, HQUSACE DoD Environmental Programs Team, Directorate of Military Programs determined that the policy at Engineer Regulation (ER) 200-3-1 (10 May 2004), paragraph 3-1.5.3.10 does not apply to this property. Reference 2015-05-20 E-Mail from Chris Evans Subject: FW: Makalapa Crater.

**PROPOSED ACTIVITIES:** Continued coordination with the Naval Facilities Engineering Command (NAVFAC), Hawaii, to assist with evaluating whether further actions and remediation activities will be necessary after the Navy completes the TCRA to clean-up the site in accordance with Comprehensive Environmental Response, Compensation Liability Act (CERCLA) as amended by the Superfund Amendments and Reauthorization Act (SARA) in accordance to Engineer Regulation (ER) 200-3-1.

**POINT OF CONTACT:** Honolulu District, Gary Shirakata, FUDS Program Manager, 808-835-4087

**LEAD REGULATOR:** State of Hawaii Department of Health (HDOH), Hazard Evaluation and Emergency Response (HEER), Steven Mow, 808-586-7574