

Environmental Condition of Property Report

Poamoho Property, O'ahu, Hawai'i
TMK 7-2-01-06

MARCH 2017



PREPARED FOR | DIRECTORATE OF PUBLIC WORKS,
U.S. ARMY GARRISON, HAWAII

PREPARED BY | U.S. ARMY CORPS OF ENGINEERS, HONOLULU DISTRICT
UNDER CONTRACT W9128A-12-D-005

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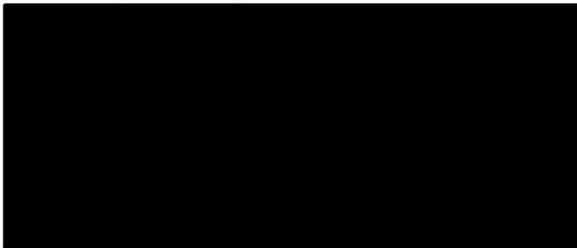
Directorate of Public Works

U.S. Army Garrison, Hawaii

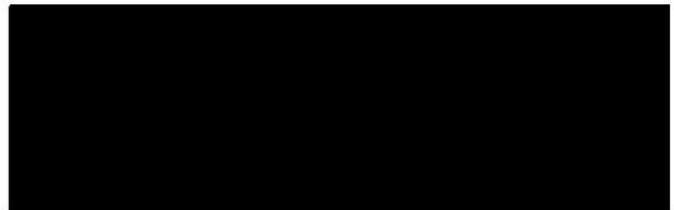
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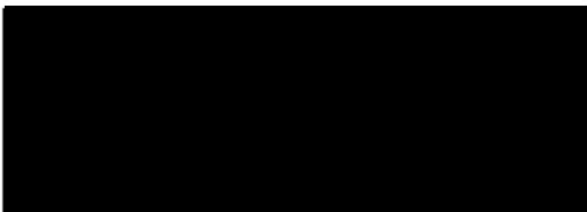
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Executive Summary

This Environmental Condition of Property (ECoP) investigation was conducted to evaluate the current environmental condition of the subject property by examining current and historical uses of the property and adjoining properties. The potential for environmental contamination of a property from hazardous substances, petroleum products, or other environmental concerns is evaluated through an ECoP investigation.

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) of 1980 requires Federal agencies to evaluate the environmental condition of property and to take remedial actions as necessary to protect human health and the environment before transferring property. Section 120(h) of CERCLA establishes a regulatory process for documenting the suitability of property for acquisition or divestment. Army Regulation (AR) 200-1 (Chapters 15-5 and 15-6) requires preparation of ECoP documents for Army Federal real property transactions.

The planned ECoP scope of work consisted of three parts: (1) a Phase I Environmental Site Assessment, (2) a Phase II Environmental Site Assessment, and (3) Property Characterization. The purpose, process, and findings for each investigation phase are summarized below:

Part 1: Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment (ESA) is performed for acquisition actions when the property is not Federally owned¹. Phase I ESAs are conducted in accordance with the United States Environmental Protection Agency (EPA) All-Appropriate Inquiry (AAI) rule (40 CFR, Part 312) as described in the American Society for Testing and Materials Standard E1527-13. The purpose of a Phase I ESA is to document the existing environmental condition of the property in a manner that demonstrates “AAI.” The investigation includes researching historical land uses, reviewing historical environmental database information, and conducting field surveys and interviews.

The Poamoho Property (TMK 7-2-01-06, totaling 4,390 acres) is part of the Ewa Forest Reserve, a heavily vegetated mountainous area in Central O’ahu. The Property is situated east of Naval Computer and Telecommunications Area Master Station Pacific (NCTAMS PAC), and is characterized by dense vegetation and rugged terrain.

The Property is owned by the State of Hawai’i and is zoned as preservation land. Use of the Property does not appear to have changed significantly in the past 50 years. The Property appears to have been designated part of the Ewa Forest Reserve since as early as 1954.

Public recreational trail access is allowed on weekends and holidays by permit from the State of Hawai’i Department of Land and Natural Resources (DLNR). In December 2014, the east portion of the Property was approved by the Board of Land and Natural Resources as the future Poamoho Natural Area Reserve (NAR), but the property has not yet been officially designated

¹ US Army Public Health Command (undated), Environmental Condition of Property (ECoP) Investigations, Technical Information Paper No. 380001-0312.

as a NAR. Surrounding properties are also rugged conservation land; nearby sites are used for agricultural, military and residential purposes. There is no indication that offsite land uses have impacted the subject property.

The Army holds a lease on the property until 2029 and has used the property for military training. The Army's lease states that the Army may use the property to practice aerial maneuvers (which may include dropping and picking up personnel with a helicopter), and may also use the property for ground-based training with advance notification and documentation to DLNR. The entire property is part of the Army's larger Kawaihoa Training Area. Range Control personnel reported that, although only blank ammunition is currently used in the KLOA, old unexploded ordnance (UXO) has been found (specific locations not identified) during training and surveys.

The Phase I ESA requires review of environmental regulatory databases to assess historical environmental concerns on the property and nearby properties. EDR, a database search service, acquires data from government agencies and also reviews proprietary database lists of historical polluters. The EDR report was augmented with additional targeted searches of Hawai'i regulatory databases. NCTAMS, situated west of the Property, is on the National Priorities List (NPL) and is also listed as a Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) site. Both listings appear associated with polychlorinated biphenyls (PCBs) found in soil around electrical transformer sites. PCBs are not highly mobile in soil, and there is no indication that the NPL/CERCLA listing is due to any incident or contamination east of NCTAMS near the Subject Property.

No structures were observed during the site reconnaissance or indicated in historical records. According to DLNR, a sensitive natural area at the eastern end the Property was recently fenced for ungulate control. The site reconnaissance was conducted by accessing two hiking trails that are managed by the DLNR Nā Ala Hele Trail & Access program, which run generally along the north and south borders of the Subject Property. No indications of environmental concern were identified during the site reconnaissance. Two staff from the DLNR Nā Ala Hele Trail & Access program, which maintains the two trails on the Subject Property, were interviewed. They reported that they knew of no environmental issues along the trail or associated with DLNR's management of the property.

The Phase I ESA revealed no evidence of recognized environmental conditions associated with the Property. Use of the Property for military training may represent a notable finding for the possible presence of UXO; however, no specific locations of potential UXO were identified.

Part 2: Phase II Environmental Site Assessment

The purpose of a Phase II assessment is to obtain a better understanding of the potential environmental concerns associated with a property. If suspected contaminants are identified during a Phase I ESA, environmental and/or geophysical sampling is conducted to determine the absence or presence, or assess the extent of contamination. Because no indication of RECs was found during the Phase I ESA, a Phase II ESA was not conducted.

Part 3: Property Characterization

Based on the findings of the Phase I and Phase II ESAs, one of seven ECoP categories is assigned to the property, or the property may be divided into parcels and an ECoP category assigned to each parcel. ECoP Environmental Condition of Property (ECoP) guidance² provides for properties to be categorized into one of seven categories:

- Category 1: Areas where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas).
- Category 2: Areas where only release or disposal of petroleum products has occurred.
- Category 3: Areas where release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial response.
- Category 4: Areas where release, disposal, and/or migration of hazardous substances has occurred, and where all remedial response actions necessary to protect human health and the environment have been taken.
- Category 5: Areas where release, disposal, and/or migration of hazardous substances has occurred, and where all remedial response actions necessary to protect human health and the environment have not yet been taken.
- Category 6: Areas where release, disposal, and/or migration of hazardous substances has occurred, but where required actions have not yet been implemented.
- Category 7: Areas that are not evaluated or require additional evaluation.

Based on the results of the Phase I ESA, **the Poamoho Property is categorized as Category 1**, i.e., an area where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas).

TABLE ES-1: SUMMARY OF PROPERTY CHARACTERIZATION

TMK:	7-2-01-06
Land Area:	4,390
State Land Use Classification	Conservation
Current Occupants/ Tenants:	State of Hawai'i (Owner) United States of America - Army (Lessee)
ECoP Category	1

² US Army Public Health Command (undated), Environmental Condition of Property (ECoP) Investigations, Technical Information Paper No. 380001-0312.

PART 1:

PHASE I ENVIRONMENTAL SITE ASSESSMENT

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Acronyms

AAI	All Appropriate Inquiry
ASTM	American Society for Testing and Materials
AUL	Activity and Use Limitation
CCH	City and County of Honolulu
CERCLA	Comprehensive Environmental Response Compensation and Liability Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
CFR	Code of Federal Regulations
CORRACTS	RCRA facilities subject to Corrective Action
DLNR	Department of Land and Natural Resources
DOFAW	Division of Forestry and Wildlife
EDR	Environmental Data Resources, Inc.
EC	Engineering Control
EPA	Environmental Protection Agency (United States)
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
FINDS	Facility Index System
HDOH	Hawai'i Department of Health
HEER	Hazard Evaluation and Emergency Response (HDOH)
HoLIS	Honolulu Land Information System (CCH)
HREC	Historical Recognized Environmental Conditions
HRS	Hawai'i Revised Statute
IC	Institutional Control
KLOA	Kawailoa Training Area
LLP	Landowner Liability Protection
LUST	Leaking underground storage tank
N/A	Not applicable
NAR	Natural Area Reserve
NFA	No Further Action
NFRAP	No Further Remedial Action Planned
NPL	National Priorities List (Superfund sites)
PCBs	Polychlorinated biphenyls
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information System
REC	Recognized Environmental Condition
sf	Square feet
SHWB	Solid and Hazardous Waste Branch (HDOH)
SHWS	State Hazardous Waste Site
TMK	Tax Map Key
TSD	Treatment, Storage, or Disposal (RCRA classification)
USDA	United States Department of Agriculture
USGS	United States Geological Survey (U. S. Dept. of the Interior)
UST	Underground storage tank
VRP	Voluntary Response Program

Section 1: Summary

A Phase I Environmental Site Assessment (ESA) has been prepared for a parcel of real estate, TMK 7-2-01-06, referenced as the “Poamoho Parcel,” also referred to as the “Subject Property” throughout this Phase I ESA report (Report). Figure 1 shows the location of the parcel.

TABLE 1: SUMMARY OF SUBJECT PROPERTY DESCRIPTION

TMK:	7-2-01-06
Land Area:	4,390 acres
Number of Buildings:	N/A
Number of Floors:	N/A
Date of Construction:	N/A
Nature of Use:	Army training, hiking trail access
Other Improvements	Hiking trails along north and south borders; fencing of proposed Natural Area Reserve (NAR) at the east end
Current Occupants/ Tenants:	Army (lease)

This ESA was conducted in general conformance with the scope of work and limitations of the American Society for Testing and Materials (ASTM)'s Standard Practice for Environmental Site Assessments (ASTM E1527-13), modified as appropriate by ASTM E2247-08, “Phase I Environmental Site Assessment Process for Forestland or Rural Property.” Any exceptions to, or deletions from this practice are described in Section 1.5 of this report.

Independent conclusions presented in this report represent professional judgment based on standard practice, with respect to conditions that existed at the time of the assessment. Detailed information regarding methodology and findings is presented in the main body and appendices of this report. This Summary and the following report are subject to the limitations of non-scope and other considerations as detailed in Section 2.4. This report should be read in its entirety to understand the coverage of the ESA and to better evaluate the information provided.

The Subject Property is largely comprised of preservation land in the Ewa Forest Reserve and has a State Land Use District classification of “Conservation.” The Subject Property has limited access and is characterized by dense vegetation and rugged mountainous terrain. Two hiking trails, managed by the State of Hawai‘i Department of Land and Natural Resources (DLNR), Na Ala Hele Trail program, run generally along the north and south borders of the Subject Property (Figure 2). The Poamoho Hele Loa Access road is about 6 miles in length and is the access road to the Poamoho Ridge Trail that runs along the northern border of the Subject Property. The Schofield-Waikāne Trail running along the southern border of the Subject Property requires access to be arranged through U.S. Army Schofield East Range and Division of Forestry and Wildlife (DOFAW). Access to the entire parcel is restricted, providing little opportunity for fugitive

dumping or other sources of environmental concern. A proposed Natural Area Reserve (NAR) is located at the eastern portion of the Subject Property (Figure 2). The proposed NAR is bounded by the Poamoho Trail to the north, the Schofield-Waikāne Trail to the south, and the summit of the Koʻolau Mountains to the east. A fence is proposed at the west boundary of the NAR.

The Army holds a lease on the property until 2029 and has used the property for military training. The entire property is part of the Army's larger Kawaihoa Training Area (KLOA). Range Control personnel reported that, although only blank ammunition is currently used in the KLOA, old unexploded ordnance (UXO) has been found (specific locations not identified) during training or surveys.

This assessment has revealed no evidence of recognized environmental conditions associated with the Property. No additional investigation or sampling of the Subject Property is recommended. Use of the Property for military training may represent a notable finding for the possible presence of UXO; however, specific locations of potential UXO were not identified.

Section 2: Introduction

A Phase I Environmental Site Assessment (ESA) has been prepared for a parcel of real estate referenced as the “Poamoho Parcel,” and also referred to as the “Subject Property” throughout this Phase I ESA report (Report). The Army intends to purchase or acquire a new long-term lease on the Subject Property for the purposes of utilizing the property for military training. The entirety of the Subject Property has a State Land Use District classification of Conservation.

2.1 Purpose

The Phase I ESA was conducted in accordance with the United States Environmental Protection Agency (EPA) All-Appropriate Inquiry (AAI) rule (40 CFR, Part 312) as described in the American Society for Testing and Materials Standard E1527-13 (ASTM E1527-13), and modified as appropriate by ASTM E2247-08, “Phase I Environmental Site Assessment Process for Forestland or Rural Property.” The purpose of the Phase I ESA was to inform the Army of Recognized Environmental Conditions (RECs), Controlled Recognized Environmental Conditions (CRECs), Historical Recognized Environmental Conditions (HRECs) or Notable Findings pertaining to the Subject Property.

A recognized environmental condition (REC) is defined by ASTM E1527-13 as “the presence or likely presence of any hazardous substances or petroleum products in, or, at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment”. The term REC includes hazardous substances and petroleum products even under conditions that might be in compliance with laws. The term is not intended to include “de minimis” conditions that do not present a threat to human health and/or the environment and that would not be subject to an enforcement action if brought to the attention of appropriate governmental agencies.

A controlled recognized environmental condition (CREC) refers to a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls). *A historical recognized environmental condition (HREC)* refers to an environmental condition that would have been considered a REC in the past, but which is no longer considered a REC based on subsequent assessment or regulatory closure. Conditions considered by the environmental professional to be a CREC or HREC shall be listed in the findings section of the Phase I Environmental Site Assessment report, and as a recognized environmental condition in the conclusions section of the Phase I ESA report.

A *Notable Finding* refers to environmental concerns that do not qualify as a REC, but have the potential to affect the Subject Property. Notable Findings are also described in the conclusions section of the Phase I ESA report.

2.2 Scope of Services

The Phase I ESA was conducted in accordance with the United States Environmental Protection Agency (EPA) All-Appropriate Inquiry (AAI) rule (40 CFR, Part 312) as described in the ASTM E1527-13. The following activities were performed to accomplish the Phase I ESA objectives:

- **Site Reconnaissance** – Visual observations of readily accessible areas of the Subject Property were conducted to identify RECs or Notable Findings. Limitations due to the size and accessibility of the Subject Property are documented. For portions of the Subject Property that could not be visually or physically observed, observations were made to the extent practicable from the nearest vantage points and supplemented with available aerial imagery, in accordance with ASTM E2247-08. Additionally, visual observations of adjoining properties were made from vantage points within the Subject Property and public rights-of-way to assess the potential impact of these properties on the Subject Property.
- **Interviews** – Interviews were conducted with individuals knowledgeable and familiar with the Subject Property.
- **Regulatory Records Review** – A review of standard and additional regulatory records, using search distances established by ASTM E1527-13 was conducted and compiled by Environmental Data Resources, Inc. (EDR; Appendix A).
- **Historical Research** – Readily available sources of historical information related to the Subject Property and adjoining properties were researched to identify historical land use practices that have the potential to adversely impact environmental conditions at the Subject Property. Sources of historical information utilized included historical aerial photographs and topographic maps. Due to the undeveloped and remote nature of the Subject Property, relevant Sanborn Fire Insurance Maps and City Directories were not available.
- **Report Preparation** – This written summary of the findings and recommendations of the Phase I ESA was prepared.

2.3 Significant Assumptions

The independent conclusions presented in this report represent professional judgment based on review of reasonably ascertainable standard records and other standard sources of information. Conclusions were made with respect to our observations at readily visible and accessible areas of the Subject Property, for conditions that existed at the time of the assessment, as limited by site reconnaissance conducted on-foot or from vehicle access viewpoints.

Information regarding operations, conditions, and previous investigations provided by the *User* of this report, by the Subject Property owner, or by either party's representatives, has been assumed to be correct and complete, except as noted in other sections of this report.

Historical records at five-year intervals stipulated by ASTM E1527-13 were not readily ascertainable. The EDR inquiry provided United States Geological Survey (USGS) Aerial Photography for 1951, 1977, 1985, 1992, 2004, 2006, and 2013 (Appendix B). United States Department of Agriculture (USDA) Geospatial Data Gateway provided aerial imagery for 2015 (Appendix B). The EDR inquiry provided USGS historical topographic maps for Hauula 7.5' Quad for 1954, 1966, 1983, 1992, and 2013 as well as Waipahu 7.5' Quad for 1954, 1968, 1983, and 2013 (Appendix B). According to ASTM E1527-13, if the specific use of the property appears unchanged over a period longer than five years, then it is not required to research the use during that period. Based on the historical aerial photos and topographic maps, the property use appears unchanged during any 5-year periods for which photos and maps were not available.

2.4 Limitations and Exceptions

ASTM guidance describes a number of “non-scope” environmental issues or conditions that the *User* may wish to assess in connection with commercial real estate that are outside the scope of this practice. These non-scope items include: asbestos-containing building materials, biological agents, cultural and historical resources, ecological resources, endangered species, health and safety, indoor air quality unrelated to releases of hazardous substances or petroleum products into the environment, industrial hygiene, lead-based paint, lead in drinking water, mold, radon, regulatory compliance, and wetlands (ASTM, 2013).

Some requirements for meeting AAI are strictly the responsibility of the *User* and beyond the scope of the Phase I ESA. These *User* requirements include providing the rationale for conducting the ESA at the Subject Property; reviewing title and judicial evidence for Activity and Use Limitations (AULs) and environmental liens associated with the Subject Property; providing any specialized, actual, and local knowledge of or experience with environmental conditions associated with the Subject Property as would be material to RECs; and providing a written explanation for a significantly lower than fair market purchase price in real estate transactions where no associated RECs are yet identified (ASTM, 2013). Furthermore, parties who wish to qualify for one of the Landowner Liability Protections (LLPs) will need to know whether they are in compliance with AULs, including land use restrictions that were relied upon in connection with a response action. A determination of compliance with AULs is beyond the scope of this assessment (ASTM, 2013).

This ESA is site-specific in that it relates to assessment of environmental conditions on a select parcel of commercial real estate (the Subject Property), and is based on information that was reasonably ascertainable on dates and for locations indicated in this report. Consequently, it does not address additional issues raised in transactions such as purchases of business entities, or interests therein, or of their assets, that may well involve environmental liabilities pertaining to properties previously owned or operated, or other off-site environmental liabilities.

This assessment is not intended to be a comprehensive inspection or assessment of all conditions that might exist at the Subject Property. No ESA can absolutely rule out the existence of hazardous materials at a given site or wholly eliminate uncertainty regarding the potential for RECs associated with the Subject Property. ESA standard practice is intended to reduce, but not eliminate, such uncertainty under conditions of reasonable limits of time and cost. Furthermore, completion of AAI does not imply an exhaustive assessment of a clean Subject Property, since the cost or time required to collect information must be balanced with the usefulness of such information and the orderly completion of a transaction.

This assessment is based upon limited research of “reasonably ascertainable/standard sources” about past and present use of the Subject Property, and upon our observations of limited accessible areas of the Subject Property. Existing hazardous materials and contaminants can escape detection using these methods, particularly in this case where dense vegetation and limited access prevent thorough site reconnaissance.

This report’s conclusions were based in part on information supplied by others, the accuracy or sufficiency of which could not be independently verified within the scope and budget of an ESA. No investigation can be thorough enough to exclude the presence of hazardous materials at a given Subject Property; therefore, if no hazardous materials are identified during an assessment, such a finding should not be construed as a guarantee of the absence of such materials on the Subject Property, but rather the results of services performed within project scope, cost, and other limitations.

Any opinions presented apply to the Subject Property conditions at the time of performance of services and do not address the potential for future releases. Changes in applicable environmental standards, practices, or regulations may occur following performance of services, which could impact the opinions presented.

2.5 User Reliance

This ESA of the Subject Property was prepared for the sole use and benefit of the US Army. ASTM guidance recommends that the report may be used for Subject Property transactions for up to one year after assessment information is collected or updated, if specific ESA components (interviews, environmental lien records searches, regulatory records review, visual inspection of subject and adjoining properties, and declaration by the Environmental Professional responsible for the assessment or update) are updated no more than 180 days prior to such transactions. Any periodic ESA review should include an update of environmental conditions in the Subject Property area.

Section 3: Subject Property Description

This section provides information about the Subject Property, such as its ownership, general description, environmental setting, current property usage, and also describes the general uses of the adjoining properties and surrounding area.

3.1 Location and Legal Description

The Subject Property is located on the leeward slopes of the Ko'olau Mountains in the north central portion of O'ahu, Hawai'i (Figure 1, Property Location Map).

The Subject Property consists of a single City and County of Honolulu (CCH) tax parcel, Tax Map Key (TMK) 7-2-01-06, as depicted in Figure 1. The total area of the Subject Property is 4,390 acres. Legal addresses, ownership, and individual parcel area details are summarized from real property (CCH's Honolulu Land Information System [HoLIS]) as follows:

TABLE 2: PROPERTY LEGAL AND OWNERSHIP INFORMATION

Street Address	TMK	Parcel Area (acres)	Current Owner(s)
Ewa Forest Reserve	7-2-01-06	4,390	State of Hawai'i

The Subject Property is largely comprised of preservation land in the Ewa Forest Reserve and has a State Land Use District classification of "Conservation." Public records of the City and County of Honolulu, Hawai'i from January 1, 2000 to January 22, 2016 were searched by EDR, and no deeds vesting title in the Subject Property were found.

The Poamoho Section of the Ewa Forest is encumbered by State General Lease S-3846 (GL S-3846), U.S. Lease Contract No. DA-94-626-ENG-78 for military purposes by the United States of America for a term of 65 years commencing August 17, 1964, i.e., until August 2029 (Appendix B). Around 2005, the Natural Area Reserve System of the State of Hawai'i Department of Land and Natural Resources Division of Forestry and Wildlife (DOFAW) requested to withdraw 1,300 acres of the leased area from the Ewa Forest Reserve and designate such area as the Poamoho NAR (see NAR Public Hearing documents in Appendix B). DOFAW started discussions with the Lessee regarding possible conflicts between the Lessee's activities under the GL S-3846 and the governing administrative rules of the NAR (Hawai'i Administrative Rules §13-2029). Another goal of the lease modification was to remove certain restrictions for public use of the area; however, this was not accomplished.

In December 2014, the Poamoho NAR on the east portion of the Property was approved by the Board of Land and Natural Resources, although it is not yet officially designated as a NAR. The Army agreed to limit training to aviation training, including low-elevation technical operations as well as to provide written monthly reports summarizing activities conducted and future activities planned. On-the-ground training exercises (firing and non-firing) or the construction of any structures by the Army requires prior written consent of DLNR. In accordance with their lease,

the Army must remove or deactivate all live or blank ammunition upon completion of a training exercise and stockpile supplies in an orderly fashion away from access paths.

3.2 Subject Property and Vicinity General Characteristics

The predominant land use on O'ahu's central plateau has been agricultural and military. The Subject Property is situated east of Wahiawa/Whitmore Village and Naval Computer and Telecommunications Area Master Station Pacific (NCTAMS PAC). The Subject Property is characterized by dense vegetation and rugged terrain (see site reconnaissance photos in Appendix C). Two hiking trails, managed by the State of Hawai'i Department of Land and Natural Resources (DLNR), Na Ala Hele Trail & Access program, run generally along the north and south borders of the Subject Property (Figure 2). Bordering properties have similar characteristics and are generally limited in access.

Agricultural land west of the Subject Property was used for growing pineapple and sugarcane since the early 20th century. The Wahiawa community, situated southwest of the Property, was developed since at least 1954 (USGS, 1954).

3.3 Current Use of the Subject Property

The Subject Property land use has not changed significantly in the past 50 years. Access is very limited and available via two trails. The northern trail, the Poamoho Ridge Trail, requires a State of Hawai'i, Department of Land and Natural Resources hiking permit and is accessible through Poamoho Hele Loa Road during weekends and State and federal holidays. DOFAW established a Memorandum of Understanding with Dole Food Company for the Poamoho Ridge Trail and agreed to limit access to twenty 4-wheel drive vehicles and no more than one hundred people per accessible day.

The southern trail, the Schofield-Waikāne Trail, requires written access permission from Schofield East Range Director of Public Works and a DOFAW hiking permit. Trail access is limited to weekends and State and federal holidays; access is obtained through the Army Lightning Training Area by prior arrangement with the Army and DOFAW.

The Subject Property is leased for military training and the entire property is part of the Army's KLOA (Appendix B). However, per State lease documents, on-the-ground training is limited and is not conducted without permission and documenting the nature of training. The lease requires the Army to maintain training roads with due regard for preventing unnecessary erosion. Under the lease agreement, the Army must limit firing on the Subject Property to weapons not larger than .50-caliber. Inert 3.5-inch rockets or weapons of similar size or purpose may also be fired provided such training will not cause fires. Range Control personnel reported that, although only blank ammunition is currently used in the KLOA, old UXO has been found (specific locations not identified) during training and surveys (Appendix D).

3.4 Descriptions of Structures, Roads and Other Improvements

The Subject Property does not contain permanent structures such as buildings. Roadways consist of dirt roads.

3.5 Current Uses of the Adjoining Properties

To the north, east and south, conservation land extends well beyond the Subject Property boundary. Land use immediately west of the Subject Property is military (Naval Computer and Telecommunications Area Master Station Pacific [NCTAMS PAC]).

Section 4: User Provided Information

The Army is responsible for communicating commonly known or reasonably ascertainable information that is material to Subject Property RECs. A “User Questionnaire” was completed by the Army (Appendix D).

4.1 Title Records

A title search per se is not required to achieve AAI; however, ASTM specifies that the standard practice calls for the User to either conduct or contract title research to assess AULs and thus meet requirements for LLP (ASTM, 2013). The Army reported that they will conduct the title search closer to the potential real estate transaction.

4.2 Environmental Liens or Activity and Use Limitations

The Army reported that they know of no environmental liens associated with the Subject Properties, and that the only AULs of which they are aware are associated with the land’s conservation zoning. EDR’s search of public records also did not indicate environmental liens or AULs associated with the Subject Properties.

4.3 Specialized Knowledge

The Army has no specialized knowledge or experience regarding environmental concerns associated with the Subject Properties.

4.4 Commonly Known or Reasonably Ascertainable Information

The Army is not aware of commonly known or reasonably ascertainable information regarding environmental concerns associated with the Subject Property.

4.5 Valuation Reduction for Environmental Issues

ASTM E1527-13 and 40 CFR 312.29 indicate that the User must identify and make a written record of an explanation for a significantly lower than fair market purchase price in transactions involving commercial real estate purchase or lease where no associated RECs are yet identified. The User shall consider the relationship of the purchase price of the Property to the fair market value of the property if the property was not affected by hazardous substances or petroleum products. The Army has stated that the purchase price reasonably reflects the fair market value of the property.

4.6 Owner, Property Manager, and Occupant Information

The property owner is the State of Hawai‘i. There are no occupants of the parcel. The User did not provide property manager information, but DLNR was contacted.

4.7 Reason for Performing Phase I ESA

This Phase I ESA was requested by the Army, a potential purchaser or continued Lessee of the Subject Property.

4.8 Other Information

No other information was provided by the User.

Section 5: Records Review

5.1 Standard Environmental Record Sources

A review of federal, state, and tribal environmental databases related to the Subject Property and surrounding area in accordance with the ASTM E1527-13 search radius was conducted to identify potential RECs. Properties that have or may have the potential for existing or future site contamination, environmental liabilities, or the potential for contamination migration were identified in this database search. Information from these various databases was compiled in the EDR Radius Map Report (EDR Report, Appendix A).

We also reviewed EDR's list of forty-two "Orphan" sites, i.e., sites for which EDR could not find addresses or mapping information. We determined that the listed "orphan" facilities were of such a distance and nature that they would not have affected the Subject Property (Appendix A). Standard environmental records and respective search distances are listed in Table 3.

TABLE 3: STANDARD REGULATORY SOURCES AND SEARCH DISTANCES

Standard Environmental Record Sources		Minimum Search Distance	Found
Federal NPL Site List		1.0 mile	1
Federal Delisted NPL Site List		0.5 mile	0
Federal CERCLIS List		0.5 mile	1
Federal CERCLIS NFRAP List		0.5 mile	0
Federal RCRA CORRACTS Facilities List		1.0 mile	0
Federal RCRA Non-CORRACTS TSD Facilities List		0.5 mile	0
Federal RCRA Generators List		Subject & Adjoining Properties	1
Federal Institutional Control/Engineering Control Registries		Subject Property	0
Federal ERNS List		Subject Property	0
State and Tribal Hazardous Waste Sites for Investigation/Remediation	NPL-Equivalent	1.0 mile	0
	CERCLIS-Equivalent	0.5 mile	0
State/Tribal Landfill and/or Solid Waste Disposal Site Lists		0.5 mile	0
State/Tribal Leaking Storage Tanks Lists		0.5 mile	0
State/Tribal Registered Storage Tanks Lists		Subject & Adjoining Properties	0
State/Tribal Institutional Controls/Engineering Controls Registries		Subject Property	0
State/Tribal Voluntary Cleanup Sites		0.5 mile	0
State/Tribal Brownfield Sites		0.5 mile	0

We augmented the EDR report with additional targeted searches of Hawai'i regulatory databases. We searched the databases for the terms, "Poamoho," "California Avenue," and "NCTAMS" and evaluated the resulting listings for their likelihood to affect the Subject Property.

5.2 Environmental Records Review Findings

Federal National Priorities List (NPL) and Delisted NPL Site Lists

The NPL, also known as the Superfund list, is a subset of the Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) that lists properties with the highest priority for cleanup under the EPA Hazard Ranking System (40 CFR Part 300). The list is compiled by the EPA pursuant to Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) 42 United States Code §9605 (a)(8)(B).

NCTAMS is listed as an NPL site. The listing appears associated with polychlorinated biphenyls (PCBs) found in soil around transformer sites. PCBs are not highly mobile in soil, and there is no indication that the NPL listing is due to any incident or contamination east of NCTAMS near the Subject Property.

Federal CERCLIS and CERCLIS NFRAP Site List

The CERCLIS list is compiled by the EPA. It contains sites that the EPA has investigated or is currently investigating for potential hazardous substance contamination for possible inclusion on the NPL (ASTM, 2013). The CERCLIS No Further Remedial Action Planned (NFRAP) database is for sites removed from CERCLIS. These include sites for which, after initial investigation, no contamination was found, or where contamination was removed quickly enough or was not serious enough to warrant Federal Superfund action or NPL consideration (EDR, 2016).

NCTAMS is also listed as a CERCLIS site for the same issues as the NPL listing, and the east end of NCTAMS is within one-half mile of the Poamoho property boundary. However, there is no indication that the NPL listing is due to any incident or contamination east of NCTAMS near the Subject Property.

Federal RCRA Corrective Action Report (CORRACTS) Facilities List

The RCRA database, compiled by the EPA, lists those regulated facilities that have notified EPA as hazardous waste generators, transporters, or treatment, storage, or disposal facilities under RCRA, as summarized on the Resource Conservation and Recovery Information System (RCRIS). CORRACTS identifies hazardous waste handlers for which RCRA corrective action is documented. No listed facilities are located on or within one mile of the Subject Property.

Federal RCRA Non-CORRACTS TSD Facilities List

RCRIS non-CORRACTS Treatment, Storage, and Disposal (TSD) facilities are those facilities without documented corrective actions where treatment, storage, and/or disposal of hazardous wastes takes place, as defined and regulated by RCRA. No listed facilities are located on or within one-half mile of the Subject Property.

Federal RCRA Generators List

Hazardous waste “generators” are those facilities that produce hazardous waste as defined by RCRA. EDR reported no large or small-quantity generators on the Subject Property or adjoining properties.

Federal Institutional and Engineering Controls Registries

The Federal Institutional Controls (ICs) Registry lists sites that have administrative measures (e.g., ground water use, construction, and property use restrictions) and post-remediation care requirements imposed to prevent exposure to residual contaminants on site. ICs typically require deed restrictions for listed sites. The Engineering Controls (ECs) Registry lists facilities that have engineering controls in place, including various forms of caps, building foundations, liners, and other treatment methods emplaced to eliminate pathways of migration for regulated substances to enter environmental media or to prevent affecting human health. EDR reported no IC facilities on the Subject Property.

Federal ERNS List

The Emergency Response Notification System (ERNS) list is compiled by the EPA. The ERNS list compiles information on reported releases of oil and hazardous substances. EDR listed no such facilities located on the Subject Property.

NPL-Equivalent and CERCLIS-Equivalent State Hazardous Waste Sites

The Hawai'i equivalent to NPL consists of those sites on the planned cleanup priority list for which the State will provide funds. Other facility cleanups may be funded by potentially responsible parties. EDR looks for both types of facilities in the State of Hawai'i Department of Health (HDOH) records searches (EDR, 2016). The HDOH office of Hazard Evaluation and Emergency Response (HEER) compiles the State Hazardous Waste Sites (SHWS) database, which includes facilities, sites, or areas in which the HDOH has an interest, has investigated, or may investigate under Hawai'i Revised Statute (HRS) 128D, and includes CERCLIS sites. EDR listed no such facilities within the recommended search distances.

State Landfill and/or Solid Waste Disposal Site Lists

The Hawai'i Solid Waste Facilities List contains information pertaining to all permitted landfills located within the State of Hawai'i. No permitted landfills are located on or within one-half mile of the Subject Property.

State Leaking Storage Tanks Lists

The HDOH Solid and Hazardous Waste Branch (SHWB) compiles records of Leaking Underground Storage Tank (LUST) inventoried incidents. No LUST sites were reported by EDR within one-half mile of the Subject Property.

State Registered Storage Tank Lists

The Underground Storage Tank (UST) database, compiled by SHWB, contains a list of registered UST owners and some details about facility UST contents, install dates, and current or past use information. No UST facilities are located on the Subject Property or adjoining properties.

State ICs and ECs Registries

State ICs and ECs are essentially the same as Federal controls as described in the Federal ICs and ECs section. The HDOH maintains a list of facilities with ECs in place. The HDOH also lists

Voluntary Response Program (VRP) and Brownfields sites with ICs in place. No listed facilities are located on the Subject Property.

State Voluntary Cleanup Sites

HDOH's VRP was established by statute in 1997 (Chapter 128D, Part II, HRS). The purpose of the VRP is to streamline the cleanup process in a way that will encourage prospective developers, lenders, and purchasers to voluntarily cleanup properties (EDR, 2016). No listed facilities are located on or within one-half mile of the Subject Property.

State Brownfield Sites

A Brownfield is real property for which future development or reuse may be hindered by existing or potential environmental contamination or hazardous substance issues. The EPA's Brownfields Program was developed so states, local communities, and other parties interested in economic viability can assess, safely clean up, and sustainably reuse brownfields. HDOH maintains a list of brownfields sites. No listed sites are located on or within one-half mile of the Subject Property.

5.3 Additional Environmental Record Sources

EDR also reviewed the following additional reasonably ascertainable additional sources of environmental records that fall outside the requirements of the ASTM guidance (and, therefore, do not have recommended search distances). Records reviewed by EDR include:

State Records of Emergency Releases

HDOH HEER maintains a spreadsheet of spill incidents. EDR's search of this database indicated no reported releases for the Subject Property. The HEER "Releases" and "Sites of Interest" databases were also searched for key phrases "Poamoho," "California Avenue," and "NCTAMS." No releases were reported that were likely to affect the Subject Property.

FINDS

The Facility Index System (FINDS) contains both facility information and "pointers" to other sources of information that contain more detail; the EDR report indicated no FINDS for the Subject Property.

Drinking Water Quality Records

Drinking water records are not applicable as no wells are located within the Subject Property.

Other EDR Record Sources

EDR searched several other additional sources of regulatory information. The EDR report indicated no entries related to Local Brownfield Lists, Local Lists of Landfill/Solid Waste Disposal Sites, and Local Lists of Hazardous Waste/Contaminated Sites. No listed facilities are located on or within one half mile of the Subject Property.

5.4 Physical Setting Record Sources

The objective of reviewing physical setting records is to assess the potential for contaminant migration that may affect the Subject Property. Review of a current U.S. Geological Survey (USGS) 7.5-minute topographic map (or equivalent) is the only required standard source for evaluating the physical setting of the Subject Property; however, additional sources may be used to provide additional information on physical setting per the environmental professional's discretion (ASTM, 2013). Discretionary physical setting sources shall be sought when (1) conditions have been identified in which hazardous substances or petroleum products are likely to migrate to the property, from the property, or within the property into the groundwater or soil and (2) more information than is provided in the current USGS 7.5 Minute Topographic Map (or equivalent) is generally obtained, pursuant to local good commercial and customary practice in initial environmental site assessments in the type of commercial real estate transaction involved, in order to assess the impact of such migration on recognized environmental conditions in connection with the property.

5.4.1 Current USGS 7.5-Minute Topographic Map

Topographic map coverage of the Subject Property vicinity is provided by the USGS Waipahu and Hauula Quadrangles, at a scale of 1:24,000 (Figure 1). The center of the Subject Property is at approximately 21° 31' 12" North latitude, 157° 56' 51" West longitude (EDR, 2016), at an average elevation of about 1,577 feet above mean sea level.

The Subject Property consists of one parcel with Tax Map Keys (TMK) 7-2-01-06 referred to as the Poamoho study area. The Poamoho study area has steep slopes including forested higher elevations and streams in the valleys. Vicinity areas that have been developed for residential and urban use are typically level or gently sloping.

5.4.2 Geology/Soils

O'ahu was formed by two volcanoes: the Waianae range on the west and the younger Ko'olau range on the east. The Ko'olau range is a narrow long ridge about 37 miles long and deeply eroded by streams. It consists of thin, narrow, basaltic lava flows piled one upon another like shingles, with minor amounts of volcanic ash and numerous dikes (Stearns 1985). Lava flows from the Ko'olau volcano banked against the already eroded slopes of the Waianae volcano to form the gently sloping surface of the Schofield Plateau (McDonald 1983). The Poamoho study area is located on the Schofield Plateau, on the western slopes of the Ko'olau range.

Subject Property soils are classified as rough mountainous land (97.7 percent) (Soil Survey Staff 2015). The parent material for the rough mountainous land is alluvium and colluvium with paralithic bedrock at 20 to 40 inches. The rough mountainous lands have slopes of 50 to 99 percent. Mean annual rainfall is about 120 to 250 inches and the mean annual temperature is about 57 to 72 degrees F. The soils are highly erodible and well drained.

5.4.3 Hydrology and Hydrogeology

The Subject Property is mostly located in the Conservation District in the high rainfall zone of the Ko'olau range. According to "Aquifer Identification and Classification for the Island of O'ahu"

(Mink and Lau, 1990), the Subject Property is located over three aquifer systems: Ko'olau and Wahiawā systems in Central O'ahu aquifer sector, and Wai'awa system in the Pearl Harbor aquifer sector. All three aquifer systems are unconfined high level aquifers segmented into compartments by dikes.

All three aquifers are classified as fresh water having less than 250mg/l chloride content, and are regarded as irreplaceable sources with high vulnerability to contamination. All the aquifers are currently used or have the potential for use for drinking water, but no drinking water wells are reported on the Subject Property.

The EDR well report map indicated that the closest wells are about one-half mile from the Subject Property boundaries (one to the west and one to the east).

5.5 Historical Record Sources

The objective of historical research is to determine previous uses of the Subject Property and surrounding area in order to identify historical and potential current RECs associated with the Subject Property. To achieve this objective, ASTM E1527-13 dictates that obvious uses of the Subject Property's first developed use (including agricultural activity or placement of fill), or back to 1940 (whichever is earlier), to the present, under condition that the records are reasonably ascertainable and likely to be useful for AAI (ASTM, 2013). Review of standard historical sources at less than approximately five year intervals is not required by this practice. If the specific use of the property appears unchanged over a period longer than five years, then it is not required by this practice to research the use during that period.

5.5.1 Sources of Historical Information

Table 4 lists the types of historical records that are considered standard or additional sources, and indicates which records were used for the research in this report. Readily available historical topographic maps and aerial photographs were obtained from EDR. Copies of these documents are included in Appendix B. Due to the undeveloped nature of the Property, Sanborn Fire Insurance maps were not included in the EDR database request.

TABLE 4: HISTORICAL SOURCES

Historical Record Sources	Date(s)	Use and Comments
Standard Sources		
Aerial Photographs	EDR 1951, 1977, 1985, and 1992; Google Earth 2004, 2006, 2013, and USDA 2015	Yes; Google Earth imagery for 2013 was of limited use due to cloud cover.
Property Tax Files and Building Department Records	--	No: CCH's HoLIS system did not contain any documents for the parcel.
Recorded Land Title Records	--	No: Not provided by User.

Historical Record Sources	Date(s)	Use and Comments
USGS Topographic Maps	1954, 1966, 1968, 1983, 1992, and 2013	Yes
Local Street Directories	--	No: No City Streets on this remote parcel.
Zoning/Land Use Records	Various Dates Online CCH Records	Yes
Additional Historic Sources		
Other Maps (Street, Tax Map, etc.)	None	No: No relevant reports documented
Internet Reports, News Items, and other Documents	None	No: No relevant items
Previous Environmental Report(s)	None	No: No reports provided by User

5.5.2 Site and Vicinity History

The Subject Property is part of the Ewa Forest Reserve, but has been used for military training purposes. The land use has not changed significantly in the past 50 years. The Property is currently owned by the State of Hawai'i, but the US Army has a lease on the Property until 2029. As of December 2014, the Poamoho NAR on the east portion of the Property (Figure 2) was approved by the Board of Land and Natural Resources, but is not yet officially designated as a NAR. Topographic maps indicate the designation as forest reserve as early as 1954. Although the Property is used for military training purposes, recreational trail access is allowed on weekends and holidays.

5.5.3 Site Historical Concerns

No structures were observed on the Property or indicated in historical records. The only identified historical land use on the Subject Property is recreational hiking access and military training. There is no indication from searching additional historical sources that unexploded ordnance is likely to be found at the Subject Property. The historical record sources do not indicate potential offsite contamination sources that would likely impact the Subject Property.

Section 6: Subject Property Reconnaissance

6.1 Methodology and Limiting Conditions

The Subject Property reconnaissance was conducted on two dates, March 4th and 24th, 2016 by [REDACTED] (Army Corps of Engineers), [REDACTED] (Hart Crowser), [REDACTED] (Hart Crowser), and [REDACTED] (Masa Fujioka & Associates).

The weather was an average of 68 degrees, wind speed 6 miles per hour, sunny, with no precipitation during the site reconnaissance. Most of the Subject Property was inaccessible due to topography and dense vegetation. Access was limited to dirt roads and trails. Trails were accessed by foot, and overlook areas were utilized to view interior areas of the parcel (Figures 3a-3c). Photographs obtained during the site reconnaissance are included in Appendix C, which includes a photo map directory to identify the location the photograph was taken within the parcel.

6.2 General Site Setting

6.2.1 Current Use(s) of the Subject Property

The Subject Property is largely comprised of preservation areas located in the Ewa Forest Reserve and has a State Land Use District classification of "Conservation." The Subject Property was viewed, to the extent practical (ASTM E2247-08), to identify current uses likely to involve the use, treatment, storage, disposal, or generation of hazardous substances or petroleum products. Observations noted during the reconnaissance are summarized in Table 5.

6.2.2 Indications of Past Use(s) of the Subject Property

The reconnaissance did not provide indications of past uses that were likely to have involved the use, treatment, storage, disposal, or generation of hazardous substances or petroleum products. Charred vegetation was observed in the southwestern corner of the parcel and is likely attributed to a brush fire that occurred a few months prior to the field reconnaissance. Clip ammunition (about 10 casings) observed at a roadside overlook before the start of the Schofield Waikāne trail is likely attributed to military training.

6.2.3 Current Use(s) and Indications of Past Use(s) of Adjoining Properties

Adjoining properties were observed to be heavily vegetated and unused, with no indications of past use(s) observed.

6.3 Exterior and Interior Observations

Exterior and interior observations, as applicable, are summarized in Table 5.

TABLE 5: SUMMARY OF RECONNAISSANCE OBSERVATIONS

Reconnaissance Subject	Comments	REC? (Y/N)
Current Use(s) of the Subject Property		
Current use	Conservation, military training, trail maintenance	N
Vacant spaces / undeveloped areas	Entire parcel with the exception of the Na Ala Hele Access roads discussed on the north and south parcel boundaries.	N
Property improvements	N/A	N
Structures (<i>incl. potential for vapor intrusion</i>)	Structures not observed. Small equipment storage trailer and water collection unit on south side of Property at an area used by DLNR for trail maintenance (Figure 3a).	N
Roads and parking areas	Dirt roads on north and south Property boundaries utilized for Na Ala Hele Access and military training.	N
Potable water supply	None within the Property. One catchment west of the central Property access is utilized in an area of the trail to provide water to outplanting of native species (Figure 3b).	N
Wells (<i>dry, irrigation, injection, abandoned, water, industrial</i>)	No evidence of wells was observed.	N
Sewage disposal system	No evidence of cesspools or on-site wastewater systems was observed.	N
Surface water drainage	Natural drainageways are present. No drainage structures or drainage issues were observed.	N
Heating/cooling systems	N/A (no permanent structures).	N
Landscaping (<i>potential pesticide use</i>)	N/A (natural area)	N
Electrical transformers (PCBs)	No transformers or other potential sources of PCBs were observed.	N
Containers / Containment		
Aboveground storage tanks	None observed, and no indications of past presence.	N
Underground storage tanks	No indications of USTs were observed.	N
Hazardous chemicals (<i>Storage, Use, Disposal</i>)	No evidence of a hazardous substance release.	N
Petroleum hydrocarbons	No evidence of petroleum hydrocarbons.	N
Pesticide usage or storage	None observed.	N
Solid or hazardous waste storage	Minor debris/litter observed. No evidence (such as stressed vegetation or staining) of hazardous substance releases.	N
Unidentified substances	Containers of unidentified substances were not observed.	N

Reconnaissance Subject	Comments	REC? (Y/N)
Septic tanks	No evidence of septic or cesspool systems was observed.	N
Berms (<i>potential secondary containment</i>)	None observed.	N
Potential Waste Disposal		
Industrial wastewater	None observed.	N
Pits, ponds, lagoons	Nothing of significance observed.	N
Pools of liquid	None observed.	N
Floor drains	N/A (no buildings).	N
Storm drainage system	None observed.	N
Dumping or filling (<i>soil or debris piles</i>)	None observed	N
Roads and trails with no apparent purpose (<i>potential for illicit dumping</i>)	None observed. Hunting trails or pig trails were observed.	N
Potential Evidence for Chemical Impacts		
Materials Spills	None observed.	N
Stained or corroded pavement, flooring, or walls	N/A	N
Odors	None detected.	N
Air emissions	None observed.	N
Stained or disturbed soil	De minimis oil staining was observed in gravel parking areas.	N
Stressed vegetation	None observed.	N
Non-ASTM items & Miscellaneous		
Asbestos-containing building materials	No suspect asbestos-containing materials were observed.	N
Lead-based paint	No buildings or other painted surfaces were observed.	N
Interior water damage/mold	N/A (no buildings).	N
Florescent lighting	N/A (no buildings).	N
High voltage power lines/cellular phone towers	None observed.	N
Other	None.	N

Reconnaissance Subject	Comments	REC? (Y/N)
Site recon indications of previous use that may have had an environmental impact		
Concrete pads	None observed.	N
Pump islands	None observed.	N
Fill ports or vent pipes	None observed.	N
Former building foundations	None observed.	N
Abandoned drums/containers	None observed.	N
Sumps and clarifiers	None observed.	N
Hoists or lifts	None observed.	N
Concrete/asphalt patches	None observed.	N
Monitoring Wells	None observed.	N
Other	Small arms ammunition casings observed at an overlook along the south trail (Figure 3c).	N
Indication of Adjoining Property Concerns		
Adjoining property use that may provide environmental concern	None observed.	N
Monitoring wells on adjoining property	None observed.	N
Odors emanating from adjoining property	None noted.	N
Contaminated runoff from adjoining property	None observed.	N
Other	None.	N

Section 7: Interviews

7.1 Interviews with Owners

The Property is owned by the State, and access is managed by DLNR, as described below.

7.2 Interviews with Site Managers

DLNR serves as the manager of the Property for the State. Two persons with DLNR were interviewed and a record of the correspondence is included in Appendix D.

Mr. [REDACTED] of the Nā Ala Hele Trail Access program reported that the two trails are maintained by DLNR. Access to both trails is through a limited permit program administered by DLNR. [REDACTED] knew of no environmental issues along the trail or associated with DLNR's management of the Property. [REDACTED] reported that DLNR has a Memorandum of Agreement with Dole Properties so the public can gain access through two gate access points to reach the Poamoho trail head. The statewide Natural Area Reserve System (NARS) consists of 21 reserves over 5 islands; O'ahu has four NARS reserves including Kaluanui NAR north of the eastern Subject Property boundary (Figure 2). [REDACTED] stated that a sensitive natural area within the Subject Property was fenced for ungulate control and fencing material was delivered via helicopter. As of December 2014, the Poamoho NAR on the east portion of the Subject Property was approved by the Board of Land and Natural Resources, but not yet officially designated as a NAR.

[REDACTED] DOFAW O'ahu Native Ecosystem Protection and Management Program Manager, was contacted on April 5, 2016 regarding the proposed NAR. [REDACTED] said the entire proposed NAR (Figure 2) has not been fenced but the section that was fenced for ungulate control was accomplished by helicopters delivering materials. Fuel spills or environmental concerns were not encountered during construction of the fenced enclosure. The location of this enclosure is not publicly available.

7.3 Interviews with Occupants

There are no current occupants of the Subject Property. The Army currently leases the Property for training. Mr. [REDACTED] Range Training Manager, provided information about ordnance use in the KLOA (Appendix D).

7.4 Interviews with Local Government Officials

The State is the owner of the property, and interviews with the managing entity, DLNR, are detailed above (7.2).

7.5 Interviews with Others

No additional interviews were conducted.

Section 8: Findings and Opinion

A Phase I ESA has been conducted in conformance with the scope and limitations of ASTM E1527-13 and E2247-08 of one parcel (TMK 7-2-01-06), located at the Poamoho Property, O'ahu, the Subject Property. This assessment has revealed no evidence of RECs, CRECs or HRECs associated with the Subject Property. Use of the Property for military training represents a notable finding for the possible presence of unexploded ordnance; however, specific locations of potential UXO were not identified.

Section 9: Conclusions and Recommendations

We have performed a Phase I Environmental Site Assessment of TMK 7-2-01-06, the Subject Property, in accordance with the scope and limitations of ASTM Practice E1527-13, as modified by E2247-08. Any exceptions to, or deletions from, this practice are described in this report. This assessment has revealed no evidence of recognized environmental conditions associated with the Subject Property. No additional investigation or sampling of the Subject Property is recommended.

Section 10: Deviations and Data Gaps

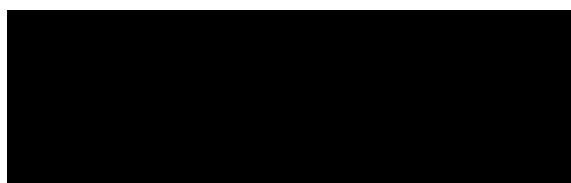
No deviations from the ASTM E2247-08 and E1527-13 standards were made during the preparation of the Phase I ESA, except as described in Section 2.4. Significant data gaps were not identified during this assessment.

Section 11: References

- ASTM, 2008. Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property (ASTM Designation E2247-08). American Society for Testing and Materials International, Pennsylvania, 43 p.
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- USDA: NRCS: Geospatial Data Gateway: Order Data 2015 Digital Ortho MrSID Island Imagery, [REDACTED] Date Accessed: March 1, 2017

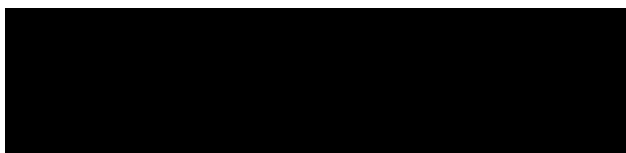
Section 12: Signatures of Environmental Professionals

The undersigned environmental professionals have performed a Phase I Environmental Site Assessment of the property designated as TMK 7-2-01-06 (Subject Property), in general conformance with the scope and limitations stated earlier in this report. By signing below, the environmental professionals declare that, to the best of their professional knowledge and belief, the undersigned meet the definition of an *Environmental Professional* as defined in §312.10 of 40 CFR 312 and have the specific qualifications based on education, training, and experience to assess a *property* of the nature, history, and setting of the Subject Property. The undersigned have performed this investigation in conformance with the “all appropriate inquiry” standards and practices set forth in 40 CFR Part 312.



Senior Geologist, Masa Fujioka & Associates

Date: 3/30/2017



 Ph.D.
Principal, Hart Crowser, Inc.

Date: 3/30/2017

Section 13: Qualifications of Environmental Professionals

Qualifications required of an Environmental Professional to assess a property are defined in the EPA's AAI Rule (40 CFR 312.10, 2005). An Environmental Professional is defined as:

A person who possesses sufficient specific education, training, and experience necessary to exercise professional judgment to develop opinions and conclusions regarding conditions indicative of releases or threatened releases (see 40 CFR Part 312.1(c)) on, at, in, or to a property, sufficient to meet the objectives and performance factors in 40 CFR Parts 312.20(e) and (f).

Such a person must:

- *Hold a current Professional Engineer's or Professional Geologist's license or registration from a State, Tribe, or US territory (or the Commonwealth of Puerto Rico) and have the equivalent of three (3) years of full-time relevant experience; or*
- *Be licensed or certified by the Federal Government, a State, Tribe, or US territory (or the Commonwealth of Puerto Rico) to perform environmental inquiries as defined in 40 CFR Part 312.21 and have the equivalent of three (3) years of full-time relevant experience; or*
- *Have a Baccalaureate or higher degree from an accredited institution of higher education in a discipline of engineering or science and the equivalent of five (5) years of full-time relevant experience; or*
- *Have the equivalent of ten (10) years of full-time relevant experience.*

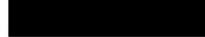
The qualifications of the Environmental Professionals who meet these requirements and who prepared this report are contained on the following pages.

Statement of Qualifications

**TITLE**

 Senior Geologist

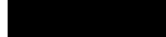
EXPERTISE

 is a Senior Geologist with Masa Fujioka & Associates (MFA). She has 25 years of experience as a Geologist in Hawai'i. Her expertise includes Phase I and Phase II Environmental Site Assessments, Geologic Investigations, Hydrogeologic Investigations, Soil and Groundwater Remediation, Geotechnical Inspections and Field Mapping.

**ACADEMIC
BACKGROUND**

B. S., Geology and Geophysics, 1990
University of Hawaii, Manoa

EXPERIENCE

 has performed numerous Phase I Environmental Site Assessments, including historical record searches, site reconnaissance, interviews and report preparation. Performed Phase II Environmental Site Assessments including report preparation, multi-incremental soil sampling, supervision of drilling and installation of groundwater monitoring, air monitoring and injection wells; well logging and soil classification.

Project Manager on multiple environmental consultation projects including subsurface investigations, remedial investigations, and feasibility/ treatability studies for petroleum releases from leaking USTs and other releases. Prepared regulatory reports including data analyses and recommendations.

Project Manager for multiple hydrogeologic investigations involving groundwater supply and transport problems. Performed well design, permitting and supervision for installation of drinking water, salt water, monitoring and injection wells. Performed and documented well development, pump tests, injection tests, and slug tests for determination of hydraulic conditions and aquifer characteristics including compliance with Regulatory permitting and reporting.

Extensive experience in conducting and supervising field mapping and environmental sampling (soil, groundwater, surface water, deep well tunnels, soil vapor, air, and waste) for laboratory analyses and for environmental assessment and delineation of subsurface conditions. Field and technical experience includes landfill gases and landfill gas extraction systems.

PAST EXPERIENCE

*Masa Fujioka & Associates, August 1991 with continued consulting projects to present.
C&R Groundwater Services, August 2000 to September 2009, Principal
J. Romano Consulting, September 2009 to October 2016*

OTHER TRAINING

40-hour Hazardous Materials/Waste Health and Safety Training since 1991 and Supervisor 8-hour Hazardous Materials/Waste Health and Safety Training since 2003.

AFFILIATIONS:

American Institute of Professional Geologists (AIPG)

HISTORY OF PROJECTS ON-GOING AND COMPLETED

Partial List

Hawai'i County Dept. of Environmental Management, Hilo Hawaii

Project Manager for groundwater monitoring and aquifer transport at Hilo Landfill. Supervision of drilling and installation of monitoring wells and pump testing. Conducted quarterly groundwater and soil gas monitoring at West Hawaii and Hilo Solid Waste Landfills. Ongoing

Hawai'i County Dept. of Environmental Management, Hilo Hawaii

Supervised and conducted subsurface air monitoring, field inspections, fire remediation, including installation, design and monitoring requirements for remediation CO₂/water injection system. Geologic, environmental mapping and reporting, Kailua-Kona Closed Landfill, Hawaii. Ongoing

Damien Estates Kahuku Ranch, Ocean View, Hawaii

Phase II Environmental Site Assessment and Remediation, Kahuku Ranch 114,000-acre site real estate transfer to Volcanos National Park. Completed.

McCoy Plantation, Honaunau, Hawaii

Phase I Environmental Site Assessment for real estate transfer of multiple parcels 500 acre agricultural/ranch lands to Puuhonua National Historical Park, Hawaii. Completed.

Hawaii MacFarms, Captain Cook, Hawaii

Phase I Environmental Site Assessment on separate locations for real estate transfer of large parcels of agricultural lands. Kona and Ka'u District, Hawaii. Completed.

University of Hawaii, Hilo, State of Hawaii

Prepared hydrogeologic reports for Aquaculture Farm, including well permitting, groundwater data collection and analysis, saltwater and freshwater well design, installation, pump testing, salinity analysis and reporting. Hilo, Hawaii. Completed.

PhD, FACEC

Principal/Hawaii Operations Manager

EDUCATION

PhD, Geology & Geophysics,
University of Hawaii, 2005

M Eng, Civil (Geotechnical)
Technical University of Nova
Scotia, 1986

B Eng, Civil Engineering,
Technical University of Nova
Scotia, 1986

REGISTRATIONS

Professional Engineer,
WA (Environmental
Engineering)

LEED® Accredited
Professional

AFFILIATIONS

American Council of
Engineering Companies
• Risk Management Comm
Chair, 2012-2015
• National Director, 2005-
2007, 2016-2018

ACEC Hawaii
• President, 2004-2005
• Board Member 2002-
2007

Society of American Military
Engineers

National Association of
Environmental Professionals

has more than 20 years of experience providing environmental engineering consulting services for a wide variety of projects in Hawai'i and the Pacific, and on the US west coast. She has managed hundreds of environmental engineering projects in Hawaii and the Pacific. Projects encompass a variety of facility types and settings, and include assessment of soil, groundwater, surface water, and building materials for contaminants such as petroleum compounds, pesticides, PCBs, furans and dioxins, heavy metals, and asbestos.

has extensive experience in environmental permitting and compliance. She has facilitated a full range of Federal, State and local permits for many project types. She has procured CWA Section 401/404 permits for several projects. has managed the preparation of EAs/EISs for public works projects and Phase I Environmental Site Assessments and Environmental Baseline Surveys for property transactions. She has provided environmental services for many design-build projects, at both design and construction phases. She has performed human-health and ecological risk assessments for contaminated properties, and has published on the risk assessment process.

REPRESENTATIVE PROJECT EXPERIENCE

Environmental Baseline Survey/Environmental Condition of Property Analysis, Moanalua Shopping Center, O'ahu, HI

Project Manager for an Environmental Baseline Survey for the transfer by lease of a Navy property to a private developer for redevelopment of a large shopping center and military services. Project included review of site history, regulatory records and geologic setting; conducting a site reconnaissance and interviews; conducting sampling; and providing a report. Environmental concerns addressed that the property included hazardous building materials and PCBs at transformer sites.

Environmental Baseline Survey/Environmental Condition of Property Analysis, Waikale Gulch (NAVMAG), O'ahu, HI

Project Manager for an Environmental Baseline Survey for the sale of a former Naval Magazine facility to a private interest. Project included review of site history, regulatory records and geologic setting; conducting a site reconnaissance and interviews; conducting sampling; and providing a report. Environmental concerns addressed that the property included hazardous building materials, PCBs at transformer sites, and metals, PCBs, dioxins, and unexploded ordinance at a former landfill site.



Site Characterization, NCTS, Finegayan, Guam

Project Manager for preliminary environmental investigations for NCTS Finegayan, Guam. Environmental scope of work consisted of an Environmental Baseline Survey effort, including historical plan review to assess potential environmental issues, site reconnaissance, interviews with personnel having historical knowledge of the environmental history of the facility, and preparation of a report. Plan review showed numerous environmental issues (e.g., historical buried tanks) unknown to current facility personnel.

Phase I Environmental Site Assessment, Kapolei Senior Housing Development, O'ahu, HI

Project Manager for a Phase I Environmental Site Assessment for a large property in Kapolei proposed for a Senior Housing Development. Project included review of site history, regulatory records and geologic setting, as well as conducting a site reconnaissance and interviews, and providing a report.

Environmental Investigation, Army Child Welfare Center, Fort Shafter, O'ahu, HI

Project Manager for an environmental investigation during design of a facility at Fort Shafter. Project included review of site history and regulatory records; developing a sampling plan and conducting surface soil sampling for pesticides and heavy metals; providing a report summarizing the investigation results; and providing input to specifications and design drawings to inform the construction contractor of required actions to address contaminated soil.

Global Hawk Aircraft Maintenance and Operations Center, Anderson Air Force Base, Guam

Project Manager for the design consultation and preparing design documents for the Global Hawk Aircraft Maintenance and Operations Center. Environmental concerns at the project site included extensive PCB contamination of soils, potential contamination from an oil-water separator, and hazardous building materials. Work included design consultation and design documents (plans, specifications and cost estimates) for handling and removal of hazardous materials and contaminated soil.

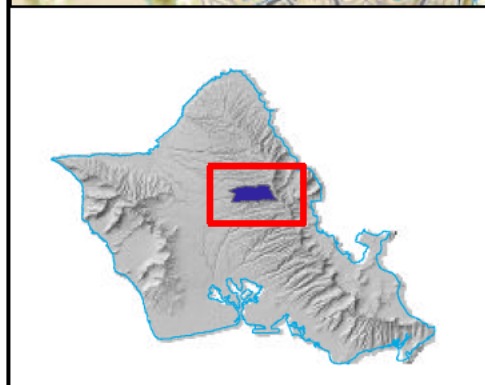
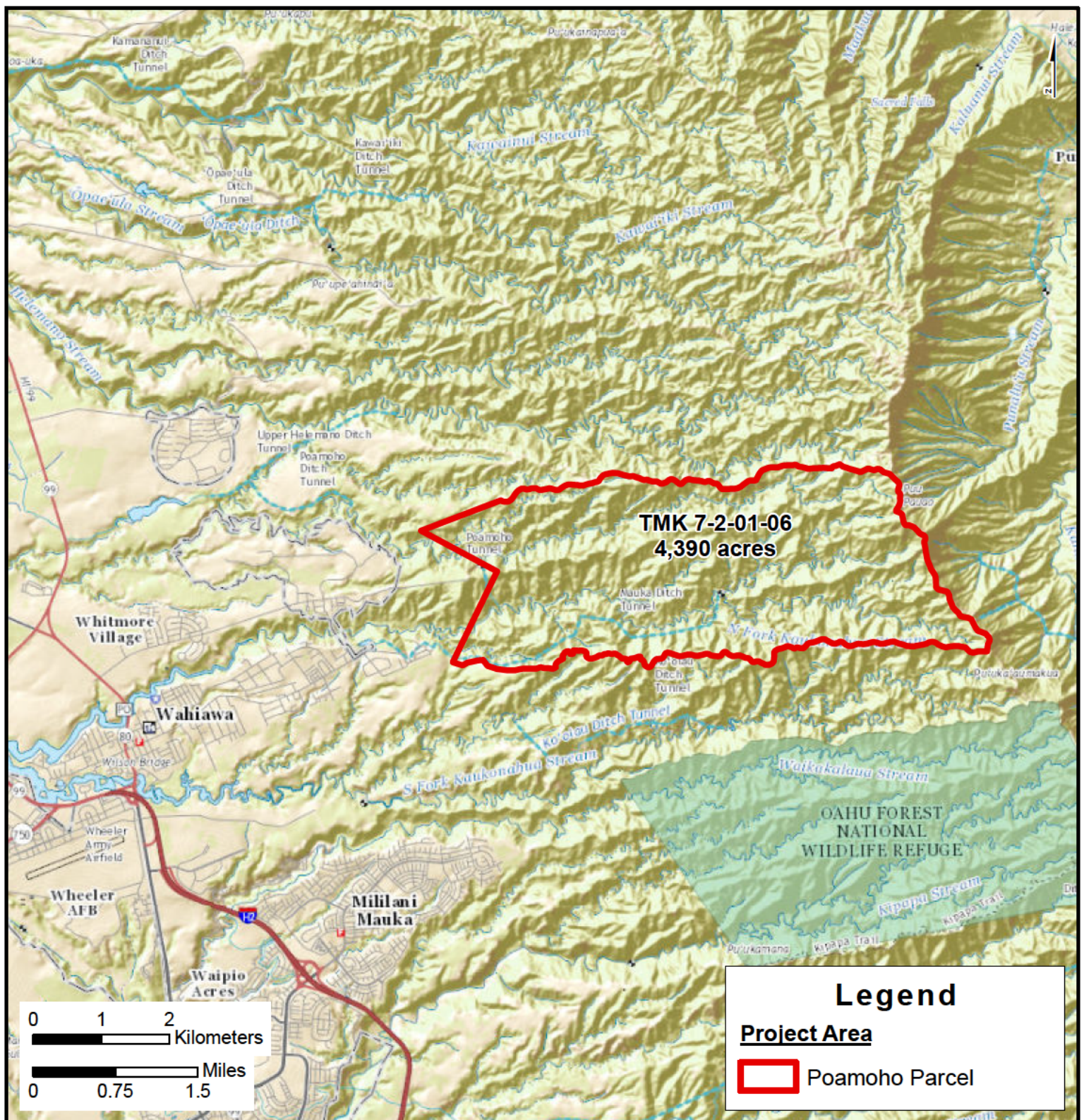
Keaau Middle School Environmental Investigation and Design, Kea'au, Island of Hawai'i, HI

Project Manager for environmental consultation associated with the design for demolition of several structures at the School. Environmental scope of work included investigation of soil contamination by organochloride pesticides, lead, and arsenic; investigation of building materials for arsenic, asbestos, and lead; developing specifications for handling and removal of hazardous materials or contaminated soil during demolition activities; environmental permitting, and consultation during demolition.

NOAA Pacific Region Center, Ford Island, O'ahu, HI

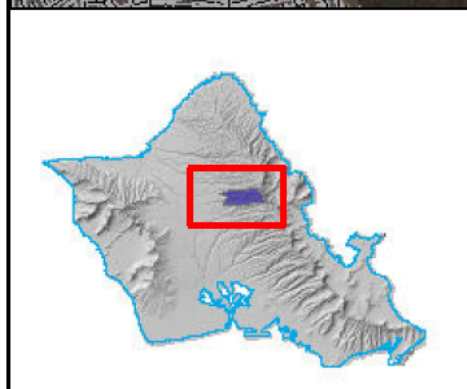
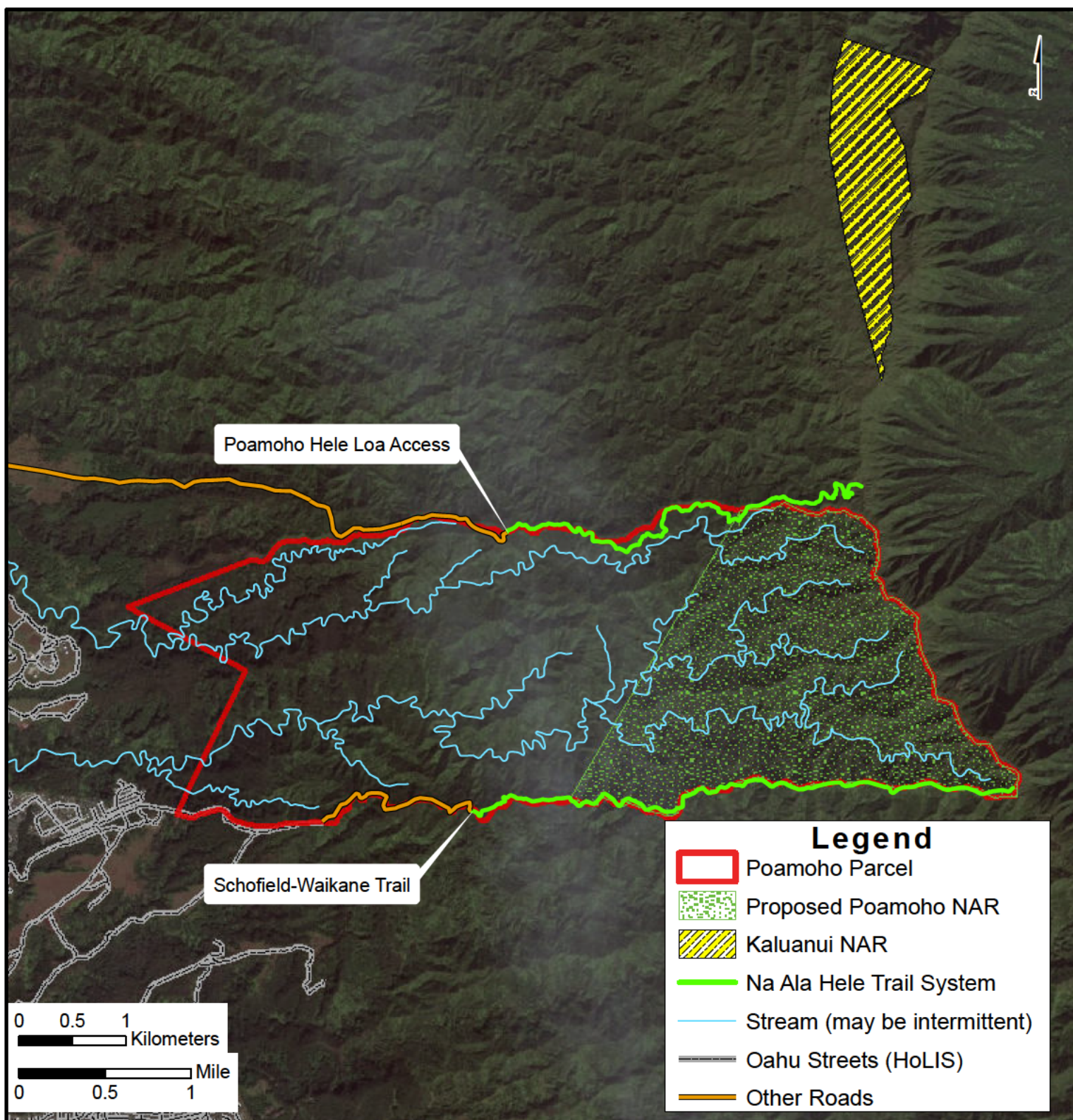
Project Manager for environmental and civil sustainability consultation for the NOAA Pacific Region Center on Ford Island. The environmental scope of work consisted of extensive hazardous materials surveys that identified high lead concentrations on building structural components, evaluation of encapsulation/remediation alternatives, and preparation of design documents for management of lead-based paint. The sustainability scope of work consisted of assisting the project civil engineer with assessing possible LEED points from storm water management and wastewater re-use.

FIGURES



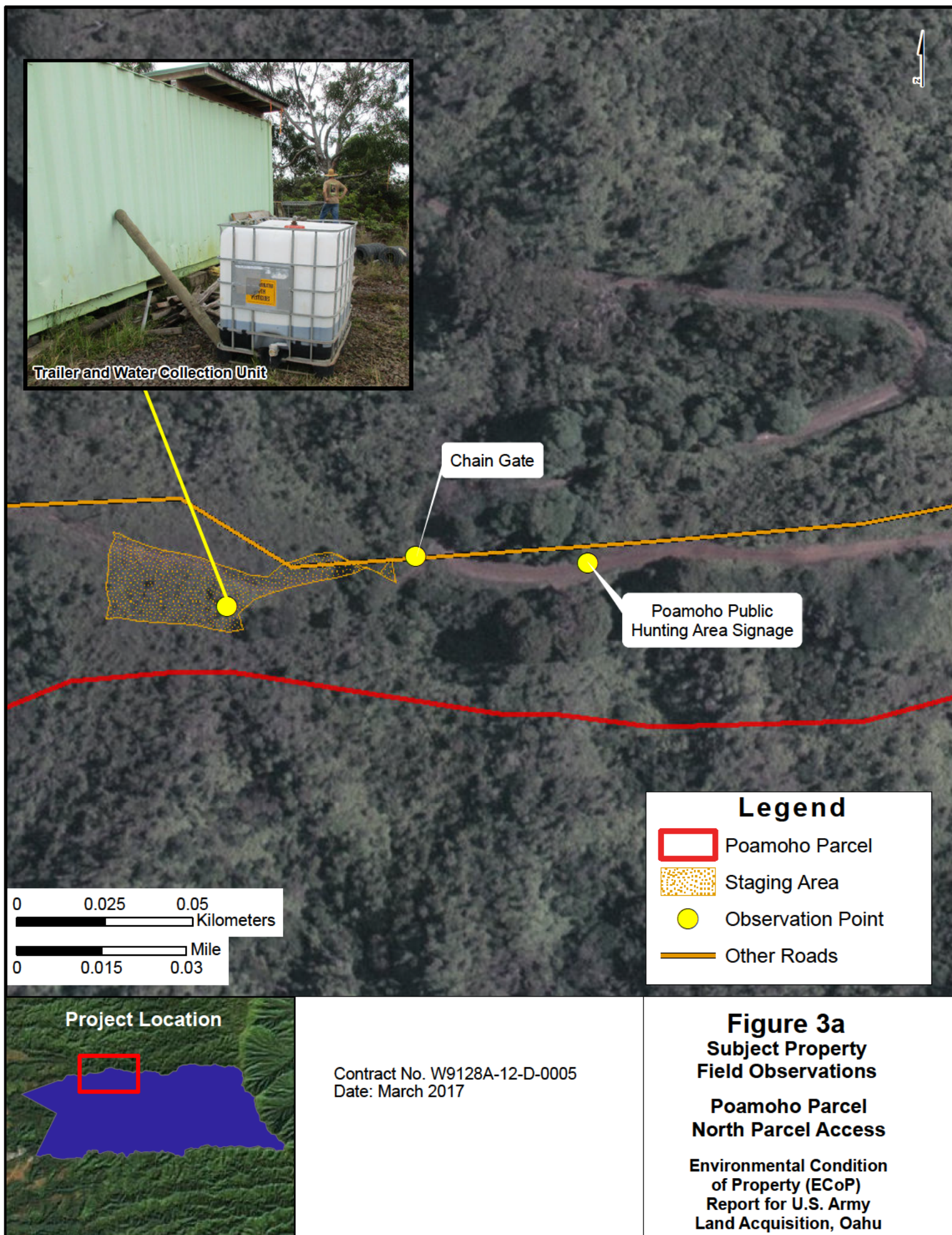
Contract No. W9128A-12-D-0005
Date: March 2017

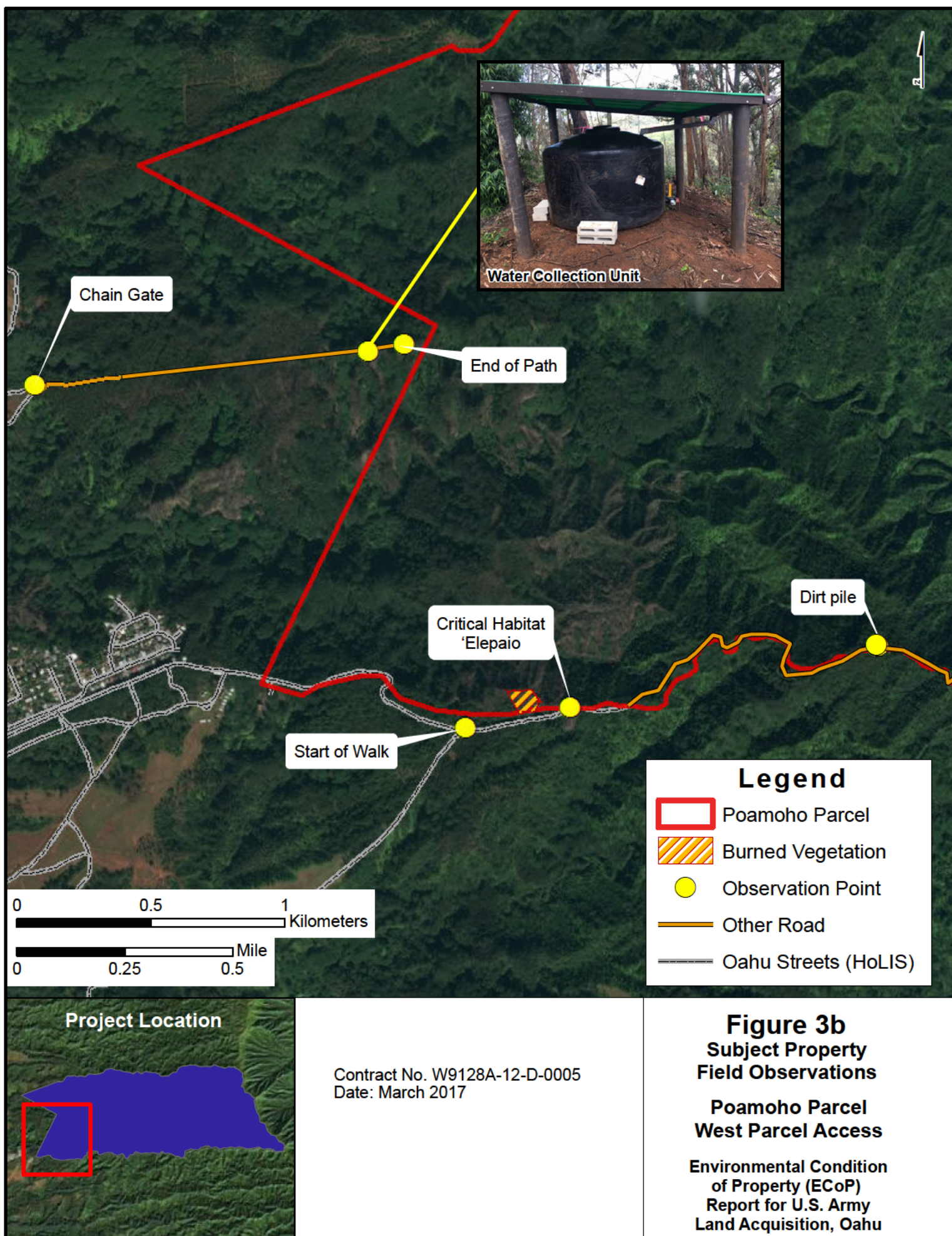
Figure 1
**Property
Location Map**
Poamoho Parcel
**Environmental Condition
of Property (ECoP)
Report for U.S. Army
Land Acquisition, Oahu**

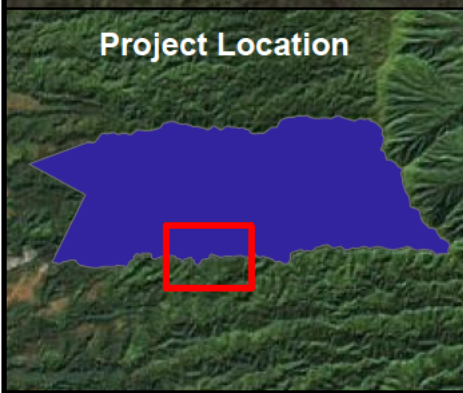
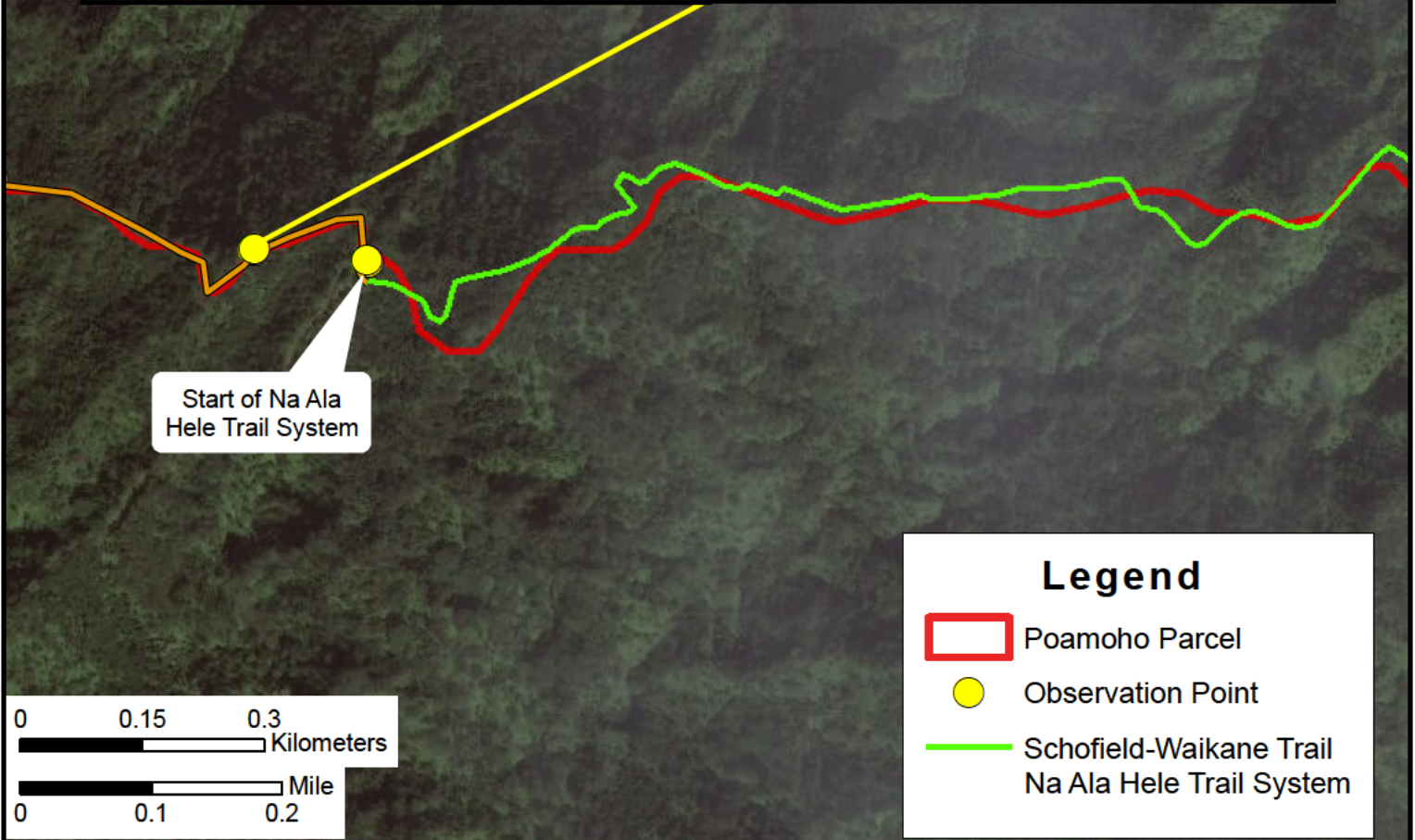


Contract No. W9128A-12-D-0005
Date: March 2017

Figure 2
Subject Property
Natural Features
Poamoho Parcel
Environmental Condition
of Property (ECoP)
Report for U.S. Army
Land Acquisition, Oahu







Contract No. W9128A-12-D-0005
Date: March 2017

Figure 3c
Subject Property
Field Observations
Poamoho Parcel
South Parcel Boundary
Environmental Condition
of Property (ECOP)
Report for U.S. Army
Land Acquisition, Oahu

APPENDICES

APPENDIX A – ENVIRONMENTAL DATABASE REVIEW

EDR DATAMAP™ AREA STUDY REPORT

TABLE OF EDR “ORPHAN” SITES

EDR ENVIRONMENTAL LIENSEARCH™

EDR DATAMAP™ WELL SEARCH REPORT

Poamoho

Wahiawa, HI 96786

Inquiry Number: 4518245.6s

January 21, 2016

EDR DataMap™ Area Study

Thank you for your business.
Please contact EDR at [REDACTED]
with any questions or comments.

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EXECUTIVE SUMMARY

TARGET PROPERTY INFORMATION

ADDRESS

WAHIAWA, HI 96786
WAHIAWA, HI 96786

DATABASES WITH NO MAPPED SITES

No mapped sites were found in EDR's search of available ("reasonably ascertainable ") government records within the requested search area for the following databases:

FEDERAL RECORDS

Proposed NPL	Proposed National Priority List Sites
Delisted NPL	National Priority List Deletions
NPL LIENS	Federal Superfund Liens
CERCLIS-NFRAP	CERCLIS No Further Remedial Action Planned
LIENS 2	CERCLA Lien Information
CORRACTS	Corrective Action Report
RCRA-TSDF	RCRA - Treatment, Storage and Disposal
RCRA-LQG	RCRA - Large Quantity Generators
RCRA-SQG	RCRA - Small Quantity Generators
RCRA-CESQG	RCRA - Conditionally Exempt Small Quantity Generator
RCRA NonGen / NLR	RCRA - Non Generators / No Longer Regulated
ERNS	Emergency Response Notification System
HMIRS	Hazardous Materials Information Reporting System
DOT OPS	Incident and Accident Data
US CDL	Clandestine Drug Labs
US BROWNFIELDS	A Listing of Brownfields Sites
LUCIS	Land Use Control Information System
CONSENT	Superfund (CERCLA) Consent Decrees
UMTRA	Uranium Mill Tailings Sites
ODI	Open Dump Inventory
DEBRIS REGION 9	Torres Martinez Reservation Illegal Dump Site Locations
US MINES	Mines Master Index File
TRIS	Toxic Chemical Release Inventory System
TSCA	Toxic Substances Control Act
FTTS	FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)
HIST FTTS	FIFRA/TSCA Tracking System Administrative Case Listing
SSTS	Section 7 Tracking Systems
PADS	PCB Activity Database System
MLTS	Material Licensing Tracking System
RADINFO	Radiation Information Database
FINDS	Facility Index System/Facility Registry System
RAATS	RCRA Administrative Action Tracking System
RMP	Risk Management Plans
COAL ASH DOE	Steam-Electric Plant Operation Data

EXECUTIVE SUMMARY

COAL ASH EPA.....	Coal Combustion Residues Surface Impoundments List
PRP.....	Potentially Responsible Parties
EPA WATCH LIST.....	EPA WATCH LIST
US FIN ASSUR.....	Financial Assurance Information
PCB TRANSFORMER.....	PCB Transformer Registration Database
US HIST CDL.....	National Clandestine Laboratory Register
SCRD DRYCLEANERS.....	State Coalition for Remediation of Drycleaners Listing
2020 COR ACTION.....	2020 Corrective Action Program List
FEMA UST.....	Underground Storage Tank Listing
FEDERAL FACILITY.....	Federal Facility Site Information listing
US AIRS.....	Aerometric Information Retrieval System Facility Subsystem
LEAD SMELTERS.....	Lead Smelter Sites

STATE AND LOCAL RECORDS

SHWS.....	Sites List
SWF/LF.....	Permitted Landfills in the State of Hawaii
UIC.....	Underground Injection Wells Listing
SPILLS.....	Release Notifications
ENG CONTROLS.....	Engineering Control Sites
INST CONTROL.....	Sites with Institutional Controls
VCP.....	Voluntary Response Program Sites
DRYCLEANERS.....	Permitted Drycleaner Facility Listing
BROWNFIELDS.....	Brownfields Sites
CDL.....	Clandestine Drug Lab Listing
AIRS.....	List of Permitted Facilities

TRIBAL RECORDS

INDIAN RESERV.....	Indian Reservations
INDIAN ODI.....	Report on the Status of Open Dumps on Indian Lands
INDIAN LUST.....	Leaking Underground Storage Tanks on Indian Land
INDIAN UST.....	Underground Storage Tanks on Indian Land
INDIAN VCP.....	Voluntary Cleanup Priority Listing

EDR PROPRIETARY RECORDS

EDR MGP.....	EDR Proprietary Manufactured Gas Plants
EDR Hist Auto.....	EDR Exclusive Historic Gas Stations
EDR Hist Cleaner.....	EDR Exclusive Historic Dry Cleaners
RGA HWS.....	Recovered Government Archive State Hazardous Waste Facilities List
RGA LUST.....	Recovered Government Archive Leaking Underground Storage Tank
RGA LF.....	Recovered Government Archive Solid Waste Facilities List

SURROUNDING SITES: SEARCH RESULTS

Surrounding sites were identified.

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

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

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

EXECUTIVE SUMMARY

FEDERAL RECORDS

NPL: Also known as Superfund, the National Priority List database is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund program. The source of this database is the U.S. EPA.

A review of the NPL list, as provided by EDR, and dated 10/30/2015 has revealed that there is 1 NPL site within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
NAVAL COMPUTER AND T	500 CENTER STREET	0	3

CERCLIS: The Comprehensive Environmental Response, Compensation and Liability Information System contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

A review of the CERCLIS list, as provided by EDR, and dated 10/25/2013 has revealed that there is 1 CERCLIS site within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
NAVAL COMPUTER AND T	500 CENTER STREET	0	3

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

A review of the US ENG CONTROLS list, as provided by EDR, and dated 09/10/2015 has revealed that there is 1 US ENG CONTROLS site within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
NAVAL COMPUTER AND T	500 CENTER STREET	0	3

US INST CONTROL: A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

A review of the US INST CONTROL list, as provided by EDR, and dated 09/10/2015 has revealed that there is 1 US INST CONTROL site within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
NAVAL COMPUTER AND T	500 CENTER STREET	0	3

EXECUTIVE SUMMARY

DOD: Consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

A review of the DOD list, as provided by EDR, and dated 12/31/2005 has revealed that there are 3 DOD sites within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
SCHOFIELD BARRACKS M		0	35
OAHU FOREST NATIONAL		0	35
WAHIAWA NAVAL RESERV		0	36

FUDS: The Listing includes locations of Formerly Used Defense Sites Properties where the US Army Corps Of Engineers is actively working or will take necessary cleanup actions.

A review of the FUDS list, as provided by EDR, and dated 01/31/2015 has revealed that there is 1 FUDS site within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
CENTER COMBAT RANGE		3	37

ROD: Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid the cleanup.

A review of the ROD list, as provided by EDR, and dated 11/25/2013 has revealed that there is 1 ROD site within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
NAVAL COMPUTER AND T	500 CENTER STREET	0	3

ICIS: The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

A review of the ICIS list, as provided by EDR, and dated 01/23/2015 has revealed that there is 1 ICIS site within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
NAVAL COMPUTER AND T	500 CENTER STREET	0	3

STATE AND LOCAL RECORDS

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

A review of the LUST list, as provided by EDR, and dated 09/04/2015 has revealed that there are 2

EXECUTIVE SUMMARY

LUST sites within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
NAV. COMMUN. AREA MA Release ID: 950090 Facility Id: 9-202321 Facility Status: Site Cleanup Completed (NFA)	BLDG 388, TANK 23	1	36
NAV. COMMUN. AREA MA Release ID: 950091 Facility Id: 9-202323 Facility Status: Site Cleanup Completed (NFA)	BLDG 411, TANK 25	2	36

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

A review of the UST list, as provided by EDR, and dated 09/04/2015 has revealed that there are 2 UST sites within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
NAV. COMMUN. AREA MA Tank Status: Permanently Out of Use Facility Id: 9-202321 Date Closed: 04/26/1995	BLDG 388, TANK 23	1	36
NAV. COMMUN. AREA MA Tank Status: Permanently Out of Use Facility Id: 9-202323 Date Closed: 04/24/1995	BLDG 411, TANK 25	2	36

EXECUTIVE SUMMARY

Please refer to the end of the findings report for unmapped orphan sites due to poor or inadequate address information.

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Total Plotted</u>
<u>FEDERAL RECORDS</u>	
NPL	1
Proposed NPL	0
Delisted NPL	0
NPL LIENS	0
CERCLIS	1
CERCLIS-NFRAP	0
LIENS 2	0
CORRACTS	0
RCRA-TSDF	0
RCRA-LQG	0
RCRA-SQG	0
RCRA-CESQG	0
RCRA NonGen / NLR	0
US ENG CONTROLS	1
US INST CONTROL	1
ERNS	0
HMIRS	0
DOT OPS	0
US CDL	0
US BROWNFIELDS	0
DOD	3
FUDS	1
LUCIS	0
CONSENT	0
ROD	1
UMTRA	0
ODI	0
DEBRIS REGION 9	0
US MINES	0
TRIS	0
TSCA	0
FTTS	0
HIST FTTS	0
SSTS	0
ICIS	1
PADS	0
MLTS	0
RADINFO	0
FINDS	0
RAATS	0
RMP	0
COAL ASH DOE	0
COAL ASH EPA	0
PRP	0
EPA WATCH LIST	0
US FIN ASSUR	0
PCB TRANSFORMER	0
US HIST CDL	0

MAP FINDINGS SUMMARY

<u>Database</u>	<u>Total Plotted</u>
SCRD DRYCLEANERS	0
2020 COR ACTION	0
FEMA UST	0
FEDERAL FACILITY	0
US AIRS	0
LEAD SMELTERS	0
 <u>STATE AND LOCAL RECORDS</u>	
SHWS	0
SWF/LF	0
UIC	0
LUST	2
UST	2
SPILLS	0
ENG CONTROLS	0
INST CONTROL	0
VCP	0
DRYCLEANERS	0
BROWNFIELDS	0
CDL	0
AIRS	0
 <u>TRIBAL RECORDS</u>	
INDIAN RESERV	0
INDIAN ODI	0
INDIAN LUST	0
INDIAN UST	0
INDIAN VCP	0
 <u>EDR PROPRIETARY RECORDS</u>	
EDR MGP	0
EDR Hist Auto	0
EDR Hist Cleaner	0
RGA HWS	0
RGA LUST	0
RGA LF	0

NOTES:

Sites may be listed in more than one database

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

NPL
Region

NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA
500 CENTER STREET
WAHIAWA, HI 96786

NPL
CERCLIS
US ENG CONTROLS
US INST CONTROL
ROD
ICIS

1000167735
HI0170090054

NPL:

EPA ID: HI0170090054
CERCLIS ID: 0902904
EPA Region: 09
Federal: Y
Final Date: 1994-05-31 00:00:00
Site Score: 50
Latitude: +21.519020
Longitude: -158.00513000000001

Category Details:

NPL Status: Currently on the Final NPL
Category Description: Surface Water Adjacent To Site-Lake/Reservoir-Unknown
Category Value: U

NPL Status: Currently on the Final NPL
Category Description: Surface Water Adjacent To Site-Perennial Stream-Unknown
Category Value: U

Site Details:

Site Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN PACIFIC
Site Status: Final
Site Zip: 96786
Site City: WAHIAWA
Site State: HI
Federal Site: Yes
Site County: HONOLULU
EPA Region: 09
Date Proposed: 01/18/94
Date Deleted: Not reported
Date Finalized: 05/31/94

Substance Details:

NPL Status: Currently on the Final NPL
Substance ID: Not reported
Substance: Not reported
CAS #: Not reported
Pathway: Not reported
Scoring: Not reported

NPL Status: Currently on the Final NPL
Substance ID: A046
Substance: POLYCHLORINATED BIPHENYLS
CAS #: 1336-36-3
Pathway: SOIL EXPOSURE PATHWAY
Scoring: 4

Summary Details:

The Naval Computer and Telecommunications Area Master Station Eastern

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Pacific NCTAMS EASTPAC) site is used for operating and maintaining facilities and equipment for the Navy's Defense Communications System. The NCTAMS EASTPAC site consists of facilities located throughout the Island of Oahu. These include facilities at Wahiawa, Lualualei, Opana, Kokekole Pass, Pearl Harbor, and various satellite telecommunication locations. The Navy's Initial Assessment Study (IAS) identified 14 potential hazardous waste sources at NCTAMS EASTPAC, all located at either Lualualei or Wahiawa. The Lualualei and Wahiawa facilities are approximately 10 miles apart. The Lualualei facility occupies 1,700 acres in a large coastal valley on the southeastern shore of Oahu. The facility is surrounded by agricultural, urban, and conservation land areas. Eight potential hazardous waste sources were identified at the Lualualei facility during the IAS. The sources include the Old Coral Pit, Antenna 403 Disposal Area, Antenna 441 Disposal Area, Building 65 Disposal Area, Antenna 354 Disposal Area, Two Wells near Building 1, Old NRTF Landfill, and Transformer Locations. All subsequent investigations evaluated the Antenna 354 Disposal Area and Transformer Locations only. Ground water in the area is brackish, and there are no drinking water wells downgradient of the facility. Surface water downstream of the site is not used for drinking water. The Wahiawa facility occupies 700 acres on the central plateau of Oahu. The northern and eastern borders of the facility lie adjacent to the Ewa Forest Reserve and other conservation land. Adjacent to the southern border of the facility are pineapple fields and conservation land. The town of Whitmore Village borders the facility to the west and the City of Wahiawa lies approximately 1 mile to the southwest. Polychlorinated biphenyls (PCBs) have been detected in soil surrounding electrical transformers within 200 feet of on-base residences at the Wahiawa facility. Approximately 248 people live in these residences. From 1942 until 1977, a 6-ounce sample of fluid from each transformer was tested quarterly to evaluate insulating properties and was then disposed of on the ground. In June 1988 and March and December 1990, soil sampling conducted around the transformers indicated the presence of PCBs. In July 1990, the Navy set a cleanup goal of 10 ppm in excavating PCB-contaminated soil. Soil removal activities began in November 1990 and were completed in February 1991. In addition, an inactive landfill (Old Wahiawa Landfill) was used for general disposal of all wastes generated at the site from the 1940s until 1973. Although the majority of the wastes were municipal solid wastes, waste lube oils, chlorinated and nonchlorinated solvents, transformer oil, hydraulic fluid, paint thinners, trichloroethane, creosote, and mercury were disposed of in the landfill. The southern edge of the Wahiawa facility drains into the North Fork Kaukonahua Stream, which flows into the Wahiawa Reservoir joining the Kaukonahua Stream which flows westward, converging with the Poamoho Stream. Most of the facility, however, drains north into the Poamoho Stream which converges with the Kaukonahua Stream approximately 7 miles west of the site, at the Kiikii Stream. The Kiikii Stream flows for approximately 1 mile before emptying into Kaiaka Bay and the Pacific Ocean. Surface water within 15 miles downstream of the Wahiawa facility is not used as a source of drinking water. The Wahiawa Public Fishing Area is located approximately 0.5 southwest of the facility on the North Fork Kaukonahua Stream. Additional fisheries located within 15 miles downstream of the facility include Kaiaka Bay, the Pacific Ocean, and the area at the confluence of Poamoho and Kaukonahua Streams. There are six Federally-designated endangered/threatened species of birds and five Federally-designated/threatened species of turtles associated with surface water within 15 miles of the Wahiawa facility. The description of the site (release) is based on information available at the time the site was scored. The description may change as additional information is gathered on the sources and extent of contamination. See 56 FR 5600, February 11, 1991, or subsequent FR notices.

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Site Status Details:

NPL Status: Final
Proposed Date: 01/18/1994
Final Date: 05/31/1994
Deleted Date: Not reported

Narratives Details:

NPL Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER
City: WAHIAWA
State: HI

CERCLIS:

Site ID: 0902904
EPA ID: HI0170090054
Facility County: HONOLULU
Short Name: NAVAL COMPUTER AND TELECO
Congressional District: 2
IFMS ID: 09AK
SMSA Number: 3320
USGC Hydro Unit: Not reported
Federal Facility: Federal Facility
DMNSN Number: 0.00000
Site Orphan Flag: N
RCRA ID: Not reported
USGS Quadrangle: Not reported
Site Init By Prog: Not reported
NFRAP Flag: Not reported
Parent ID: Not reported
RST Code: Not reported
EPA Region: 09
Classification: Not reported
Site Settings Code: SU
NPL Status: Currently on the Final NPL
DMNSN Unit Code: Not reported
RBRAC Code: Not reported
RResp Fed Agency Code: USNV
Non NPL Status: Not reported
Non NPL Status Date: / /
Site Fips Code: 15003
CC Concurrence Date: / /
CC Concurrence FY: Not reported
Alias EPA ID: Not reported
Site FUDS Flag: Not reported

CERCLIS Site Contact Name(s):

Contact ID: 9000135.00000
[REDACTED]
Contact Tel: (415) [REDACTED]
Contact Title: Remedial Project Manager (RPM)
Contact Email: Not reported

Contact ID: 9000059.00000
Contact Name: Eugenia Chow
Contact Tel: (415) [REDACTED]

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NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA (Continued)

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Contact Title: Site Assessment Manager (SAM)
Contact Email: Not reported

CERCLIS Site Alias Name(s):

Alias ID: 101
Alias Name: NCTAMS EASTPAC WAHIAWA
Alias Address: Not reported
HI
Alias ID: 201
Alias Name: NAVCAMS WAHIAWA
Alias Address: Not reported
HI
Alias ID: 301
Alias Name: NAVAL COMPUTER & TELECOMMUNICATIONS AREA
Alias Address: Not reported
Not reported
Alias ID: 302
Alias Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN PACIFIC
Alias Address: Not reported
Not reported
Alias ID: 303
Alias Name: NAVAL COMPUTER & TELECOMMUNICATIONS AREA
Alias Address: MASTER STATION, EASTERN PACIFIC
WAHIAWA, HI 967863050
Alias ID: 304
Alias Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN PACIFIC
Alias Address: CENTER ST
OAHU, HI 96786
Alias ID: 9270200
Alias Name: HONOLULU NAVAL COMPUTER & TELECOMMUNICATIONS, EP
Alias Address: 500 CENTER ST
WAHIAWA, HI 91109
Alias ID: 201
Alias ID: 101
Alias Comments: PREVIOUS EPA ID# AZD 981 416 977PREVIOUS EPA ID# AZD 981 416 977

Site Description: In 1996, the Navy conducted a remedial investigation. Soil assessment and investigation results indicated that two chemicals of potential concern (COPCs), polychlorinated biphenyls (PCBs) and thallium, were detected at concentrations above residential preliminary remediation goals (PRGs) in soil samples. Human health and ecological risk assessments determined that exposure to the soil does not pose an unacceptable risk to human health or the environment, and that the site is suitable for unrestricted use. Therefore, no Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) action is necessary for the site. Based on the soil investigation results, the Navy, in conjunction with the Department of Health, State of Hawaii (DOH) and EPA Region 9, selected no action as the final remedy for the Site. Estimated Total Capital Cost: Not documented Estimated Annual O&M Cost: Not documented Estimated Total O&M Cost: Not documented Estimated Present-worth Total Cost: Not documented OU1: The Old Incinerator Site (OIS) is situated on the southern flank of the Bldg. 6 gulch behind Bldg. 336 at Naval Computer and Telecommunications Area Master Station, Pacific Site (NCTAMS PAC) Wahiawa. The gulch is approximately 60 feet deep and densely vegetated. An unnamed intermittent stream flows through the gulch and past the OIS. The OIS is presently unused, vacant, and comprises steps, a landing, and the foundation of a former incinerator in which controlled documents were burned. The surrounding area is a secure military facility used for industrial/commercial activities. Executive Order 12580 authorizes Department of Navy (DON) to act as

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the lead agency for environmental response actions at Navy sites, such as the OIS. EPA and state of Hawaii Department of Health (DOH) have provided oversight during the environmental investigation activities at the OIS. Funding for the site work at OIS is provided by the Navy Environmental Restoration Program. The NCTAMS PAC Wahiawa operates and maintains communications facilities for the Navy in the eastern Pacific. It is part of the Defense Communications System and of the military satellite communications system. Discarded controlled documents and other miscellaneous wastes were burned in an incinerator on the western edge of the gulch behind Bldg. 336. Ash from the incinerator was disposed of at the OIS, which occupies about 0.14 acres of land within the same gulch as the Bldg. 6 Disposal Area, and was formerly included in the Bldg. 6 Disposal Area as the "Burn Area." The incinerator was removed in 1975. Remnants of the incinerator include a concrete foundation, steps, and a single wall near the top of the gulch slope. Immediately downslope of the concrete foundation, the ground is covered with ash, small amounts of slag (i.e., melted metal), and other miscellaneous wastes. Ash has been reported to depths up to 11 feet below ground surface (bgs). The presence of ash at depth indicates that the ash was occasionally covered with soil. The presence of slag materials indicates materials other than paper may also have been burned during document destruction. NCTAMS PAC Wahiawa has been the subject of four previous environmental investigations: -An initial site assessment -A site inspection -An expanded site inspection -A remedial investigation (RI) The OIS was considered within the Bldg. 6 Disposal Area during the first three of these investigations, and was investigated as a separate site during the RI. Initial Assessment Study. An initial assessment study (IAS) was conducted by the Naval Energy and Environmental Support Activity. The purpose of the study was to identify areas that may require further investigation or cleanup. The IAS report recommended that a site inspection be conducted to determine whether contamination existed at the Bldg. 6 Disposal Area and to develop recommendations for further action. Site Inspection. A site inspection was conducted by the Navy to characterize the Bldg. 6 Disposal Area by determining the presence or absence of contamination in the surface and subsurface soil. The Bldg. 6 Disposal Area encompasses the former location of the incinerator and the adjacent area of ash identified during the site inspection as the "Burn Area." The site inspection report concluded that arsenic, lead, mercury, and xylene in soil may be the result of historical waste management practices. Expanded Site Inspection. A supplemental or expanded site inspection was conducted by the Navy to further investigate the Bldg. 6 Disposal Area. Investigators concluded that elevated concentrations of lead are common in surface soil and sediment samples, although only one detection exceeded the Corrective Action Level used for comparison. Results for subsurface samples correlated with surface and sediment samples and defined some contaminant sources, including the OIS. The great depth to the groundwater and the presence of intervening clay layers greatly reduce the risk of groundwater contamination. While the surrounding civilian population was concluded to probably not be at immediate risk (they are unlikely to come into direct contact with the soil), the offsite civilian population was considered potentially at risk because of possible transport of contaminants via surface drainage. Naval personnel were concluded to be the most at risk via direct contact with contaminated soil. Remedial Investigation. The Navy completed a remedial investigation (RI) based on the findings and recommendations of the two site inspections. The initial scope of the RI was to collect and evaluate the data needed to quantify risk associated with the Bldg. 6 Disposal Area and, if necessary, to identify appropriate remedial actions. The OIS was not included in the original scope of the RI. However, observations made during the initial RI field reconnaissance in 1996 revealed concerns about the site, and

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it was added to the RI scope. The RI Report identified two organic chemicals; (benzo(a)pyrene and benzo(b)fluoranthene), and four metals; antimony, arsenic, copper, and lead, as COPCs in soil. Human health and ecological risks were below target points of departure for surface soil. Human health and ecological risk estimates for subsurface soil indicated that mitigation through LUCs or a removal action may be required for the OIS to protect human health and the environment. During the RI, no dioxins were detected; however, the reporting limits for dioxin exceeded the then current residential preliminary remediation goal (PRG). During additional sampling performed in 2006, eight surface soil samples and seven subsurface soil samples were collected and analyzed for antimony, arsenic, copper, lead, and dioxins. The subsurface soil samples had exceedances of the EPA Region 9 industrial PRGs for arsenic (six of seven samples), dioxin (four of seven samples), and lead (one of seven samples). These additional sample analytical results supported the RI conclusion for the need for a response action to mitigate site risks. Enforcement Activities There have been no enforcement activities at OIS at NCTAMS PAC Wahiawa, Oahu, Hawaii. A Record of Decision for Operable Unit 01 of the Naval Computer and Telecommunications Area Master Station Eastern Pacific Site was completed in February 2010. OU 03: Naval Computer and Telecommunications Area Master Station Pacific (NCTAMSPAC) Wahiawa Branch occupies 700 acres on the central plateau of Oahu, west of the Koolau Mountains. It is located near the town of Wahiawa. Land use around the facility is primarily agricultural for pineapple cultivation. Three transformer sites are located at this installation: - Building 236: The site includes Building 236 and surrounding grass. - Building 261: The site includes Building 261 and the surrounding grass and asphalt. - Building 343: The site includes Building 343 and the surrounding grass and concrete. NRTF Lualualei occupies 1,700 acres within Lualualei Valley, near the southwest shore of Oahu. Four transformer sites are located at this installation: - Building 1: The site consists of a transformer located on a concrete pad outside Building 1, which is surrounded by grass and a chain-link fence. - Building 68: This site includes Building 68, which currently houses a transformer: it is surrounded by grass and a concrete pad. - Former S84: The site includes an abandoned concrete pad (former transformer location), which is bordered on three sides by a chain-link fence and adjoins Building 84, and surrounding grass. - Former Rigger Shop (FRS): The FRS includes the former building (the building has been demolished and the transformer has been removed) and its surrounding area. Available historical records at NCTAMSPAC indicate polychlorinated biphenyls (PCBs) were present in the dielectric fluid used in many of the former and existing transformers at NCTAMSPAC Wahiawa Branch and at NRTF Lualualei. The PCB-containing fluids may have been released to concrete surfaces or surface soil by leaking directly from the transformers or during regular transformer testing and maintenance. Periodic sampling was required to test the dielectric properties of the transformer fluid during operation of the transformers. Once testing was completed, the fluid was reportedly poured onto the adjacent area, such as grass, concrete pads, or along building walls. All of the active transformers at NCTAMSPAC have been replaced or retrofilled with non-PCB-containing dielectric fluid. The following investigations were completed for transformers at NCTAMSPAC. In 1986, an Initial Assessment Study (IAS) was conducted by the Naval Energy and Environmental Support Activity (NEESA) at NCTAMSPAC. This IAS identified 25 transformer locations that required further investigation based on records of past maintenance practices; however, the IAS did not include sampling. Building 261 at NCTAMSPAC Wahiawa Branch and Building 68 at NRTF Lualualei were included in the IAS. In 1988, a site inspection (SI) was performed at the 25 transformer locations identified in the IAS, including Building 261 at NCTAMSPAC Wahiawa Branch and Building 68 at NRTF Lualualei. Soil samples were collected from the transformer locations to assess

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the extent of PCB contamination. Elevated PCB concentrations were detected in soil samples from Building 261 and Building 68 that exceeded cleanup levels. Elevated chlordane concentrations were also detected in soil samples collected from Building 261. In 1991, an SI was performed at two additional transformer locations, including Building 236 at NCTAMSPAC Wahiawa Branch. Building 236 was not previously identified in the 1986 IAS. Building 236 first appeared on a list of PCB-containing transformers in November 1988, after testing the transformer revealed PCB concentrations greater than cleanup levels. SI sampling at Building 236 indicated that PCBs were detected at levels that exceeded the cleanup levels. A maximum PCB concentration in a surface soil sample of 4.12 milligrams per kilogram (mg/kg) was detected at this site. In 1991, the Navy conducted a removal action to address PCB contamination at 12 transformer locations at NCTAMSPAC Wahiawa Branch. This removal action also included additional sampling to further characterize the nature and extent of PCB contamination at Building 261 and Building 236. The sampling results indicated that elevated PCB concentrations were present in the soil at Buildings 261 and 236; however, the contaminated soil was not removed during this removal action because further delineation of the sites was necessary. Building 68 at NRTF Luahalei was not included in this removal action. In 1995, the Navy ranked the relative risk of four transformer locations, including Building 343 at NCTAMSPAC Wahiawa Branch. Navy Public Works Center (PWC) collected surface soil and concrete samples and analyzed them for PCBs. The analytical data, although not of the quality required to accurately assess contamination levels, indicated the presence of PCBs at Building 343. In 1995 and 1996, the Navy PWC collected surface soil and concrete wipe samples from the sidewalk near Building 343 at NCTAMSPAC Wahiawa Branch. The samples were screened for PCBs to address potential worker safety issues related to PCB exposure in the area in support of Military Construction (MILCON) Project P-160, Bachelor Enlisted Quarters Modernization of Building 321. The surface soil and concrete wipe samples contained non-detectable levels of PCBs (did not exceed 1 mg/kg and did not exceed 1.0 micrograms per 100 square centimeters); however, data was considered to be not of sufficient quality to conclude that contamination did not exist. In 1998, an engineering evaluation/cost analysis (EE/CA) was prepared to evaluate removal action alternatives to address PCB contamination at transformers at NCTAMSPAC. Of the seven transformer sites presented in the EE/CA, only two (Building 261 and Building 343 at NCTAMSPAC Wahiawa Branch) are discussed in this record of decision (ROD). The EE/CA recommended a removal action consisting of excavation of PCB-contaminated soil and concrete and disposal in an off-island landfill. An action memorandum (AM) documented the Navy's decision to conduct non-time-critical removal actions (NCRAs) at the transformer sites. This EE/CA and AM did not include Building 236 located at NCTAMSPAC Wahiawa Branch, or Building 1, Building 68, Former S84, or the FRS, located at NRTF Luahalei. A NCRA was conducted at Building 261 at NCTAMSPAC Wahiawa Branch from October 1998 to February 2000 to remove PCB-contaminated soil, as identified in the EE/CA. A removal action was not required at Building 343 because both the initial immunoassay and the verification results were below the cleanup levels for soil and concrete. A total of 109 cubic yards (cy) of PCB-contaminated soil was excavated from Building 261 and stockpiled at NRTF Luahalei pending thermal desorption treatment at former Naval Air Station (NAS) Barbers Point. The excavated area was then backfilled with clean coral fill and topsoil and then was compacted and restored (such as landscaping, concrete and asphalt paving). Treated soil from Building 261 was used as backfill at other transformer sites undergoing removal actions. In 2000, the Navy, in consultation with the EPA and the State of Hawaii Department of Health (DOH), determined that soil from multiple transformer sites from multiple naval facilities across Oahu could be consolidated for treatment and this action

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could be considered an on-site action. Based on this decision, treatment alternatives were evaluated in a treatment EE/CA prepared in September 2000 for the combined sites. The EE/CA recommended consolidating soils from three facilities (former NAS Barbers Point, Pearl Harbor Naval Complex [PHNC], and NCTAMSPAC) and treating the soil with thermal desorption. Prior to implementation of the treatment process, soil that was already excavated was stockpiled either at former NAS Barbers Point or at NRTF Lualualei. Once the treatment process began, these stockpiles were transported to the treatment unit located at former NAS Barbers Point. An AM documented the Navy's decision to undertake removal actions at these facilities. Various alternatives were evaluated against the nine criteria in the National Oil and Hazardous Substances Pollution Contingency Plan (NCP). Excavation and on-island thermal desorption was the alternative selected to address soil containing PCB concentrations greater than the Toxic Substances Control Act (TSCA) cleanup level for high-occupancy areas (1 mg/kg) and the DOH Tier 1 soil action level (SAL) (1mg/kg); it complied with applicable or relevant and appropriate requirements (ARARs) and to-be-considered (TBC) criteria; it was protective; and it was capable of meeting the established treatment objectives for PCB-contaminated media. In 2002, an AM addendum documented procedures for the excavation, treatment, and final placement of PCB-contaminated soil and concrete from transformer sites not originally considered in the 2000 AM or any of the previous EE/CAs or AMs prepared for former NAS Barbers Point, PHNC, and NCTAMSPAC. The AM addendum proposed site selection criteria for new sites that will be remediated using the removal action alternatives selected in the previous AMs because the conditions at these new sites are consistent with the conditions at the sites in the previous AMs. Although this AM addendum presented the general criteria for inclusion of a transformer site, site-specific information was to be included as an attachment to the AM addendum, and thereby "plugged in" to the document. This "plug-in" AM addendum allowed for the selection of a protective, presumptive cleanup action (excavation, treatment, and placement) at future PCB transformer sites, provided that the sites met the selection criteria. In November and December 2001, an SI was conducted at various transformer locations at NCTAMSPAC, including Building 236 at NCTAMSPAC Wahiawa Branch and at Buildings 1, 68, Former S84, and FRS at NRTF Lualualei. Historical data existed for some of the transformers; however, soil samples were collected for other transformers without historical data. Based on sampling results that exceeded cleanup levels, Building 236 at NCTAMSPAC Wahiawa Branch and Buildings 1, 68, Former S84, and FRS at NRTF Lualualei were recommended for further action. In March 2003, a "plug-in" to the AM addendum was prepared recommending that Building 236, Building 1, Building 68, Former S84, and the FRS undergo a NTCRA consisting of excavation followed by on-island thermal desorption treatment, and transport and placement of treated media back at the excavation sites. From 2003 to 2004, preliminary sampling was conducted to support the design efforts for the removal action at various transformer locations, including Building 236 at NCTAMSPAC Wahiawa Branch and Buildings 1, 68, Former S84, and FRS at NRTF Lualualei. Pre-excavation samples were collected to define the lateral and vertical extent of PCB contamination in soils at concentrations that exceeded the cleanup level (1 mg/kg) before soil was excavated and treated at former NAS Barbers Point. NTCRAs were conducted at Building 236 at NCTAMSPAC Wahiawa Branch and at Building 1, Building 68, Former S84, and the FRS at NRTF Lualualei from March 2004 to May 2004. A total of 1.5 bank cubic yards (bcy) of PCB-containing soil was excavated from Building 236; 5 bcy from Building 1; 107.1 bcy from Building 68; 488.9 bcy was excavated from Former S84; and 7.7 bcy was excavated from the FRS. The soil from the transformer sites was transported to former NAS Barbers Point to the thermal desorption unit for treatment. During the thermal desorption treatment process, four

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confirmation samples of the treated material were collected for every 100 tons treated. Once confirmation was received, the excavated areas were then backfilled with treated soil from the treatment system (except for Building 236, which was backfilled with coral fill and topsoil) and then was compacted and restored (such as landscaping, concrete and asphalt paving). In 2006, a revised SI was prepared to provide an update on removal action activities that had occurred at various transformer sites at NCTAMSPAC since 2001. The revised SI concluded that cleanup levels for PCBs were met at Building 236 at NCTAMSPAC Wahiawa Branch and at Buildings 1, 68, Former S84, and FRS at NRTF Lualualei and no further action is necessary. After the NTCRAs were completed, remediation verification reports (RVRs) were prepared to document that the NTCRAs were successfully completed and the cleanup level of 1 mg/kg was achieved for soil at these transformer sites, as established in the AM and in accordance with the TSCA high-occupancy cleanup level (1 mg/kg for soil) and the DOH Tier 1 SAL (1 mg/kg). This RVR was ultimately included in a consolidated RVR prepared to document removal and treatment at all sites included in the treatment system. NCTAMSPAC consists of two study areas on the island of Oahu: NCTAMSPAC Wahiawa Branch, and NRTF Lualualei. NCTAMSPAC operates and maintains communication facilities and equipment for Navy shore installations, fleet units in the Pacific, and the Defense Communications System. NCTAMSPAC Wahiawa Branch serves as the main receiving station, and NRTF Lualualei is the main transmitting facility. An EE/CA was prepared in January 1998 to evaluate removal action alternatives to address PCBs in soil and concrete at seven transformer sites (S-17, Building 106, Building 242, Building 261, and Building 343 at NCTAMSPAC Wahiawa Branch and S-26 at NRTF Lualualei) at NCTAMSPAC. Of the seven transformer sites originally presented in the 1998 EE/CA, only two (Building 261 and Building 343) are discussed in this ROD. As part of the 1998 EE/CA, conceptual site models (CSM) were developed for each of the transformer sites based on the following: - Location and type of transformers located at each site; - Known or suspected mechanism of PCB release into the environment; - Known or suspected media (soil and concrete) that may be affected; and - Potential migration pathways to human and ecological receptors. The CSMs developed for the transformers identified the following site characteristics: The physical setting of each of the seven transformer sites identified in the 1998 EE/CA was based on descriptions provided by previous investigations, reviews of as-built or plan drawings, and site reconnaissance. Of the transformer sites discussed in this ROD, only two PCB-containing transformers - located at Building 261 and Building 343 - were originally identified in the EE/CA. Sources of PCB contamination at these transformer sites are a result of: (1) testing and previously disposing of PCB dielectric fluid from the transformers onto the surrounding soils; and (2) leaking PCB dielectric fluid from the transformers onto the surrounding soil or concrete pad. These sources are considered the principal mechanisms of release for PCBs at these transformer sites. PCBs are generally insoluble and tend to sorb to soil particles, making PCB transport by leaching unlikely. The primary mechanism for the transport of PCBs was erosion by surface runoff. Transport of PCBs sorbed to soil particles was possible in areas eroded by surface runoff; however, surface erosion was minimal in the areas surrounding these transformers sites because of the gentle slopes and vegetative cover. The potentially affected media was surface and subsurface soil and concrete in the immediate vicinity of the transformer sites. All previous investigations involved surface soils or concrete only; therefore, the depth of PCB contamination was not known for any of the transformer sites identified in the 1998 EE/CA. A previous removal action conducted at transformer sites at NCTAMSPAC in 1991 indicated that higher PCB concentrations in the surface soils tend to correlate with an increased depth of contamination. A correlation could not be made that equates surface soil contamination levels to depth of

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contamination. The 1998 EE/CA assumed that surface soil contamination below 50 mg/kg would require a 1-foot excavation and greater than 50 mg/kg will require a 2-foot excavation to evaluate removal action options consistently. Actual excavation depths were established during verification sampling. Contamination of surface water and groundwater was considered unlikely because of the low solubility of PCBs and the depth of groundwater. As a result, groundwater samples were not collected because there was no indication that PCBs had migrated to groundwater based on the depth of PCB contamination in soil and the depth to groundwater. Following removal actions at these seven transformer sites, PCB concentrations do not exceed the cleanup levels established for these sites; therefore, there is no affected surface or subsurface soils at the seven transformer sites. The primary route of exposure was direct contact with contaminated soil or concrete, either through the skin or by incidental ingestion. Contact with contaminated airborne dust or eroded soil particles in surface runoff were unlikely because of the vegetative or asphalt cover; however, dust generated by construction or removal activities was of concern. Controls were implemented to minimize airborne PCB transport if vegetation or asphalt was disturbed through construction or removal activities. Given the low volatility of PCBs, transport in the gaseous phase was not considered a significant mechanism. PCBs are nearly insoluble and have a strong tendency to sorb to soil particles, making it unlikely that PCBs have affected groundwater. Exposure to PCB-contaminated groundwater was therefore considered unlikely. Following removal actions at these seven transformer sites, PCB concentrations do not exceed cleanup levels established for these sites; therefore, there are no known or potential routes of exposure at the seven transformer sites. Access to NCTAMSPAC Wahiawa Branch and NRTF Lualualei is restricted to employees of the Navy, their dependents, and contractors. Employees and contractors who routinely enter the vicinity of the transformer sites were potentially exposed to contaminated soil through incidental ingestion, direct dermal contact, or dust inhalation. Human exposure to contaminated air was possible if work generates fugitive dust. Surrounding areas at NCTAMSPAC Wahiawa Branch and NRTF Lualualei support a limited ecological environment. Following removal actions at these seven transformer sites, PCB concentrations do not exceed cleanup levels established for these sites; therefore, there are no exposure concerns to any known or potential human or environmental receptors at the seven transformer sites. The nature and extent of contamination were delineated by incorporating the physical setting and CSM for the transformer sites with the results of available previous sampling results to estimate the areas of potential contamination (AOPC) at each of the seven transformer sites. In cases where the sampling data were insufficient or nonexistent, assumptions were made about the extent of contamination. Since the 1998 EE/CA was finalized and after discussions with EPA and DOH, the Navy determined that soil from multiple transformer sites could be consolidated for treatment based on similar characteristics to the sites evaluated in the 1998 EE/CA. Therefore, the evaluations in the 1998 EE/CA would apply to the additional transformer sites identified for treatment.

Removal actions were conducted at these seven transformer sites. Based on post-excavation confirmation sampling results, PCB concentrations remaining at these sites do not exceed the cleanup levels established for these sites; therefore, the seven transformer sites are suitable for unrestricted use. The pre-removal action land use for the seven transformer sites at NCTAMSPAC was low-occupancy (restricted) use. NCTAMSPAC is a Naval communications facility composed of two physically separate installations. NCTAMSPAC Wahiawa Branch serves as the receiving station and NRTF Lualualei is the transmitting facility. All seven transformer sites were active prior to removal actions, although PCBs were no longer used. The post-removal action and future land use of the seven transformer sites at NCTAMSPAC is anticipated

MAP FINDINGS

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to remain unchanged from current conditions. The Navy will maintain NCTAMSPAC for use as a communications facility, which is considered low-occupancy (restricted) use; however, the potential for high-occupancy (unrestricted) use was also considered at these seven transformer sites. Potential future on-site populations will be limited to Navy contractor personnel performing routine maintenance and periodic inspections of the transformers, and performing any necessary repairs. Currently, there are no plans to change the current land use status of the seven transformer sites at NCTAMSPAC. A ROD for Operable Unit 3 was completed in September 2007. Operable Unit 3 (Sequence 015): The Naval Computer and Telecommunications Area Master Station Pacific (NCTAMSPAC) operates at several locations around the island of Oahu. Only NCTAMSPAC Wahiawa Branch and the Naval Radio Transmitting Facility (NRTF) Lualualei are the subjects of this Record of Decision (ROD). NCTAMSPAC Wahiawa Branch occupies 700 acres on the central plateau of Oahu, west of the Koolau Mountains. It is located near the Town of Wahiawa. Land use around the facility is primarily agricultural for pineapple cultivation. Three transformer sites are located at this installation: - Building 3: An active transformer site located in the south-central section of the facility near the intersection of Center Street and Tarawa Drive. This site includes the area outside of Building 3, consisting of concrete and grass. - Building 106: An active transformer site located southeast of and adjacent to Building 106 along Saipan Drive on the western side of NCTAMS Wahiawa. The site includes Building 106 and the surrounding asphalt. - S-17: An inactive site formerly located in a mostly level, grassy field along the south side of Polaris Drive, near the center of NCTAMS Wahiawa. The site included an underground vault where access was provided by a subsurface tunnel located near Polaris Drive. The vault has been filled with concrete. NRTF Lualualei occupies 1,700 acres within Lualualei Valley, near the southwest shore of Oahu. Two transformer sites are located at this installation. - Building 81: An active transformer site located near the center of the installation, north of Edison Road. This site includes Building 81 and the surrounding grass, concrete, and asphalt. - S-26: An active transformer site located near a former residential area in the west-central portion of NRTF Lualualei and adjacent to Building 404. The site includes a fenced area and surrounding concrete. Previous investigations identified a potential for the five transformer sites to impact the environment, resulting in unacceptable risk to human health and the environment. Polychlorinated biphenyl (PCB) contaminated soil and concrete were found at elevated levels and needed to be removed. The threat of exposure to PCBs warranted action. The Navy served as the lead agency for all of the aforementioned investigations conducted at the NCTAMSPAC. Throughout these investigations additional support and oversight was provided by the EPA and Hawaii Department of Health (DOH). Navy funds provided the monies used to conduct the cleanup and removal actions at the five NCTAMSPAC transformer sites. Available historical records at NCTAMSPAC indicate PCBs were present in the dielectric fluid used in many of the former and existing transformers at NCTAMSPAC Wahiawa Branch and at NRTF Lualualei. The PCB-containing fluids may have been released to concrete surfaces or surface soil by leaking directly from the transformers or during regular transformer testing and maintenance. Periodic sampling was required to test the dielectric properties of the transformer fluid during their operation. Once testing was completed, the fluid was reportedly poured onto the adjacent area, such as grass, concrete pads, or along building walls. All of the active transformers at NCTAMSPAC have been replaced or retrofilled with non-PCB-containing dielectric fluid. Non-time critical removal actions (NTCRA) were implemented at the five transformer sites from 1991 through 2004 to remove PCB-contaminated soils and concrete at concentrations that exceeded cleanup levels. The results of the NTCRA indicate that conditions at the five transformer sites pose no unacceptable risk to human health or the environment

MAP FINDINGS

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NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA (Continued)

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under the current land use configurations (low-occupancy areas), as the contamination exists beneath a clean, backfilled soil cap and vegetation or concrete encapsulation. However, Land Use Controls are necessary for protection of human health and the environment for five transformer sites at NCTAMSPAC where cleanup levels were not met after contaminated soil was excavated and concrete was encapsulated. No enforcement activities have been conducted at the five transformer sites at NCTAMSPAC, Oahu, Hawaii. A ROD addressing Operable Unit 03 of NCTAMSPAC was completed in December 2010. The Old Wahiawa Landfill (OWLF) is located within the Naval Computer and Telecommunications Area Master Station, Pacific (NCTAMS PAC) Wahiawa and covers approximately 4 acres of densely wooded land near the eastern perimeter of the facility. The landfill is closed; capped with soil and anchored by dense vegetation. The site is bound to the southwest by a remote, rugged, heavily overgrown gulch. An unnamed intermittent stream lies at the bottom of the gulch and flows westward during heavy rainfall. The Department of the Navy (DON) is the lead agency for environmental response actions at the OWLF. The EPA and the State of Hawaii Department of Health (DOH) have provided oversight during the environmental investigation activities at the OWLF. Funding for the site work at OWLF is provided by the Navy Environmental Restoration Program. The NCTAMS PAC Wahiawa operates and maintains communications facilities for the Navy in the eastern Pacific. It is part of the Defense Communications System and of the military satellite communications system. From the 1940s until 1973, the OWLF served as the primary disposal area for wastes (mostly municipal) generated on base. Refuse was originally dumped into the southwestern end of the gulch. As usage increased, the landfill was operated more traditionally, with alternating layers of waste and soil. Previous investigations indicated that the landfill has no engineered liner with a maximum landfill thickness of 41 feet below ground surface (bgs). The OWLF was closed in 1973, which was prior to the passage of the Resource Conservation and Recovery Act. In 1978, it was leveled and covered with a 3-foot-deep soil layer to meet the then-current landfill closure requirements. NCTAMS PAC Wahiawa has been the subject of five previous environmental investigations: -An initial assessment study -A site inspection -An expanded site inspection -A remedial investigation (RI) -A feasibility study (FS) Initial Assessment Study: The Naval Energy and Environmental Support Activity conducted an initial assessment study (IAS). The purpose of the study was to identify areas that may require further investigation or cleanup. The study identified potentially contaminated sites from historical records, aerial photographs, field inspections, and interviews. The IAS report recommended that a site inspection be conducted to determine whether contamination existed at the OWLF and to develop recommendations for further action. Site Inspection: The Navy conducted a site inspection at the OWLF by determining the presence or absence of contamination in the surface and subsurface soil. Soil samples were collected to assess levels of soil contamination and the extent of downgradient contaminant migration. The site inspection report concluded that lead and mercury in site soil may be the result of historical waste management practices. Expanded Site Inspection: The Navy conducted a supplemental or expanded site inspection to further investigate the OWLF. Sampling results generally supported the findings of the 1989 site inspection. Lead and mercury were detected in soil samples, but at concentrations well below the EPA Region 9 preliminary remediation goals (PRGs) for residential soil. Total petroleum hydrocarbons (TPH), and oil and grease were also detected in soil samples. Remedial Investigation: The Navy completed a RI based on the findings and recommendations of the two site inspections. The initial scope of the RI was to collect and evaluate the data needed to quantify risk associated with the OWLF and, if necessary, identify appropriate remedial actions. The RI report identified five polynuclear aromatic hydrocarbons (PAHs), three metals (chromium, thallium, and vanadium),

MAP FINDINGS

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NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA (Continued)

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total polychlorinated biphenyls (PCBs), and cyanide as chemicals of potential concern (COPCs) in soil. Although other metals, including lead and mercury, were also detected in soil; concentrations were below either the 2004 PRGs and/or the estimated background range. Estimates of human and ecological risks were below target points of departure for surface soil. Human health and ecological risk estimates for subsurface soil indicated that chromium presented unacceptable risks/hazards. The RI concluded that a response action may be required for the OWLF to protect human health and the environment. The perched groundwater, which was encountered at approximately 40 feet bgs, is not likely to represent a potential source of drinking water and is distinct from the regional water supply, the Schofield Aquifer; a high level, unconfined aquifer, contained in dike compartments. The unconfined top of the Schofield Aquifer is approximately 800 to 900 feet bgs at NCTAMS PAC Wahiawa. Perched groundwater beneath the OWLF contains the following site related contaminants; the organic compounds trichloroethene (TCE) and bis(2-ethylhexyl)phthalate (BEHP) and the inorganic chemicals aluminum, cobalt, copper, iron, manganese, and zinc at concentrations exceeding the screening criteria. bis(2-ethylhexyl)phthalate (BEHP) and trichloroethylene (TCE) were detected in the perched aquifer at concentrations that were below their respective maximum contaminant levels (MCLs) (with the exception of one detection of BEHP that was a laboratory estimated value reported above the MCL). No organic compounds were detected at concentrations above the acute or chronic State of Hawaii Water Quality Standards (WQSS) in the surface water samples collected at the OWLF. Carbon disulfide was the only organic chemical detected in the surface water. Four metals were detected at concentrations above WQS values; chromium, copper, lead, nickel, and zinc (dissolved phase). The surface water does not support ecological receptors; therefore, WQSS were used for comparison only, and are not considered applicable or relevant and appropriate requirements (ARARs) or to be considered (TBC) requirements. Feasibility Study: A FS was conducted to evaluate response action alternatives to address contamination in subsurface soils at the OWLF and to recommend a site-specific response action. A variety of response alternatives were initially screened based on implementability, effectiveness, and cost. Three alternatives were retained for further evaluation, (1) No Action, (2) long-term monitoring and maintenance (LTMM) and land use controls (LUCs), and (3) Cover Reinforcement, LTMM, and LUCs. No enforcement activities have been conducted for the OWLF at NCTAMS PAC, Oahu, Hawaii. A Record of Decision for Operable Unit 4 of the Naval Computer and Telecommunications Area Master Station Eastern Pacific Superfund Site was completed in February 2010.

CERCLIS Assessment History:

Action Code: 001
Action: DISCOVERY
Date Started: / /
Date Completed: 05/01/87
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: SITE INSPECTION

MAP FINDINGS

Map ID
Direction
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Distance (ft.)Site

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Database(s) EPA ID Number

NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA (Continued)

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Date Started: / /
Date Completed: 03/28/91
Priority Level: Higher priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: PRELIMINARY ASSESSMENT
Date Started: / /
Date Completed: 03/28/91
Priority Level: Higher priority for further assessment
Operable Unit: SITEWIDE
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: HAZARD RANKING SYSTEM PACKAGE
Date Started: / /
Date Completed: 01/11/94
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Facilities
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: PROPOSAL TO NATIONAL PRIORITIES LIST
Date Started: / /
Date Completed: 01/18/94
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Facilities
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: FINAL LISTING ON NATIONAL PRIORITIES LIST
Date Started: / /
Date Completed: 05/31/94
Priority Level: Not reported

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA (Continued)

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Operable Unit: SITEWIDE
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 08/02/04
Date Completed: 09/28/06
Priority Level: Not reported
Operable Unit: BLDG 293 DUMPSITE
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 002
Action: RECORD OF DECISION
Date Started: / /
Date Completed: 09/28/06
Priority Level: Not reported
Operable Unit: BLDG 293 DUMPSITE
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 008
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 03/27/06
Date Completed: 07/13/07
Priority Level: Not reported
Operable Unit: BUILDING 6 DISPOSAL SITE
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 003
Action: RECORD OF DECISION
Date Started: / /
Date Completed: 09/28/07
Priority Level: Not reported
Operable Unit: TRANSFORMER SITES
Primary Responsibility: Federal Facilities
Planning Status: Not reported

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA (Continued)

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Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 006
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 09/16/04
Date Completed: 09/30/07
Priority Level: Not reported
Operable Unit: TRANSFORMER SITES
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: INTERAGENCY AGREEMENT NEGOTIATIONS
Date Started: 10/26/94
Date Completed: 03/24/09
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: FEDERAL INTERAGENCY AGREEMENT
Date Started: 01/08/09
Date Completed: 03/24/09
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Federal Enforcement
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 005
Action: RECORD OF DECISION
Date Started: / /
Date Completed: 02/03/10
Priority Level: Not reported
Operable Unit: OWLF
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA (Continued)

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For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 04/26/95
Date Completed: 02/04/10
Priority Level: Not reported
Operable Unit: OIS
Primary Responsibility: Federal Facilities
Planning Status: Primary
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: RECORD OF DECISION
Date Started: / /
Date Completed: 02/04/10
Priority Level: Not reported
Operable Unit: OIS
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 015
Action: RECORD OF DECISION
Date Started: / /
Date Completed: 12/22/10
Priority Level: Not reported
Operable Unit: TRANSFORMER SITES
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 008
Action: FEDERAL FACILITY REMEDIAL ACTION
Date Started: 02/03/10
Date Completed: 05/08/12
Priority Level: Not reported
Operable Unit: OWLF
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Limited Action
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 009

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA (Continued)

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Action: FEDERAL FACILITY REMEDIAL ACTION
Date Started: 10/01/10
Date Completed: 05/08/12
Priority Level: Not reported
Operable Unit: OIS
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 010
Action: FEDERAL FACILITY REMEDIAL ACTION
Date Started: 06/01/11
Date Completed: 07/11/12
Priority Level: Not reported
Operable Unit: TRANSFORMER SITES
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Limited Action
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 009
Action: RECORD OF DECISION
Date Started: / /
Date Completed: 11/21/12
Priority Level: Not reported
Operable Unit: BUILDING 6 DISPOSAL SITE
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 009
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 09/08/10
Date Completed: 05/27/13
Priority Level: Not reported
Operable Unit: SERVICE STATION GULCH
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 010
Action: RECORD OF DECISION
Date Started: / /
Date Completed: 05/27/13

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA (Continued)

1000167735

Priority Level: Not reported
Operable Unit: SERVICE STATION GULCH
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 001
Action: Restoration Advisory Board
Date Started: 04/01/95
Date Completed: / /
Priority Level: Not reported
Operable Unit: SITEWIDE
Primary Responsibility: Not reported
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 007
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 05/09/10
Date Completed: / /
Priority Level: Not reported
Operable Unit: WEST GULCH
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 003
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 07/15/10
Date Completed: / /
Priority Level: Not reported
Operable Unit: BLD 1 SEWAGE POND
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 011
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 08/02/10
Date Completed: / /
Priority Level: Not reported
Operable Unit: BLDG 65 DISPOSAL AREA
Primary Responsibility: Federal Facilities

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA (Continued)

1000167735

Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 010
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 02/01/12
Date Completed: / /
Priority Level: Not reported
Operable Unit: OLD CORAL PIT
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Action Code: 013
Action: FEDERAL FACILITY REMEDIAL INVESTIGATION/FEASIBILITY STUDY
Date Started: 12/01/12
Date Completed: / /
Priority Level: Not reported
Operable Unit: OLD NRTF LANDFILL
Primary Responsibility: Federal Facilities
Planning Status: Not reported
Urgency Indicator: Not reported
Action Anomaly: Not reported

For detailed financial records, contact EDR for a Site Report.:

Federal Register Details:

Fed Register Date: 05/31/94
Fed Register Volume: 59
Page Number: 27989

Fed Register Date: 01/18/94
Fed Register Volume: 59
Page Number: 2568

[Click this hyperlink](#) while viewing on your computer to access
30 additional US CERCLIS Financial: record(s) in the EDR Site Report.

US ENG CONTROLS:

EPA ID: HI0170090054
Site ID: 0902904
Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN
PACIFIC
Address: 500 CENTER STREET
WAHIAWA, HI 96786
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Actual Date: 06/30/2010

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA (Continued)

1000167735

Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 002
Action Name: RECORD OF DECISION
Action Completion date: 09/28/2006
Operable Unit: 02
Contaminated Media : Soil
Engineering Control: No Action
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 003
Action Name: RECORD OF DECISION
Action Completion date: 09/28/2007
Operable Unit: 03
Contaminated Media : Soil
Engineering Control: Air Sparging: Ozone Enhancement
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 003
Action Name: RECORD OF DECISION
Action Completion date: 09/28/2007
Operable Unit: 03
Contaminated Media : Soil
Engineering Control: No Further Action
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 005
Action Name: RECORD OF DECISION
Action Completion date: 02/03/2010
Operable Unit: 04
Contaminated Media : Soil
Engineering Control: Impermeable Barrier
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

Action ID: 005
Action Name: RECORD OF DECISION
Action Completion date: 02/03/2010
Operable Unit: 04
Contaminated Media : Soil
Engineering Control: Monitoring
Contact Name: Not reported
Contact Phone and Ext: Not reported

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA (Continued)

1000167735

Latitude: Not reported
Longitude: Not reported

Action ID: 005
Action Name: RECORD OF DECISION
Action Completion date: 02/03/2010
Operable Unit: 04
Contaminated Media : Soil
Engineering Control: Operations & Maintenance (O&M)
Contact Name: Not reported
Contact Phone and Ext: Not reported
Latitude: Not reported
Longitude: Not reported

US INST CONTROL:

EPA ID: HI0170090054
Site ID: 0902904
Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN PACIFIC
Action Name: RECORD OF DECISION
Address: 500 CENTER STREET
WAHIAWA, HI 96786
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Access Restriction
Actual Date: 01/30/2010
Comple. Date: 02/04/2010
Operable Unit: 01
Contaminated Media : Soil
Contact Name : Not reported
Contact Phone and Ext :Not reported
Latitude : Not reported
Longitude : Not reported

EPA ID: HI0170090054
Site ID: 0902904
Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN PACIFIC
Action Name: RECORD OF DECISION
Address: 500 CENTER STREET
WAHIAWA, HI 96786
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Deed Restriction
Actual Date: 01/30/2010
Comple. Date: 02/04/2010
Operable Unit: 01
Contaminated Media : Soil
Contact Name : Not reported
Contact Phone and Ext :Not reported
Latitude : Not reported
Longitude : Not reported

EPA ID: HI0170090054

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA (Continued)

1000167735

Site ID: 0902904
Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN
PACIFIC
Action Name: RECORD OF DECISION
Address: 500 CENTER STREET
WAHIAWA, HI 96786
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Land Use Restriction
Actual Date: 01/30/2010
Comple. Date: 02/04/2010
Operable Unit: 01
Contaminated Media : Soil
Contact Name : Not reported
Contact Phone and Ext :Not reported
Latitude : Not reported
Longitude : Not reported
EPA ID: HI0170090054
Site ID: 0902904
Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN
PACIFIC
Action Name: RECORD OF DECISION
Address: 500 CENTER STREET
WAHIAWA, HI 96786
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Access Restriction
Actual Date: 06/30/2010
Comple. Date: 02/03/2010
Operable Unit: 04
Contaminated Media : Soil
Contact Name : Not reported
Contact Phone and Ext :Not reported
Latitude : Not reported
Longitude : Not reported
EPA ID: HI0170090054
Site ID: 0902904
Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN
PACIFIC
Action Name: RECORD OF DECISION
Address: 500 CENTER STREET
WAHIAWA, HI 96786
EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Deed Restriction
Actual Date: 06/30/2010
Comple. Date: 02/03/2010
Operable Unit: 04
Contaminated Media : Soil
Contact Name : Not reported
Contact Phone and Ext :Not reported
Latitude : Not reported

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA (Continued)

1000167735

Longitude : Not reported

EPA ID: HI0170090054

Site ID: 0902904

Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN
PACIFIC

Action Name: RECORD OF DECISION

Address: 500 CENTER STREET
WAHIAWA, HI 96786

EPA Region: 09

County: HONOLULU

Event Code: Not reported

Inst. Control: Land Use Restriction

Actual Date: 06/30/2010

Comple. Date: 02/03/2010

Operable Unit: 04

Contaminated Media : Soil

Contact Name : Not reported

Contact Phone and Ext :Not reported

Latitude : Not reported

Longitude : Not reported

EPA ID: HI0170090054

Site ID: 0902904

Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN
PACIFIC

Action Name: RECORD OF DECISION

Address: 500 CENTER STREET
WAHIAWA, HI 96786

EPA Region: 09

County: HONOLULU

Event Code: Not reported

Inst. Control: Access Restriction

Actual Date: 03/31/2011

Comple. Date: 12/22/2010

Operable Unit: 03

Contaminated Media : Soil

Contact Name : Not reported

Contact Phone and Ext :Not reported

Latitude : Not reported

Longitude : Not reported

EPA ID: HI0170090054

Site ID: 0902904

Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN
PACIFIC

Action Name: RECORD OF DECISION

Address: 500 CENTER STREET
WAHIAWA, HI 96786

EPA Region: 09

County: HONOLULU

Event Code: Not reported

Inst. Control: Building, demolition, or excavation regulation

Actual Date: 03/31/2011

Comple. Date: 12/22/2010

Operable Unit: 03

Contaminated Media : Soil

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA (Continued)

1000167735

Contact Name : Not reported
Contact Phone and Ext :Not reported
Latitude : Not reported
Longitude : Not reported

EPA ID: HI0170090054
Site ID: 0902904
Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN
PACIFIC
Action Name: RECORD OF DECISION
Address: 500 CENTER STREET
WAHIAWA, HI 96786

EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Deed Restriction
Actual Date: 03/31/2011
Comple. Date: 12/22/2010
Operable Unit: 03
Contaminated Media : Soil
Contact Name : Not reported
Contact Phone and Ext :Not reported
Latitude : Not reported
Longitude : Not reported

EPA ID: HI0170090054
Site ID: 0902904
Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN
PACIFIC
Action Name: RECORD OF DECISION
Address: 500 CENTER STREET
WAHIAWA, HI 96786

EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Land Use Restriction
Actual Date: 03/31/2011
Comple. Date: 12/22/2010
Operable Unit: 03
Contaminated Media : Soil
Contact Name : Not reported
Contact Phone and Ext :Not reported
Latitude : Not reported
Longitude : Not reported

EPA ID: HI0170090054
Site ID: 0902904
Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN
PACIFIC
Action Name: RECORD OF DECISION
Address: 500 CENTER STREET
WAHIAWA, HI 96786

EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Access Restriction
Actual Date: 03/31/2011

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA (Continued)

1000167735

Comple. Date: 12/22/2010
Operable Unit: 03
Contaminated Media : Solid Waste
Contact Name : Not reported
Contact Phone and Ext :Not reported
Latitude : Not reported
Longitude : Not reported

EPA ID: HI0170090054
Site ID: 0902904
Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN
PACIFIC

Action Name: RECORD OF DECISION
Address: 500 CENTER STREET
WAHIAWA, HI 96786

EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Building, demolition, or excavation regulation
Actual Date: 03/31/2011
Comple. Date: 12/22/2010
Operable Unit: 03
Contaminated Media : Solid Waste
Contact Name : Not reported
Contact Phone and Ext :Not reported
Latitude : Not reported
Longitude : Not reported

EPA ID: HI0170090054
Site ID: 0902904
Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN
PACIFIC

Action Name: RECORD OF DECISION
Address: 500 CENTER STREET
WAHIAWA, HI 96786

EPA Region: 09
County: HONOLULU
Event Code: Not reported
Inst. Control: Deed Restriction
Actual Date: 03/31/2011
Comple. Date: 12/22/2010
Operable Unit: 03
Contaminated Media : Solid Waste
Contact Name : Not reported
Contact Phone and Ext :Not reported
Latitude : Not reported
Longitude : Not reported

EPA ID: HI0170090054
Site ID: 0902904
Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN
PACIFIC

Action Name: RECORD OF DECISION
Address: 500 CENTER STREET
WAHIAWA, HI 96786

EPA Region: 09
County: HONOLULU

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA (Continued)

1000167735

Event Code: Not reported
Inst. Control: Land Use Restriction
Actual Date: 03/31/2011
Comple. Date: 12/22/2010
Operable Unit: 03
Contaminated Media : Solid Waste
Contact Name : Not reported
Contact Phone and Ext :Not reported
Latitude : Not reported
Longitude : Not reported

ROD:

Full-text of USEPA Record of Decision(s) is available from EDR.

ICIS:

Enforcement Action ID: 09-2014-2515
FRS ID: 110013768823
Program ID: BR HI6170024388
Action Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN PACIFIC
Full Address: 500 CENTER STREET NCTAMSPAC WAHIAWA HI 96786-3007
State: Hawaii
Facility Name: NCTAMS EASTPAC - WAHIAWA
Facility Address: 500 CENTER STREET
WAHIAWA, HI 96786-3007
Enforcement Action Type: CERCLA 120E Federal Facility Agreement (FFA)
Facility County: HONOLULU
EPA Region #: 9

Enforcement Action ID: 09-2014-2515
FRS ID: 110013768823
Program ID: CERCLIS HI0170090054
Action Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN PACIFIC
Full Address: 500 CENTER STREET NCTAMSPAC WAHIAWA HI 96786-3007
State: Hawaii
Facility Name: NCTAMS EASTPAC - WAHIAWA
Facility Address: 500 CENTER STREET
WAHIAWA, HI 96786-3007
Enforcement Action Type: CERCLA 120E Federal Facility Agreement (FFA)
Facility County: HONOLULU
EPA Region #: 9

Enforcement Action ID: 09-2014-2515
FRS ID: 110013768823
Program ID: SDWIS HI0000357
Action Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN PACIFIC
Full Address: 500 CENTER STREET NCTAMSPAC WAHIAWA HI 96786-3007
State: Hawaii
Facility Name: NCTAMS EASTPAC - WAHIAWA
Facility Address: 500 CENTER STREET
WAHIAWA, HI 96786-3007
Enforcement Action Type: CERCLA 120E Federal Facility Agreement (FFA)
Facility County: HONOLULU
EPA Region #: 9

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA (Continued)

1000167735

Enforcement Action ID: 09-2014-2515
FRS ID: 110013768823
Program ID: RE-POWERING HI0170090054-23094
Action Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN PACIFIC
Full Address: 500 CENTER STREET NCTAMSPAC WAHIAWA HI 96786-3007
State: Hawaii
Facility Name: NCTAMS EASTPAC - WAHIAWA
Facility Address: 500 CENTER STREET
WAHIAWA, HI 96786-3007
Enforcement Action Type: CERCLA 120E Federal Facility Agreement (FFA)
Facility County: HONOLULU
EPA Region #: 9

Enforcement Action ID: 09-2014-2515
FRS ID: 110013768823
Program ID: RCRINFO HI6170024388
Action Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN PACIFIC
Full Address: 500 CENTER STREET NCTAMSPAC WAHIAWA HI 96786-3007
State: Hawaii
Facility Name: NCTAMS EASTPAC - WAHIAWA
Facility Address: 500 CENTER STREET
WAHIAWA, HI 96786-3007
Enforcement Action Type: CERCLA 120E Federal Facility Agreement (FFA)
Facility County: HONOLULU
EPA Region #: 9

Enforcement Action ID: 09-2014-2515
FRS ID: 110013768823
Program ID: NCDB C09#05T122001PCB
Action Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN PACIFIC
Full Address: 500 CENTER STREET NCTAMSPAC WAHIAWA HI 96786-3007
State: Hawaii
Facility Name: NCTAMS EASTPAC - WAHIAWA
Facility Address: 500 CENTER STREET
WAHIAWA, HI 96786-3007
Enforcement Action Type: CERCLA 120E Federal Facility Agreement (FFA)
Facility County: HONOLULU
EPA Region #: 9

Enforcement Action ID: 09-2014-2515
FRS ID: 110013768823
Program ID: HI-EHW 9308
Action Name: NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN PACIFIC
Full Address: 500 CENTER STREET NCTAMSPAC WAHIAWA HI 96786-3007
State: Hawaii
Facility Name: NCTAMS EASTPAC - WAHIAWA
Facility Address: 500 CENTER STREET
WAHIAWA, HI 96786-3007
Enforcement Action Type: CERCLA 120E Federal Facility Agreement (FFA)
Facility County: HONOLULU
EPA Region #: 9

Enforcement Action ID: 09-2014-2515

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA (Continued)

1000167735

FRS ID:	110013768823
Program ID:	FRS 110013768823
Action Name:	NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EASTERN PACIFIC
Full Address:	500 CENTER STREET NCTAMSPAC WAHIAWA HI 96786-3007
State:	Hawaii
Facility Name:	NCTAMS EASTPAC - WAHIAWA
Facility Address:	500 CENTER STREET WAHIAWA, HI 96786-3007
Enforcement Action Type:	CERCLA 120E Federal Facility Agreement (FFA)
Facility County:	HONOLULU
EPA Region #:	9
Enforcement Action ID:	09-2009-2517
FRS ID:	110013768823
Program ID:	BR HI6170024388
Action Name:	NCTAMS FEDERAL FACILITY AGREEMENT
Full Address:	500 CENTER STREET NCTAMSPAC WAHIAWA HI 96786-3007
State:	Hawaii
Facility Name:	NCTAMS EASTPAC - WAHIAWA
Facility Address:	500 CENTER STREET WAHIAWA, HI 96786-3007
Enforcement Action Type:	CERCLA 120E Federal Facility Agreement (FFA)
Facility County:	HONOLULU
EPA Region #:	9
Enforcement Action ID:	09-2009-2517
FRS ID:	110013768823
Program ID:	RE-POWERING HI0170090054-23094
Action Name:	NCTAMS FEDERAL FACILITY AGREEMENT
Full Address:	500 CENTER STREET NCTAMSPAC WAHIAWA HI 96786-3007
State:	Hawaii
Facility Name:	NCTAMS EASTPAC - WAHIAWA
Facility Address:	500 CENTER STREET WAHIAWA, HI 96786-3007
Enforcement Action Type:	CERCLA 120E Federal Facility Agreement (FFA)
Facility County:	HONOLULU
EPA Region #:	9
Enforcement Action ID:	09-2009-2517
FRS ID:	110013768823
Program ID:	RCRAINFO HI6170024388
Action Name:	NCTAMS FEDERAL FACILITY AGREEMENT
Full Address:	500 CENTER STREET NCTAMSPAC WAHIAWA HI 96786-3007
State:	Hawaii
Facility Name:	NCTAMS EASTPAC - WAHIAWA
Facility Address:	500 CENTER STREET WAHIAWA, HI 96786-3007
Enforcement Action Type:	CERCLA 120E Federal Facility Agreement (FFA)
Facility County:	HONOLULU
EPA Region #:	9
Enforcement Action ID:	09-2009-2517
FRS ID:	110013768823
Program ID:	NCDB C09#05T122001PCB
Action Name:	NCTAMS FEDERAL FACILITY AGREEMENT
Full Address:	500 CENTER STREET NCTAMSPAC WAHIAWA HI 96786-3007

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA (Continued)

1000167735

State: Hawaii
Facility Name: NCTAMS EASTPAC - WAHIAWA
Facility Address: 500 CENTER STREET
WAHIAWA, HI 96786-3007
Enforcement Action Type: CERCLA 120E Federal Facility Agreement (FFA)
Facility County: HONOLULU
EPA Region #: 9
Enforcement Action ID: 09-2009-2517
FRS ID: 110013768823
Program ID: HI-EHW 9308
Action Name: NCTAMS FEDERAL FACILITY AGREEMENT
Full Address: 500 CENTER STREET NCTAMSPAC WAHIAWA HI 96786-3007
State: Hawaii
Facility Name: NCTAMS EASTPAC - WAHIAWA
Facility Address: 500 CENTER STREET
WAHIAWA, HI 96786-3007
Enforcement Action Type: CERCLA 120E Federal Facility Agreement (FFA)
Facility County: HONOLULU
EPA Region #: 9
Enforcement Action ID: 09-2009-2517
FRS ID: 110013768823
Program ID: FRS 110013768823
Action Name: NCTAMS FEDERAL FACILITY AGREEMENT
Full Address: 500 CENTER STREET NCTAMSPAC WAHIAWA HI 96786-3007
State: Hawaii
Facility Name: NCTAMS EASTPAC - WAHIAWA
Facility Address: 500 CENTER STREET
WAHIAWA, HI 96786-3007
Enforcement Action Type: CERCLA 120E Federal Facility Agreement (FFA)
Facility County: HONOLULU
EPA Region #: 9
Enforcement Action ID: 09-2009-2517
FRS ID: 110013768823
Program ID: CERCLIS HI0170090054
Action Name: NCTAMS FEDERAL FACILITY AGREEMENT
Full Address: 500 CENTER STREET NCTAMSPAC WAHIAWA HI 96786-3007
State: Hawaii
Facility Name: NCTAMS EASTPAC - WAHIAWA
Facility Address: 500 CENTER STREET
WAHIAWA, HI 96786-3007
Enforcement Action Type: CERCLA 120E Federal Facility Agreement (FFA)
Facility County: HONOLULU
EPA Region #: 9
Enforcement Action ID: 09-2009-2517
FRS ID: 110013768823
Program ID: SDWIS HI0000357
Action Name: NCTAMS FEDERAL FACILITY AGREEMENT
Full Address: 500 CENTER STREET NCTAMSPAC WAHIAWA HI 96786-3007
State: Hawaii
Facility Name: NCTAMS EASTPAC - WAHIAWA
Facility Address: 500 CENTER STREET
WAHIAWA, HI 96786-3007
Enforcement Action Type: CERCLA 120E Federal Facility Agreement (FFA)

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA (Continued)

1000167735

Facility County: HONOLULU
EPA Region #: 9

Program ID: BR HI6170024388
Facility Name: NCTAMS EASTPAC - WAHIAWA
Address: 500 CENTER STREET
Tribal Indicator: N
Fed Facility: Yes
NAIC Code: Not reported
SIC Code: Not reported

Program ID: CERCLIS HI0170090054
Facility Name: NCTAMS EASTPAC - WAHIAWA
Address: 500 CENTER STREET
Tribal Indicator: N
Fed Facility: Yes
NAIC Code: Not reported
SIC Code: Not reported

Program ID: FRS 110013768823
Facility Name: NCTAMS EASTPAC - WAHIAWA
Address: 500 CENTER STREET
Tribal Indicator: N
Fed Facility: Yes
NAIC Code: Not reported
SIC Code: Not reported

Program ID: HI-EHW 9308
Facility Name: NCTAMS EASTPAC - WAHIAWA
Address: 500 CENTER STREET
Tribal Indicator: N
Fed Facility: Yes
NAIC Code: Not reported
SIC Code: Not reported

Program ID: NCDB C09#05T122001PCB
Facility Name: NCTAMS EASTPAC - WAHIAWA
Address: 500 CENTER STREET
Tribal Indicator: N
Fed Facility: Yes
NAIC Code: Not reported
SIC Code: Not reported

Program ID: RCRAINFO HI6170024388
Facility Name: NCTAMS EASTPAC - WAHIAWA
Address: 500 CENTER STREET
Tribal Indicator: N
Fed Facility: Yes
NAIC Code: Not reported
SIC Code: Not reported

Program ID: RE-POWERING HI0170090054-23094
Facility Name: NCTAMS EASTPAC - WAHIAWA
Address: 500 CENTER STREET
Tribal Indicator: N
Fed Facility: Yes

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA (Continued)

1000167735

NAIC Code: Not reported
SIC Code: Not reported

Program ID: SDWIS HI0000357
Facility Name: NCTAMS EASTPAC - WAHIAWA
Address: 500 CENTER STREET
Tribal Indicator: N
Fed Facility: Yes
NAIC Code: Not reported
SIC Code: Not reported

Program ID: BR HI6170024388
Facility Name: NCTAMS EASTPAC - WAHIAWA
Address: 500 CENTER STREET
Tribal Indicator: N
Fed Facility: Yes
NAIC Code: Not reported
SIC Code: Not reported

Program ID: CERCLIS HI0170090054
Facility Name: NCTAMS EASTPAC - WAHIAWA
Address: 500 CENTER STREET
Tribal Indicator: N
Fed Facility: Yes
NAIC Code: Not reported
SIC Code: Not reported

Program ID: FRS 110013768823
Facility Name: NCTAMS EASTPAC - WAHIAWA
Address: 500 CENTER STREET
Tribal Indicator: N
Fed Facility: Yes
NAIC Code: Not reported
SIC Code: Not reported

Program ID: HI-EHW 9308
Facility Name: NCTAMS EASTPAC - WAHIAWA
Address: 500 CENTER STREET
Tribal Indicator: N
Fed Facility: Yes
NAIC Code: Not reported
SIC Code: Not reported

Program ID: NCDB C09#05T122001PCB
Facility Name: NCTAMS EASTPAC - WAHIAWA
Address: 500 CENTER STREET
Tribal Indicator: N
Fed Facility: Yes
NAIC Code: Not reported
SIC Code: Not reported

Program ID: RCRAINFO HI6170024388
Facility Name: NCTAMS EASTPAC - WAHIAWA
Address: 500 CENTER STREET
Tribal Indicator: N
Fed Facility: Yes
NAIC Code: Not reported

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

NAVAL COMPUTER AND TELECOMMUNICATIONS AREA MASTER STATION EA (Continued)

1000167735

SIC Code: Not reported

Program ID: RE-POWERING HI0170090054-23094
Facility Name: NCTAMS EASTPAC - WAHIAWA
Address: 500 CENTER STREET
Tribal Indicator: N
Fed Facility: Yes
NAIC Code: Not reported
SIC Code: Not reported

Program ID: SDWIS HI0000357
Facility Name: NCTAMS EASTPAC - WAHIAWA
Address: 500 CENTER STREET
Tribal Indicator: N
Fed Facility: Yes
NAIC Code: Not reported
SIC Code: Not reported

**DOD
Region**

SCHOFIELD BARRACKS MILITARY RESERVATION

**DOD CUSA147731
N/A**

SCHOFIELD BARRACKS MILITA (County), HI

DOD:
Feature 1: Army DOD
Feature 2: Not reported
Feature 3: Not reported
URL: Not reported
Name 1: Schofield Barracks Military Reservation
Name 2: Not reported
Name 3: Not reported
State: HI
DOD Site: Yes
Tile name: HIHONOLULU

**DOD
Region**

OAHU FOREST NATIONAL WILDLIFE REFUGE

**DOD CUSA147730
N/A**

OAHU FOREST NATIONAL WILD (County), HI

DOD:
Feature 1: National Wildlife Refuge FWS
Feature 2: Army DOD
Feature 3: Not reported
URL: <http://www.fws.gov/refuges/profiles/index.cfm?id=12532>
Name 1: Oahu Forest National Wildlife Refuge
Name 2: Schofield Barracks Military Reservation
Name 3: Not reported
State: HI
DOD Site: Yes
Tile name: HIHONOLULU

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

DOD
Region

WAHIAWA NAVAL RESERVATION

DOD CUSA147728
N/A

WAHIAWA NAVAL RESERVATION (County), HI

DOD:

Feature 1: Navy DOD
Feature 2: Not reported
Feature 3: Not reported
URL: Not reported
Name 1: Wahiawa Naval Reservation
Name 2: Not reported
Name 3: Not reported
State: HI
DOD Site: Yes
Tile name: HIHONOLULU

1

NAV. COMMUN. AREA MASTER STATION EASTERN PACIFIC
BLDG 388, TANK 23
SCHOFIELD BARRACKS, HI 96786

LUST U003222086
UST N/A

LUST:

Facility ID: 9-202321
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 11/07/1997
Release ID: 950090
Project Officer: [REDACTED]

UST:

Facility ID: 9-202321
Owner: U.S. DEPT OF THE NAVY
Owner Address: Not reported
Owner City,St,Zip: Schofield Barracks, 96786 96786
Latitude: 21.522025
Longitude: -157.994825
Horizontal Reference Datum Name: NAD83
Horizontal Collection Method Name: Map

Tank ID: R-M-23
Date Installed: 04/15/1965
Tank Status: Permanently Out of Use
Date Closed: 04/26/1995
Tank Capacity: 2300
Substance: Diesel

2

NAV. COMMUN. AREA MASTER STATION EASTERN PACIFIC
BLDG 411, TANK 25
SCHOFIELD BARRACKS, HI 96786

LUST U003222088
UST N/A

LUST:

Facility ID: 9-202323
Facility Status: Site Cleanup Completed (NFA)
Facility Status Date: 11/03/1997
Release ID: 950091
Project Officer: Lene Ichinotsubo

UST:

Facility ID: 9-202323

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

NAV. COMMUN. AREA MASTER STATION EASTERN PACIFIC (Continued)

U003222088

Owner: U.S. DEPT OF THE NAVY
Owner Address: Not reported
Owner City,St,Zip: Schofield Barracks, 96786 96786
Latitude: 21.520578
Longitude: -157.995362
Horizontal Reference Datum Name: NAD83
Horizontal Collection Method Name: Map

Tank ID: R-25
Date Installed: 04/15/1977
Tank Status: Permanently Out of Use
Date Closed: 04/24/1995
Tank Capacity: 15000
Substance: Diesel

3

CENTER COMBAT RANGE

FUDS 1012129421

N/A

WAHIAWA, HI

FUDS:

Federal Facility ID: HI9799FA104
FUDS #: H09HI0480
INST ID: 64061
Facility Name: CENTER COMBAT RANGE
City: WAHIAWA
State: HI
EPA Region: 09
County: HONOLULU
Congressional District: 02
US Army District: Honolulu District (POH)
Fiscal Year: 2013
Telephone: XXXXXXXXXX
NPL Status: Not Listed
RAB: Not reported
CTC: 18907.20
Current Owner: Private Sector; State Government
Current Prog: Not reported
Future Prog: Not reported
Acreage: Not reported

Description: : The former Center Combat Range is located in East Central Oahu east of Mililani and Highway H2. The uninhabited property is located east of a housing development in rugged terrain that limits development. The property is identified as TMK: 9-5-02: 45; 9-5-03:10; 9-5-04: 01 and 9-5-04: 02. The approximate geographic center is 21 29' 10" N, 157 56' 20" W, and is within Hawaii US Congressional District 1 and US EPA Region 9.

History: The former Center Combat Range consisted of 5,249 acres of land for which the Territory of Hawaii Board of Commissioners of Agriculture and Forestry granted a use permit on September 28, 1943. This permit authorized the Army to use the land of Waipio for combat training purposes. The Center Combat Range was depicted on a June 1944 map of Oahu training areas, camps, and centers. Immediately to the south is another FUDS, the Waiawa Training Area. Directly north is the still active Schofield Barracks East Range. The training ended sometime in late 1945, as a January 5, 1946 memorandum provided formal notice that the Army was no longer using the land. No clearance report was located for this property, but during a November 1945 clearance of the adjacent Waiawa Training Area troops recovered numerous

MAP FINDINGS

Map ID			EDR ID Number
Direction			
Distance			
Distance (ft.)	Site	Database(s)	EPA ID Number

CENTER COMBAT RANGE (Continued)	1012129421
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	unexploded ordnance (UXO) items ranging from rifle grenades up to and including 155-mm high explosive (HE) projectiles.
Latitude:	-157.936996459
Longitude:	21.484899520900

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

To maintain currency of the following federal and state databases, EDR contacts the appropriate governmental agency on a monthly or quarterly basis, as required.

Number of Days to Update: Provides confirmation that EDR is reporting records that have been updated within 90 days from the date the government agency made the information available to the public.

FEDERAL RECORDS

NPL: National Priority List

National Priorities List (Superfund). The NPL is a subset of CERCLIS and identifies over 1,200 sites for priority cleanup under the Superfund Program. NPL sites may encompass relatively large areas. As such, EDR provides polygon coverage for over 1,000 NPL site boundaries produced by EPA's Environmental Photographic Interpretation Center (EPIC) and regional EPA offices.

Date of Government Version: 10/30/2015	Source: EPA
Date Data Arrived at EDR: 11/07/2015	Telephone: N/A
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 01/08/2016
Number of Days to Update: 58	Next Scheduled EDR Contact: 04/18/2016
	Data Release Frequency: Quarterly

NPL Site Boundaries

Sources:

EPA's Environmental Photographic Interpretation Center (EPIC)

Telephone: [REDACTED]

EPA Region 1

Telephone: [REDACTED]

EPA Region 6

Telephone: [REDACTED]

EPA Region 3

Telephone: [REDACTED]

EPA Region 7

Telephone: [REDACTED]

EPA Region 4

Telephone: [REDACTED]

EPA Region 8

Telephone: [REDACTED]

EPA Region 5

Telephone: [REDACTED]

EPA Region 9

Telephone: [REDACTED]

EPA Region 10

Telephone: [REDACTED]

Proposed NPL: Proposed National Priority List Sites

A site that has been proposed for listing on the National Priorities List through the issuance of a proposed rule in the Federal Register. EPA then accepts public comments on the site, responds to the comments, and places on the NPL those sites that continue to meet the requirements for listing.

Date of Government Version: 10/30/2015	Source: EPA
Date Data Arrived at EDR: 11/07/2015	Telephone: N/A
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 01/08/2016
Number of Days to Update: 58	Next Scheduled EDR Contact: 04/18/2016
	Data Release Frequency: Quarterly

Delisted NPL: National Priority List Deletions

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate.

Date of Government Version: 10/30/2015	Source: EPA
Date Data Arrived at EDR: 11/07/2015	Telephone: N/A
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 01/08/2016
Number of Days to Update: 58	Next Scheduled EDR Contact: 04/18/2016
	Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

NPL LIENS: Federal Superfund Liens

Federal Superfund Liens. Under the authority granted the USEPA by CERCLA of 1980, the USEPA has the authority to file liens against real property in order to recover remedial action expenditures or when the property owner received notification of potential liability. USEPA compiles a listing of filed notices of Superfund Liens.

Date of Government Version: 10/15/1991
Date Data Arrived at EDR: 02/02/1994
Date Made Active in Reports: 03/30/1994
Number of Days to Update: 56

Source: EPA
Telephone: [REDACTED]
Last EDR Contact: 08/15/2011
Next Scheduled EDR Contact: 11/28/2011
Data Release Frequency: No Update Planned

CERCLIS: Comprehensive Environmental Response, Compensation, and Liability Information System

CERCLIS contains data on potentially hazardous waste sites that have been reported to the USEPA by states, municipalities, private companies and private persons, pursuant to Section 103 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). CERCLIS contains sites which are either proposed to or on the National Priorities List (NPL) and sites which are in the screening and assessment phase for possible inclusion on the NPL.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 94

Source: EPA
Telephone: [REDACTED]
Last EDR Contact: 11/23/2015
Next Scheduled EDR Contact: 03/07/2016
Data Release Frequency: Quarterly

CERCLIS-NFRAP: CERCLIS No Further Remedial Action Planned

Archived sites are sites that have been removed and archived from the inventory of CERCLIS sites. Archived status indicates that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL), unless information indicates this decision was not appropriate or other considerations require a recommendation for listing at a later time. This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 11/11/2013
Date Made Active in Reports: 02/13/2014
Number of Days to Update: 94

Source: EPA
Telephone: [REDACTED]
Last EDR Contact: 11/23/2015
Next Scheduled EDR Contact: 03/07/2016
Data Release Frequency: Quarterly

LIENS 2: CERCLA Lien Information

A Federal CERCLA ('Superfund') lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. These monies are spent to investigate and address releases and threatened releases of contamination. CERCLIS provides information as to the identity of these sites and properties.

Date of Government Version: 02/18/2014
Date Data Arrived at EDR: 03/18/2014
Date Made Active in Reports: 04/24/2014
Number of Days to Update: 37

Source: Environmental Protection Agency
Telephone: [REDACTED]
Last EDR Contact: 10/30/2015
Next Scheduled EDR Contact: 02/08/2016
Data Release Frequency: Varies

CORRACTS: Corrective Action Report

CORRACTS identifies hazardous waste handlers with RCRA corrective action activity.

Date of Government Version: 06/09/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/16/2015
Number of Days to Update: 82

Source: EPA
Telephone: [REDACTED]
Last EDR Contact: 12/18/2015
Next Scheduled EDR Contact: 04/11/2016
Data Release Frequency: Quarterly

RCRA-TSDF: RCRA - Treatment, Storage and Disposal

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

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 06/09/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/16/2015
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: (415) [REDACTED]
Last EDR Contact: 12/18/2015
Next Scheduled EDR Contact: 04/11/2016
Data Release Frequency: Quarterly

RCRA-LQG: RCRA - Large Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Large quantity generators (LQGs) generate over 1,000 kilograms (kg) of hazardous waste, or over 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/09/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/16/2015
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: (415) [REDACTED]
Last EDR Contact: 12/18/2015
Next Scheduled EDR Contact: 04/11/2016
Data Release Frequency: Quarterly

RCRA-SQG: RCRA - Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Small quantity generators (SQGs) generate between 100 kg and 1,000 kg of hazardous waste per month.

Date of Government Version: 06/09/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/16/2015
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: (415) [REDACTED]
Last EDR Contact: 12/18/2015
Next Scheduled EDR Contact: 04/11/2016
Data Release Frequency: Quarterly

RCRA-CESQG: RCRA - Conditionally Exempt Small Quantity Generators

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Conditionally exempt small quantity generators (CESQGs) generate less than 100 kg of hazardous waste, or less than 1 kg of acutely hazardous waste per month.

Date of Government Version: 06/09/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/16/2015
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: (415) [REDACTED]
Last EDR Contact: 12/18/2015
Next Scheduled EDR Contact: 04/11/2016
Data Release Frequency: Varies

RCRA NonGen / NLR: RCRA - Non Generators / No Longer Regulated

RCRAInfo is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. The database includes selective information on sites which generate, transport, store, treat and/or dispose of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA). Non-Generators do not presently generate hazardous waste.

Date of Government Version: 06/09/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/16/2015
Number of Days to Update: 82

Source: Environmental Protection Agency
Telephone: (415) [REDACTED]
Last EDR Contact: 12/18/2015
Next Scheduled EDR Contact: 04/11/2016
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

US ENG CONTROLS: Engineering Controls Sites List

A listing of sites with engineering controls in place. Engineering controls include various forms of caps, building foundations, liners, and treatment methods to create pathway elimination for regulated substances to enter environmental media or effect human health.

Date of Government Version: 09/10/2015
Date Data Arrived at EDR: 09/11/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 53

Source: Environmental Protection Agency
Telephone: [REDACTED]
Last EDR Contact: 11/24/2015
Next Scheduled EDR Contact: 03/14/2016
Data Release Frequency: Varies

US INST CONTROL: Sites with Institutional Controls

A listing of sites with institutional controls in place. Institutional controls include administrative measures, such as groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements intended to prevent exposure to contaminants remaining on site. Deed restrictions are generally required as part of the institutional controls.

Date of Government Version: 09/10/2015
Date Data Arrived at EDR: 09/11/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 53

Source: Environmental Protection Agency
Telephone: [REDACTED]
Last EDR Contact: 11/24/2015
Next Scheduled EDR Contact: 03/14/2016
Data Release Frequency: Varies

ERNS: Emergency Response Notification System

Emergency Response Notification System. ERNS records and stores information on reported releases of oil and hazardous substances.

Date of Government Version: 06/22/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/16/2015
Number of Days to Update: 82

Source: National Response Center, United States Coast Guard
Telephone: [REDACTED]
Last EDR Contact: 12/29/2015
Next Scheduled EDR Contact: 04/11/2016
Data Release Frequency: Annually

HMIRS: Hazardous Materials Information Reporting System

Hazardous Materials Incident Report System. HMIRS contains hazardous material spill incidents reported to DOT.

Date of Government Version: 06/24/2015
Date Data Arrived at EDR: 06/26/2015
Date Made Active in Reports: 09/02/2015
Number of Days to Update: 68

Source: U.S. Department of Transportation
Telephone: [REDACTED]
Last EDR Contact: 12/30/2015
Next Scheduled EDR Contact: 04/11/2016
Data Release Frequency: Annually

DOT OPS: Incident and Accident Data

Department of Transportation, Office of Pipeline Safety Incident and Accident data.

Date of Government Version: 07/31/2012
Date Data Arrived at EDR: 08/07/2012
Date Made Active in Reports: 09/18/2012
Number of Days to Update: 42

Source: Department of Transportation, Office of Pipeline Safety
Telephone: [REDACTED]
Last EDR Contact: 11/07/2015
Next Scheduled EDR Contact: 02/15/2016
Data Release Frequency: Varies

US CDL: Clandestine Drug Labs

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 08/12/2015
Date Data Arrived at EDR: 09/04/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 60

Source: Drug Enforcement Administration
Telephone: [REDACTED]
Last EDR Contact: 11/25/2015
Next Scheduled EDR Contact: 03/14/2016
Data Release Frequency: Quarterly

US BROWNFIELDS: A Listing of Brownfields Sites

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties takes development pressures off of undeveloped, open land, and both improves and protects the environment. Assessment, Cleanup and Redevelopment Exchange System (ACRES) stores information reported by EPA Brownfields grant recipients on brownfields properties assessed or cleaned up with grant funding as well as information on Targeted Brownfields Assessments performed by EPA Regions. A listing of ACRES Brownfield sites is obtained from Cleanups in My Community. Cleanups in My Community provides information on Brownfields properties for which information is reported back to EPA, as well as areas served by Brownfields grant programs.

Date of Government Version: 09/21/2015
Date Data Arrived at EDR: 09/23/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 103

Source: Environmental Protection Agency
Telephone: [REDACTED]
Last EDR Contact: 12/21/2015
Next Scheduled EDR Contact: 04/04/2016
Data Release Frequency: Semi-Annually

DOD: Department of Defense Sites

This data set consists of federally owned or administered lands, administered by the Department of Defense, that have any area equal to or greater than 640 acres of the United States, Puerto Rico, and the U.S. Virgin Islands.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 11/10/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 62

Source: USGS
Telephone: [REDACTED]
Last EDR Contact: 01/15/2016
Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: Semi-Annually

FUDS: Formerly Used Defense Sites

The listing includes locations of Formerly Used Defense Sites properties where the US Army Corps of Engineers is actively working or will take necessary cleanup actions.

Date of Government Version: 01/31/2015
Date Data Arrived at EDR: 07/08/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 97

Source: U.S. Army Corps of Engineers
Telephone: [REDACTED]
Last EDR Contact: 12/11/2015
Next Scheduled EDR Contact: 03/21/2016
Data Release Frequency: Varies

LUCIS: Land Use Control Information System

LUCIS contains records of land use control information pertaining to the former Navy Base Realignment and Closure properties.

Date of Government Version: 05/28/2015
Date Data Arrived at EDR: 05/29/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 13

Source: Department of the Navy
Telephone: [REDACTED]
Last EDR Contact: 11/13/2015
Next Scheduled EDR Contact: 02/29/2016
Data Release Frequency: Varies

CONSENT: Superfund (CERCLA) Consent Decrees

Major legal settlements that establish responsibility and standards for cleanup at NPL (Superfund) sites. Released periodically by United States District Courts after settlement by parties to litigation matters.

Date of Government Version: 12/31/2014
Date Data Arrived at EDR: 04/17/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 46

Source: Department of Justice, Consent Decree Library
Telephone: Varies
Last EDR Contact: 12/23/2015
Next Scheduled EDR Contact: 04/11/2016
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

ROD: Records Of Decision

Record of Decision. ROD documents mandate a permanent remedy at an NPL (Superfund) site containing technical and health information to aid in the cleanup.

Date of Government Version: 11/25/2013
Date Data Arrived at EDR: 12/12/2013
Date Made Active in Reports: 02/24/2014
Number of Days to Update: 74

Source: EPA
Telephone: [REDACTED]
Last EDR Contact: 12/11/2015
Next Scheduled EDR Contact: 03/21/2016
Data Release Frequency: Annually

UMTRA: Uranium Mill Tailings Sites

Uranium ore was mined by private companies for federal government use in national defense programs. When the mills shut down, large piles of the sand-like material (mill tailings) remain after uranium has been extracted from the ore. Levels of human exposure to radioactive materials from the piles are low; however, in some cases tailings were used as construction materials before the potential health hazards of the tailings were recognized.

Date of Government Version: 09/14/2010
Date Data Arrived at EDR: 10/07/2011
Date Made Active in Reports: 03/01/2012
Number of Days to Update: 146

Source: Department of Energy
Telephone: [REDACTED]
Last EDR Contact: 11/19/2015
Next Scheduled EDR Contact: 03/07/2016
Data Release Frequency: Varies

ODI: Open Dump Inventory

An open dump is defined as a disposal facility that does not comply with one or more of the Part 257 or Part 258 Subtitle D Criteria.

Date of Government Version: 06/30/1985
Date Data Arrived at EDR: 08/09/2004
Date Made Active in Reports: 09/17/2004
Number of Days to Update: 39

Source: Environmental Protection Agency
Telephone: [REDACTED]
Last EDR Contact: 06/09/2004
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

DEBRIS REGION 9: Torres Martinez Reservation Illegal Dump Site Locations

A listing of illegal dump sites location on the Torres Martinez Indian Reservation located in eastern Riverside County and northern Imperial County, California.

Date of Government Version: 01/12/2009
Date Data Arrived at EDR: 05/07/2009
Date Made Active in Reports: 09/21/2009
Number of Days to Update: 137

Source: EPA, Region 9
Telephone: [REDACTED]
Last EDR Contact: 10/26/2015
Next Scheduled EDR Contact: 02/08/2016
Data Release Frequency: No Update Planned

US MINES: Mines Master Index File

Contains all mine identification numbers issued for mines active or opened since 1971. The data also includes violation information.

Date of Government Version: 08/18/2015
Date Data Arrived at EDR: 09/01/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 125

Source: Department of Labor, Mine Safety and Health Administration
Telephone: [REDACTED]
Last EDR Contact: 12/03/2015
Next Scheduled EDR Contact: 03/14/2016
Data Release Frequency: Semi-Annually

US MINES 3: Active Mines & Mineral Plants Database Listing

Active Mines and Mineral Processing Plant operations for commodities monitored by the Minerals Information Team of the USGS.

Date of Government Version: 04/14/2011
Date Data Arrived at EDR: 06/08/2011
Date Made Active in Reports: 09/13/2011
Number of Days to Update: 97

Source: USGS
Telephone: [REDACTED]
Last EDR Contact: 12/04/2015
Next Scheduled EDR Contact: 03/14/2016
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

US MINES 2: Ferrous and Nonferrous Metal Mines Database Listing

This map layer includes ferrous (ferrous metal mines are facilities that extract ferrous metals, such as iron ore or molybdenum) and nonferrous (Nonferrous metal mines are facilities that extract nonferrous metals, such as gold, silver, copper, zinc, and lead) metal mines in the United States.

Date of Government Version: 12/05/2005	Source: USGS
Date Data Arrived at EDR: 02/29/2008	Telephone: [REDACTED]
Date Made Active in Reports: 04/18/2008	Last EDR Contact: 12/04/2015
Number of Days to Update: 49	Next Scheduled EDR Contact: 03/14/2016
	Data Release Frequency: Varies

TRIS: Toxic Chemical Release Inventory System

Toxic Release Inventory System. TRIS identifies facilities which release toxic chemicals to the air, water and land in reportable quantities under SARA Title III Section 313.

Date of Government Version: 12/31/2013	Source: EPA
Date Data Arrived at EDR: 02/12/2015	Telephone: [REDACTED]
Date Made Active in Reports: 06/02/2015	Last EDR Contact: 11/24/2015
Number of Days to Update: 110	Next Scheduled EDR Contact: 03/07/2016
	Data Release Frequency: Annually

TSCA: Toxic Substances Control Act

Toxic Substances Control Act. TSCA identifies manufacturers and importers of chemical substances included on the TSCA Chemical Substance Inventory list. It includes data on the production volume of these substances by plant site.

Date of Government Version: 12/31/2012	Source: EPA
Date Data Arrived at EDR: 01/15/2015	Telephone: [REDACTED]
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 12/23/2015
Number of Days to Update: 14	Next Scheduled EDR Contact: 04/04/2016
	Data Release Frequency: Every 4 Years

FTTS: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

FTTS tracks administrative cases and pesticide enforcement actions and compliance activities related to FIFRA, TSCA and EPCRA (Emergency Planning and Community Right-to-Know Act). To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 04/09/2009	Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Date Data Arrived at EDR: 04/16/2009	Telephone: [REDACTED]
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 11/18/2015
Number of Days to Update: 25	Next Scheduled EDR Contact: 03/07/2016
	Data Release Frequency: Quarterly

FTTS INSP: FIFRA/ TSCA Tracking System - FIFRA (Federal Insecticide, Fungicide, & Rodenticide Act)/TSCA (Toxic Substances Control Act)

A listing of FIFRA/TSCA Tracking System (FTTS) inspections and enforcements.

Date of Government Version: 04/09/2009	Source: EPA
Date Data Arrived at EDR: 04/16/2009	Telephone: [REDACTED]
Date Made Active in Reports: 05/11/2009	Last EDR Contact: 11/18/2015
Number of Days to Update: 25	Next Scheduled EDR Contact: 03/07/2016
	Data Release Frequency: Quarterly

HIST FTTS: FIFRA/TSCA Tracking System Administrative Case Listing

A complete administrative case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: [REDACTED]
Last EDR Contact: 12/17/2007
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

HIST FTTS INSP: FIFRA/TSCA Tracking System Inspection & Enforcement Case Listing

A complete inspection and enforcement case listing from the FIFRA/TSCA Tracking System (FTTS) for all ten EPA regions. The information was obtained from the National Compliance Database (NCDB). NCDB supports the implementation of FIFRA (Federal Insecticide, Fungicide, and Rodenticide Act) and TSCA (Toxic Substances Control Act). Some EPA regions are now closing out records. Because of that, and the fact that some EPA regions are not providing EPA Headquarters with updated records, it was decided to create a HIST FTTS database. It included records that may not be included in the newer FTTS database updates. This database is no longer updated.

Date of Government Version: 10/19/2006
Date Data Arrived at EDR: 03/01/2007
Date Made Active in Reports: 04/10/2007
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: [REDACTED]
Last EDR Contact: 12/17/2008
Next Scheduled EDR Contact: 03/17/2008
Data Release Frequency: No Update Planned

SSTS: Section 7 Tracking Systems

Section 7 of the Federal Insecticide, Fungicide and Rodenticide Act, as amended (92 Stat. 829) requires all registered pesticide-producing establishments to submit a report to the Environmental Protection Agency by March 1st each year. Each establishment must report the types and amounts of pesticides, active ingredients and devices being produced, and those having been produced and sold or distributed in the past year.

Date of Government Version: 12/31/2009
Date Data Arrived at EDR: 12/10/2010
Date Made Active in Reports: 02/25/2011
Number of Days to Update: 77

Source: EPA
Telephone: [REDACTED]
Last EDR Contact: 10/26/2015
Next Scheduled EDR Contact: 02/08/2016
Data Release Frequency: Annually

ICIS: Integrated Compliance Information System

The Integrated Compliance Information System (ICIS) supports the information needs of the national enforcement and compliance program as well as the unique needs of the National Pollutant Discharge Elimination System (NPDES) program.

Date of Government Version: 01/23/2015
Date Data Arrived at EDR: 02/06/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 31

Source: Environmental Protection Agency
Telephone: [REDACTED]
Last EDR Contact: 01/08/2016
Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: Quarterly

PADS: PCB Activity Database System

PCB Activity Database. PADS Identifies generators, transporters, commercial storers and/or brokers and disposers of PCB's who are required to notify the EPA of such activities.

Date of Government Version: 07/01/2014
Date Data Arrived at EDR: 10/15/2014
Date Made Active in Reports: 11/17/2014
Number of Days to Update: 33

Source: EPA
Telephone: [REDACTED]
Last EDR Contact: 01/12/2016
Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: Annually

MLTS: Material Licensing Tracking System

MLTS is maintained by the Nuclear Regulatory Commission and contains a list of approximately 8,100 sites which possess or use radioactive materials and which are subject to NRC licensing requirements. To maintain currency, EDR contacts the Agency on a quarterly basis.

Date of Government Version: 06/26/2015
Date Data Arrived at EDR: 07/10/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 95

Source: Nuclear Regulatory Commission
Telephone: [REDACTED]
Last EDR Contact: 12/07/2015
Next Scheduled EDR Contact: 03/21/2016
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RADINFO: Radiation Information Database

The Radiation Information Database (RADINFO) contains information about facilities that are regulated by U.S. Environmental Protection Agency (EPA) regulations for radiation and radioactivity.

Date of Government Version: 07/07/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 07/09/2015	Telephone: [REDACTED]
Date Made Active in Reports: 09/16/2015	Last EDR Contact: 01/07/2016
Number of Days to Update: 69	Next Scheduled EDR Contact: 04/18/2016
	Data Release Frequency: Quarterly

FINDS: Facility Index System/Facility Registry System

Facility Index System. FINDS contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in this report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

Date of Government Version: 07/20/2015	Source: EPA
Date Data Arrived at EDR: 09/09/2015	Telephone: (415) [REDACTED]
Date Made Active in Reports: 11/03/2015	Last EDR Contact: 12/10/2015
Number of Days to Update: 55	Next Scheduled EDR Contact: 03/21/2016
	Data Release Frequency: Quarterly

RAATS: RCRA Administrative Action Tracking System

RCRA Administration Action Tracking System. RAATS contains records based on enforcement actions issued under RCRA pertaining to major violators and includes administrative and civil actions brought by the EPA. For administration actions after September 30, 1995, data entry in the RAATS database was discontinued. EPA will retain a copy of the database for historical records. It was necessary to terminate RAATS because a decrease in agency resources made it impossible to continue to update the information contained in the database.

Date of Government Version: 04/17/1995	Source: EPA
Date Data Arrived at EDR: 07/03/1995	Telephone: [REDACTED]
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

RMP: Risk Management Plans

When Congress passed the Clean Air Act Amendments of 1990, it required EPA to publish regulations and guidance for chemical accident prevention at facilities using extremely hazardous substances. The Risk Management Program Rule (RMP Rule) was written to implement Section 112(r) of these amendments. The rule, which built upon existing industry codes and standards, requires companies of all sizes that use certain flammable and toxic substances to develop a Risk Management Program, which includes a(n): Hazard assessment that details the potential effects of an accidental release, an accident history of the last five years, and an evaluation of worst-case and alternative accidental releases; Prevention program that includes safety precautions and maintenance, monitoring, and employee training measures; and Emergency response program that spells out emergency health care, employee training measures and procedures for informing the public and response agencies (e.g the fire department) should an accident occur.

Date of Government Version: 08/01/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 08/26/2015	Telephone: [REDACTED]
Date Made Active in Reports: 11/03/2015	Last EDR Contact: 10/26/2015
Number of Days to Update: 69	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Varies

BRS: Biennial Reporting System

The Biennial Reporting System is a national system administered by the EPA that collects data on the generation and management of hazardous waste. BRS captures detailed data from two groups: Large Quantity Generators (LQG) and Treatment, Storage, and Disposal Facilities.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/24/2015
Date Made Active in Reports: 09/30/2015
Number of Days to Update: 218

Source: EPA/NTIS
Telephone: [REDACTED]
Last EDR Contact: 11/24/2015
Next Scheduled EDR Contact: 03/07/2016
Data Release Frequency: Biennially

LEAD SMELTER 2: Lead Smelter Sites

A list of several hundred sites in the U.S. where secondary lead smelting was done from 1931 and 1964. These sites may pose a threat to public health through ingestion or inhalation of contaminated soil or dust

Date of Government Version: 04/05/2001
Date Data Arrived at EDR: 10/27/2010
Date Made Active in Reports: 12/02/2010
Number of Days to Update: 36

Source: American Journal of Public Health
Telephone: [REDACTED]
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

LEAD SMELTER 1: Lead Smelter Sites

A listing of former lead smelter site locations.

Date of Government Version: 11/25/2014
Date Data Arrived at EDR: 11/26/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: [REDACTED]
Last EDR Contact: 01/08/2016
Next Scheduled EDR Contact: 04/18/2016
Data Release Frequency: Varies

2020 COR ACTION: 2020 Corrective Action Program List

The EPA has set ambitious goals for the RCRA Corrective Action program by creating the 2020 Corrective Action Universe. This RCRA cleanup baseline includes facilities expected to need corrective action. The 2020 universe contains a wide variety of sites. Some properties are heavily contaminated while others were contaminated but have since been cleaned up. Still others have not been fully investigated yet, and may require little or no remediation. Inclusion in the 2020 Universe does not necessarily imply failure on the part of a facility to meet its RCRA obligations.

Date of Government Version: 04/22/2013
Date Data Arrived at EDR: 03/03/2015
Date Made Active in Reports: 03/09/2015
Number of Days to Update: 6

Source: Environmental Protection Agency
Telephone: [REDACTED]
Last EDR Contact: 11/13/2015
Next Scheduled EDR Contact: 02/22/2016
Data Release Frequency: Varies

PRP: Potentially Responsible Parties

A listing of verified Potentially Responsible Parties

Date of Government Version: 10/25/2013
Date Data Arrived at EDR: 10/17/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 3

Source: EPA
Telephone: [REDACTED]
Last EDR Contact: 11/13/2015
Next Scheduled EDR Contact: 02/22/2016
Data Release Frequency: Quarterly

EPA WATCH LIST: EPA WATCH LIST

EPA maintains a "Watch List" to facilitate dialogue between EPA, state and local environmental agencies on enforcement matters relating to facilities with alleged violations identified as either significant or high priority. Being on the Watch List does not mean that the facility has actually violated the law only that an investigation by EPA or a state or local environmental agency has led those organizations to allege that an unproven violation has in fact occurred. Being on the Watch List does not represent a higher level of concern regarding the alleged violations that were detected, but instead indicates cases requiring additional dialogue between EPA, state and local agencies - primarily because of the length of time the alleged violation has gone unaddressed or unresolved.

Date of Government Version: 08/30/2013
Date Data Arrived at EDR: 03/21/2014
Date Made Active in Reports: 06/17/2014
Number of Days to Update: 88

Source: Environmental Protection Agency
Telephone: [REDACTED]
Last EDR Contact: 11/10/2015
Next Scheduled EDR Contact: 02/22/2016
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

COAL ASH DOE: Steam-Electric Plant Operation Data

A listing of power plants that store ash in surface ponds.

Date of Government Version: 12/31/2005	Source: Department of Energy
Date Data Arrived at EDR: 08/07/2009	Telephone: [REDACTED]
Date Made Active in Reports: 10/22/2009	Last EDR Contact: 01/13/2016
Number of Days to Update: 76	Next Scheduled EDR Contact: 04/25/2016
	Data Release Frequency: Varies

PCB TRANSFORMER: PCB Transformer Registration Database

The database of PCB transformer registrations that includes all PCB registration submittals.

Date of Government Version: 02/01/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 10/19/2011	Telephone: [REDACTED]
Date Made Active in Reports: 01/10/2012	Last EDR Contact: 10/29/2015
Number of Days to Update: 83	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Varies

FEDERAL FACILITY: Federal Facility Site Information listing

A listing of National Priority List (NPL) and Base Realignment and Closure (BRAC) sites found in the Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS) Database where EPA Federal Facilities Restoration and Reuse Office is involved in cleanup activities.

Date of Government Version: 03/26/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 04/08/2015	Telephone: [REDACTED]
Date Made Active in Reports: 06/11/2015	Last EDR Contact: 01/06/2016
Number of Days to Update: 64	Next Scheduled EDR Contact: 04/18/2016
	Data Release Frequency: Varies

US HIST CDL: National Clandestine Laboratory Register

A listing of clandestine drug lab locations. The U.S. Department of Justice ("the Department") provides this web site as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy. Members of the public must verify the accuracy of all entries by, for example, contacting local law enforcement and local health departments.

Date of Government Version: 08/12/2015	Source: Drug Enforcement Administration
Date Data Arrived at EDR: 09/04/2015	Telephone: [REDACTED]
Date Made Active in Reports: 11/03/2015	Last EDR Contact: 08/31/2015
Number of Days to Update: 60	Next Scheduled EDR Contact: 12/14/2015
	Data Release Frequency: No Update Planned

COAL ASH EPA: Coal Combustion Residues Surface Impoundments List

A listing of coal combustion residues surface impoundments with high hazard potential ratings.

Date of Government Version: 07/01/2014	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/10/2014	Telephone: N/A
Date Made Active in Reports: 10/20/2014	Last EDR Contact: 12/11/2015
Number of Days to Update: 40	Next Scheduled EDR Contact: 03/21/2016
	Data Release Frequency: Varies

FEMA UST: Underground Storage Tank Listing

A listing of all FEMA owned underground storage tanks.

Date of Government Version: 01/01/2010	Source: FEMA
Date Data Arrived at EDR: 02/16/2010	Telephone: [REDACTED]
Date Made Active in Reports: 04/12/2010	Last EDR Contact: 01/08/2016
Number of Days to Update: 55	Next Scheduled EDR Contact: 04/25/2016
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

US FIN ASSUR: Financial Assurance Information

All owners and operators of facilities that treat, store, or dispose of hazardous waste are required to provide proof that they will have sufficient funds to pay for the clean up, closure, and post-closure care of their facilities.

Date of Government Version: 09/01/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/03/2015	Telephone: [REDACTED]
Date Made Active in Reports: 11/03/2015	Last EDR Contact: 11/13/2015
Number of Days to Update: 61	Next Scheduled EDR Contact: 02/29/2016
	Data Release Frequency: Quarterly

SCRD DRYCLEANERS: State Coalition for Remediation of Drycleaners Listing

The State Coalition for Remediation of Drycleaners was established in 1998, with support from the U.S. EPA Office of Superfund Remediation and Technology Innovation. It is comprised of representatives of states with established drycleaner remediation programs. Currently the member states are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Date of Government Version: 03/07/2011	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/09/2011	Telephone: [REDACTED]
Date Made Active in Reports: 05/02/2011	Last EDR Contact: 11/19/2015
Number of Days to Update: 54	Next Scheduled EDR Contact: 02/29/2016
	Data Release Frequency: Varies

US AIRS (AFS): Aerometric Information Retrieval System Facility Subsystem (AFS)

The database is a sub-system of Aerometric Information Retrieval System (AIRS). AFS contains compliance data on air pollution point sources regulated by the U.S. EPA and/or state and local air regulatory agencies. This information comes from source reports by various stationary sources of air pollution, such as electric power plants, steel mills, factories, and universities, and provides information about the air pollutants they produce. Action, air program, air program pollutant, and general level plant data. It is used to track emissions and compliance data from industrial plants.

Date of Government Version: 10/20/2015	Source: EPA
Date Data Arrived at EDR: 10/27/2015	Telephone: [REDACTED]
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 12/22/2015
Number of Days to Update: 69	Next Scheduled EDR Contact: 04/11/2016
	Data Release Frequency: Annually

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/20/2015	Source: EPA
Date Data Arrived at EDR: 10/27/2015	Telephone: [REDACTED]
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 12/22/2015
Number of Days to Update: 69	Next Scheduled EDR Contact: 04/11/2016
	Data Release Frequency: Annually

STATE AND LOCAL RECORDS

SHWS: Sites List

Facilities, sites or areas in which the Office of Hazard Evaluation and Emergency Response has an interest, has investigated or may investigate under HRS 128D (includes CERCLIS sites).

Date of Government Version: 12/02/2014	Source: Department of Health
Date Data Arrived at EDR: 12/22/2014	Telephone: [REDACTED]
Date Made Active in Reports: 01/27/2015	Last EDR Contact: 11/25/2015
Number of Days to Update: 36	Next Scheduled EDR Contact: 03/07/2016
	Data Release Frequency: Semi-Annually

SWF/LF: Permitted Landfills in the State of Hawaii

Solid Waste Facilities/Landfill Sites. SWF/LF type records typically contain an inventory of solid waste disposal facilities or landfills in a particular state. Depending on the state, these may be active or inactive facilities or open dumps that failed to meet RCRA Subtitle D Section 4004 criteria for solid waste landfills or disposal sites.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/17/2012
Date Data Arrived at EDR: 04/03/2013
Date Made Active in Reports: 05/10/2013
Number of Days to Update: 37

Source: Department of Health
Telephone: [REDACTED]
Last EDR Contact: 10/02/2015
Next Scheduled EDR Contact: 01/11/2016
Data Release Frequency: Varies

UIC: Underground Injection Wells Listing

A listing of underground injection well locations.

Date of Government Version: 02/07/2013
Date Data Arrived at EDR: 02/12/2013
Date Made Active in Reports: 04/09/2013
Number of Days to Update: 56

Source: Department of Health
Telephone: [REDACTED]
Last EDR Contact: 11/24/2015
Next Scheduled EDR Contact: 03/14/2016
Data Release Frequency: Varies

LUST: Leaking Underground Storage Tank Database

Leaking Underground Storage Tank Incident Reports. LUST records contain an inventory of reported leaking underground storage tank incidents. Not all states maintain these records, and the information stored varies by state.

Date of Government Version: 09/04/2015
Date Data Arrived at EDR: 09/25/2015
Date Made Active in Reports: 11/06/2015
Number of Days to Update: 42

Source: Department of Health
Telephone: [REDACTED]
Last EDR Contact: 12/04/2015
Next Scheduled EDR Contact: 03/14/2016
Data Release Frequency: Semi-Annually

UST: Underground Storage Tank Database

Registered Underground Storage Tanks. UST's are regulated under Subtitle I of the Resource Conservation and Recovery Act (RCRA) and must be registered with the state department responsible for administering the UST program. Available information varies by state program.

Date of Government Version: 09/04/2015
Date Data Arrived at EDR: 09/25/2015
Date Made Active in Reports: 11/06/2015
Number of Days to Update: 42

Source: Department of Health
Telephone: [REDACTED]
Last EDR Contact: 12/04/2015
Next Scheduled EDR Contact: 03/14/2016
Data Release Frequency: Semi-Annually

SPILLS: Release Notifications

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

Date of Government Version: 12/02/2014
Date Data Arrived at EDR: 12/22/2014
Date Made Active in Reports: 01/28/2015
Number of Days to Update: 37

Source: Department of Health
Telephone: [REDACTED]
Last EDR Contact: 11/25/2015
Next Scheduled EDR Contact: 03/07/2016
Data Release Frequency: Varies

ENG CONTROLS: Engineering Control Sites

A listing of sites with engineering controls in place.

Date of Government Version: 12/02/2014
Date Data Arrived at EDR: 12/22/2014
Date Made Active in Reports: 01/27/2015
Number of Days to Update: 36

Source: Department of Health
Telephone: [REDACTED]
Last EDR Contact: 11/25/2015
Next Scheduled EDR Contact: 03/07/2016
Data Release Frequency: Varies

INST CONTROL: Sites with Institutional Controls

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

Date of Government Version: 12/02/2014
Date Data Arrived at EDR: 12/22/2014
Date Made Active in Reports: 01/27/2015
Number of Days to Update: 36

Source: Department of Health
Telephone: [REDACTED]
Last EDR Contact: 11/25/2015
Next Scheduled EDR Contact: 03/07/2016
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

VCP: Voluntary Response Program Sites

Sites participating in the Voluntary Response Program. The purpose of the VRP is to streamline the cleanup process in a way that will encourage prospective developers, lenders, and purchasers to voluntarily cleanup properties.

Date of Government Version: 12/02/2014
Date Data Arrived at EDR: 12/22/2014
Date Made Active in Reports: 01/27/2015
Number of Days to Update: 36

Source: Department of Health
Telephone: [REDACTED]
Last EDR Contact: 11/25/2015
Next Scheduled EDR Contact: 03/07/2016
Data Release Frequency: Varies

DRYCLEANERS: Permitted Drycleaner Facility Listing

A listing of permitted drycleaner facilities in the state.

Date of Government Version: 10/05/2015
Date Data Arrived at EDR: 10/08/2015
Date Made Active in Reports: 11/16/2015
Number of Days to Update: 39

Source: Department of Health
Telephone: [REDACTED]
Last EDR Contact: 01/04/2016
Next Scheduled EDR Contact: 04/18/2016
Data Release Frequency: Varies

BROWNFIELDS: Brownfields Sites

With certain legal exclusions and additions, the term 'brownfield site' means real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant.

Date of Government Version: 12/02/2014
Date Data Arrived at EDR: 12/22/2014
Date Made Active in Reports: 01/27/2015
Number of Days to Update: 36

Source: Department of Health
Telephone: [REDACTED]
Last EDR Contact: 11/25/2015
Next Scheduled EDR Contact: 03/07/2016
Data Release Frequency: Varies

CDL: Clandestine Drug Lab Listing

A listing of clandestine drug lab site locations.

Date of Government Version: 08/04/2010
Date Data Arrived at EDR: 09/10/2010
Date Made Active in Reports: 10/22/2010
Number of Days to Update: 42

Source: Department of Health
Telephone: [REDACTED]
Last EDR Contact: 11/24/2015
Next Scheduled EDR Contact: 03/14/2016
Data Release Frequency: Varies

AIRS: List of Permitted Facilities

A listing of permitted facilities in the state.

Date of Government Version: 10/06/2015
Date Data Arrived at EDR: 10/08/2015
Date Made Active in Reports: 11/06/2015
Number of Days to Update: 29

Source: Department of Health
Telephone: [REDACTED]
Last EDR Contact: 01/04/2016
Next Scheduled EDR Contact: 04/18/2016
Data Release Frequency: Varies

TRIBAL RECORDS

INDIAN RESERV: Indian Reservations

This map layer portrays Indian administered lands of the United States that have any area equal to or greater than 640 acres.

Date of Government Version: 12/31/2005
Date Data Arrived at EDR: 12/08/2006
Date Made Active in Reports: 01/11/2007
Number of Days to Update: 34

Source: USGS
Telephone: [REDACTED]
Last EDR Contact: 01/15/2016
Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: Semi-Annually

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN ODI: Report on the Status of Open Dumps on Indian Lands
Location of open dumps on Indian land.

Date of Government Version: 12/31/1998
Date Data Arrived at EDR: 12/03/2007
Date Made Active in Reports: 01/24/2008
Number of Days to Update: 52

Source: Environmental Protection Agency
Telephone: [REDACTED]
Last EDR Contact: 11/06/2015
Next Scheduled EDR Contact: 02/15/2016
Data Release Frequency: Varies

INDIAN LUST R7: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Iowa, Kansas, and Nebraska

Date of Government Version: 03/30/2015
Date Data Arrived at EDR: 04/28/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 55

Source: EPA Region 7
Telephone: [REDACTED]
Last EDR Contact: 10/08/2015
Next Scheduled EDR Contact: 02/08/2016
Data Release Frequency: Varies

INDIAN LUST R6: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in New Mexico and Oklahoma.

Date of Government Version: 05/13/2015
Date Data Arrived at EDR: 08/03/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 71

Source: EPA Region 6
Telephone: [REDACTED]
Last EDR Contact: 10/26/2015
Next Scheduled EDR Contact: 02/08/2016
Data Release Frequency: Varies

INDIAN LUST R1: Leaking Underground Storage Tanks on Indian Land
A listing of leaking underground storage tank locations on Indian Land.

Date of Government Version: 10/27/2015
Date Data Arrived at EDR: 10/29/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 67

Source: EPA Region 1
Telephone: [REDACTED]
Last EDR Contact: 10/27/2015
Next Scheduled EDR Contact: 02/08/2016
Data Release Frequency: Varies

INDIAN LUST R5: Leaking Underground Storage Tanks on Indian Land
Leaking underground storage tanks located on Indian Land in Michigan, Minnesota and Wisconsin.

Date of Government Version: 11/04/2015
Date Data Arrived at EDR: 11/13/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 52

Source: EPA, Region 5
Telephone: [REDACTED]
Last EDR Contact: 10/26/2015
Next Scheduled EDR Contact: 02/08/2016
Data Release Frequency: Varies

INDIAN LUST R10: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Alaska, Idaho, Oregon and Washington.

Date of Government Version: 07/21/2015
Date Data Arrived at EDR: 07/29/2015
Date Made Active in Reports: 10/13/2015
Number of Days to Update: 76

Source: EPA Region 10
Telephone: [REDACTED]
Last EDR Contact: 01/07/2016
Next Scheduled EDR Contact: 02/08/2016
Data Release Frequency: Quarterly

INDIAN LUST R8: Leaking Underground Storage Tanks on Indian Land
LUSTs on Indian land in Colorado, Montana, North Dakota, South Dakota, Utah and Wyoming.

Date of Government Version: 04/30/2015
Date Data Arrived at EDR: 05/05/2015
Date Made Active in Reports: 06/22/2015
Number of Days to Update: 48

Source: EPA Region 8
Telephone: [REDACTED]
Last EDR Contact: 10/08/2015
Next Scheduled EDR Contact: 02/08/2016
Data Release Frequency: Quarterly

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN LUST R9: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Arizona, California, New Mexico and Nevada

Date of Government Version: 01/08/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/08/2015	Telephone: [REDACTED]
Date Made Active in Reports: 02/09/2015	Last EDR Contact: 10/30/2015
Number of Days to Update: 32	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Quarterly

INDIAN LUST R4: Leaking Underground Storage Tanks on Indian Land LUSTs on Indian land in Florida, Mississippi and North Carolina.

Date of Government Version: 11/24/2015	Source: EPA Region 4
Date Data Arrived at EDR: 12/01/2015	Telephone: [REDACTED]
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 10/26/2015
Number of Days to Update: 34	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Semi-Annually

INDIAN UST R1: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont and ten Tribal Nations).

Date of Government Version: 10/20/2015	Source: EPA, Region 1
Date Data Arrived at EDR: 10/29/2015	Telephone: [REDACTED]
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 10/27/2015
Number of Days to Update: 67	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Varies

INDIAN UST R5: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 5 (Michigan, Minnesota and Wisconsin and Tribal Nations).

Date of Government Version: 11/05/2015	Source: EPA Region 5
Date Data Arrived at EDR: 11/13/2015	Telephone: [REDACTED]
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 10/26/2015
Number of Days to Update: 52	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Varies

INDIAN UST R6: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 6 (Louisiana, Arkansas, Oklahoma, New Mexico, Texas and 65 Tribes).

Date of Government Version: 05/13/2015	Source: EPA Region 6
Date Data Arrived at EDR: 08/03/2015	Telephone: [REDACTED]
Date Made Active in Reports: 10/13/2015	Last EDR Contact: 10/26/2015
Number of Days to Update: 71	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Semi-Annually

INDIAN UST R7: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 7 (Iowa, Kansas, Missouri, Nebraska, and 9 Tribal Nations).

Date of Government Version: 09/23/2014	Source: EPA Region 7
Date Data Arrived at EDR: 11/25/2014	Telephone: [REDACTED]
Date Made Active in Reports: 01/29/2015	Last EDR Contact: 10/26/2015
Number of Days to Update: 65	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

INDIAN UST R8: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, Wyoming and 27 Tribal Nations).

Date of Government Version: 07/28/2015	Source: EPA Region 8
Date Data Arrived at EDR: 08/14/2015	Telephone: [REDACTED]
Date Made Active in Reports: 10/13/2015	Last EDR Contact: 07/22/2015
Number of Days to Update: 60	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Quarterly

INDIAN UST R9: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 9 (Arizona, California, Hawaii, Nevada, the Pacific Islands, and Tribal Nations).

Date of Government Version: 12/14/2014	Source: EPA Region 9
Date Data Arrived at EDR: 02/13/2015	Telephone: [REDACTED]
Date Made Active in Reports: 03/13/2015	Last EDR Contact: 10/30/2015
Number of Days to Update: 28	Next Scheduled EDR Contact: 02/09/2016
	Data Release Frequency: Quarterly

INDIAN UST R10: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 10 (Alaska, Idaho, Oregon, Washington, and Tribal Nations).

Date of Government Version: 07/21/2015	Source: EPA Region 10
Date Data Arrived at EDR: 07/29/2015	Telephone: [REDACTED]
Date Made Active in Reports: 10/13/2015	Last EDR Contact: 01/07/2016
Number of Days to Update: 76	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Quarterly

INDIAN UST R4: Underground Storage Tanks on Indian Land

The Indian Underground Storage Tank (UST) database provides information about underground storage tanks on Indian land in EPA Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee and Tribal Nations)

Date of Government Version: 11/24/2015	Source: EPA Region 4
Date Data Arrived at EDR: 12/01/2015	Telephone: [REDACTED]
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 10/26/2015
Number of Days to Update: 34	Next Scheduled EDR Contact: 02/08/2016
	Data Release Frequency: Semi-Annually

INDIAN VCP R1: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 1.

Date of Government Version: 09/29/2014	Source: EPA, Region 1
Date Data Arrived at EDR: 10/01/2014	Telephone: [REDACTED]
Date Made Active in Reports: 11/06/2014	Last EDR Contact: 12/28/2015
Number of Days to Update: 36	Next Scheduled EDR Contact: 04/11/2016
	Data Release Frequency: Varies

INDIAN VCP R7: Voluntary Cleanup Priority Listing

A listing of voluntary cleanup priority sites located on Indian Land located in Region 7.

Date of Government Version: 03/20/2008	Source: EPA, Region 7
Date Data Arrived at EDR: 04/22/2008	Telephone: [REDACTED]
Date Made Active in Reports: 05/19/2008	Last EDR Contact: 04/20/2009
Number of Days to Update: 27	Next Scheduled EDR Contact: 07/20/2009
	Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

EDR PROPRIETARY RECORDS

EDR MGP: EDR Proprietary Manufactured Gas Plants

The EDR Proprietary Manufactured Gas Plant Database includes records of coal gas plants (manufactured gas plants) compiled by EDR's researchers. Manufactured gas sites were used in the United States from the 1800's to 1950's to produce a gas that could be distributed and used as fuel. These plants used whale oil, rosin, coal, or a mixture of coal, oil, and water that also produced a significant amount of waste. Many of the byproducts of the gas production, such as coal tar (oily waste containing volatile and non-volatile chemicals), sludges, oils and other compounds are potentially hazardous to human health and the environment. The byproduct from this process was frequently disposed of directly at the plant site and can remain or spread slowly, serving as a continuous source of soil and groundwater contamination.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

EDR Hist Auto: EDR Exclusive Historic Gas Stations

EDR has searched selected national collections of business directories and has collected listings of potential gas station/filling station/service station sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include gas station/filling station/service station establishments. The categories reviewed included, but were not limited to gas, gas station, gasoline station, filling station, auto, automobile repair, auto service station, service station, etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

EDR Hist Cleaner: EDR Exclusive Historic Dry Cleaners

EDR has searched selected national collections of business directories and has collected listings of potential dry cleaner sites that were available to EDR researchers. EDR's review was limited to those categories of sources that might, in EDR's opinion, include dry cleaning establishments. The categories reviewed included, but were not limited to dry cleaners, cleaners, laundry, laundromat, cleaning/laundry, wash & dry etc. This database falls within a category of information EDR classifies as "High Risk Historical Records", or HRHR. EDR's HRHR effort presents unique and sometimes proprietary data about past sites and operations that typically create environmental concerns, but may not show up in current government records searches.

Date of Government Version: N/A
Date Data Arrived at EDR: N/A
Date Made Active in Reports: N/A
Number of Days to Update: N/A

Source: EDR, Inc.
Telephone: N/A
Last EDR Contact: N/A
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

RGH HWS: Recovered Government Archive State Hazardous Waste Facilities List

The EDR Recovered Government Archive State Hazardous Waste database provides a list of SHWS incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Health in Hawaii.

Date of Government Version: N/A
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/08/2014
Number of Days to Update: 191

Source: Department of Health
Telephone: N/A
Last EDR Contact: 06/01/2012
Next Scheduled EDR Contact: N/A
Data Release Frequency: Varies

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

RGA LUST: Recovered Government Archive Leaking Underground Storage Tank

The EDR Recovered Government Archive Leaking Underground Storage Tank database provides a list of LUST incidents derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Health in Hawaii.

Date of Government Version: N/A	Source: Department of Health
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 01/03/2014	Last EDR Contact: 06/01/2012
Number of Days to Update: 186	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

RGA LF: Recovered Government Archive Solid Waste Facilities List

The EDR Recovered Government Archive Landfill database provides a list of landfills derived from historical databases and includes many records that no longer appear in current government lists. Compiled from Records formerly available from the Department of Health in Hawaii.

Date of Government Version: N/A	Source: Department of Health
Date Data Arrived at EDR: 07/01/2013	Telephone: N/A
Date Made Active in Reports: 01/17/2014	Last EDR Contact: 06/01/2012
Number of Days to Update: 200	Next Scheduled EDR Contact: N/A
	Data Release Frequency: Varies

OTHER DATABASE(S)

Depending on the geographic area covered by this report, the data provided in these specialty databases may or may not be complete. For example, the existence of wetlands information data in a specific report does not mean that all wetlands in the area covered by the report are included. Moreover, the absence of any reported wetlands information does not necessarily mean that wetlands do not exist in the area covered by the report.

Oil/Gas Pipelines

Source: PennWell Corporation

Petroleum Bundle (Crude Oil, Refined Products, Petrochemicals, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)) N = Natural Gas Bundle (Natural Gas, Gas Liquids (LPG/NGL), and Specialty Gases (Miscellaneous)). This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Electric Power Transmission Line Data

Source: PennWell Corporation

This map includes information copyrighted by PennWell Corporation. This information is provided on a best effort basis and PennWell Corporation does not guarantee its accuracy nor warrant its fitness for any particular purpose. Such information has been reprinted with the permission of PennWell.

Sensitive Receptors: There are individuals deemed sensitive receptors due to their fragile immune systems and special sensitivity to environmental discharges. These sensitive receptors typically include the elderly, the sick, and children. While the location of all sensitive receptors cannot be determined, EDR indicates those buildings and facilities - schools, daycares, hospitals, medical centers, and nursing homes - where individuals who are sensitive receptors are likely to be located.

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: [REDACTED]

The database includes a listing of hospitals based on the American Hospital Association's annual survey of hospitals.

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: [REDACTED]

A listing of hospitals with Medicare provider number, produced by Centers of Medicare & Medicaid Services, a federal agency within the U.S. Department of Health and Human Services.

Nursing Homes

Source: National Institutes of Health

Telephone: [REDACTED]

Information on Medicare and Medicaid certified nursing homes in the United States.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Public Schools

Source: National Center for Education Statistics

Telephone: [REDACTED]

The National Center for Education Statistics' primary database on elementary and secondary public education in the United States. It is a comprehensive, annual, national statistical database of all public elementary and secondary schools and school districts, which contains data that are comparable across all states.

Private Schools

Source: National Center for Education Statistics

Telephone: [REDACTED]

The National Center for Education Statistics' primary database on private school locations in the United States.

Flood Zone Data: This data, available in select counties across the country, was obtained by EDR in 2003 & 2011 from the Federal Emergency Management Agency (FEMA). Data depicts 100-year and 500-year flood zones as defined by FEMA.

NWI: National Wetlands Inventory. This data, available in select counties across the country, was obtained by EDR in 2002, 2005 and 2010 from the U.S. Fish and Wildlife Service.

State Wetlands Data: Wetlands Inventory

Source: Office of Planning

Telephone: [REDACTED]

















Earthquake Fault Lines: The fault lines displayed on EDR's Topographic map are digitized quaternary faultlines, prepared in 1975 by the United State Geological Survey

STREET AND ADDRESS INFORMATION

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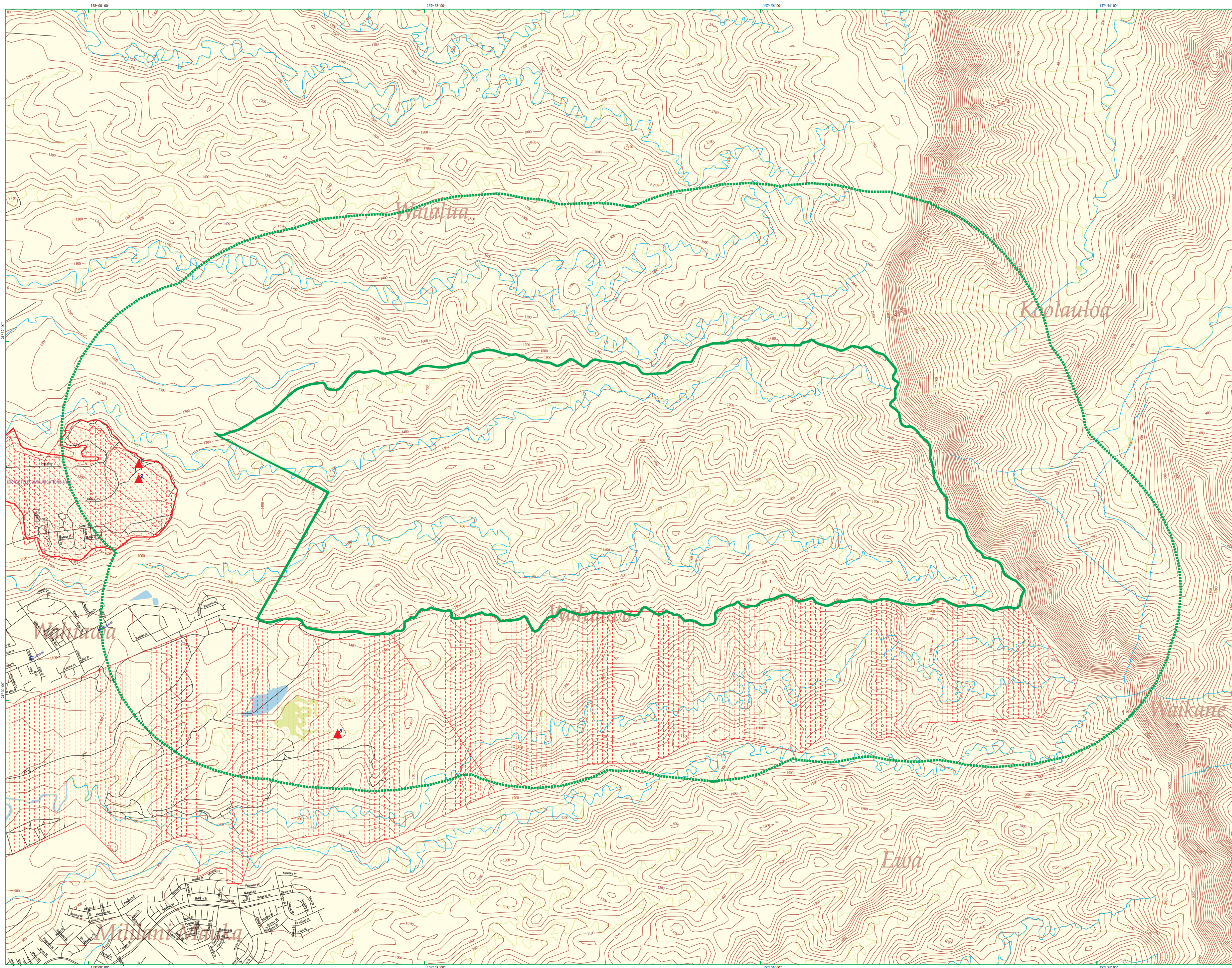
EDR DataMap® Area Study

Poamoho

-  Listed Sites
-  Earthquake Epicenters (Richter 5 or greater)
-  Search Boundary
-  Roads
-  Major Roads
-  Waterways
-  Railroads
-  Contour Lines
-  Pipelines
-  Powerlines
-  Fault Lines
-  Water
-  Superfund Sites
-  Federal DOD Sites
-  Indian Reservations BIA
-  National Wetland Inventory



Scale in Miles



Count: 41 records

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
EWA BEACH	1003879126	MILILANI TOWN LDFL	TMK: 9-4-05:11 HWY H-2	96789	CERCLIS-NFRAP
HALEIWA	U003221987	PAUMALU EARTH STATION - COMSAT	COMSAT CORPORATION 58-350 KAMEHAMEHA HWY	96712	LUST
HALEIWA	1006819286	KAWAIOLOA LANDFILL	KAWAIOLOA RD	96712	SHWS
HALEIWA	1001126976	VITRO SERVICES CORP IRSP DIV	SATELLITE TRACKNG STA KEANA PT	96712	RCRA-SQG
HALEIWA	1006820954	HALEIWA CANOE CLUB	C ST	96712	SHWS
HALEIWA	U004109520	KAWAIOLOA CAMP	TURN IN AT ALUVION NURSERY (61-676 KAM HWY).	96712	UST
HALEIWA	S110061846	TWIN BRIDGE ROAD DRUM DUMPING-HALEIWA	TWIN BRIDGE GATE AREA (OPAEULA 3-D)	96712	SHWS
HAUULA	1006821012	HANAKAILIO BEACH	HANAKAILIO BEACH	96717	SHWS
HONOLULU COUNTY	1008171650	POAMOHO SEWAGE SPILL	UNKNOWN	00000	FINDS
KAHALUU	U004228170	C&CH AHUIMANU WASTEWATER PRELIMINARY TREATMENT FACILITY	47-305 KAHEKILI HWY	96744	LUST, UST
KAHALUU	S110169200	HECO TRANSFORMER 56646	47-195 KAMEHAMEHA HWY	96744	SHWS, SPILLS, ENG CONTROLS, IN CONTROL
KANEOHE	1000122673	J & M AUTOMOTIVE	45 620 C KAM HWY	96744	RCRA NonGen / NLR, FINDS
KANEOHE	1017770188	SAFEWAY STORE #207	46-065 KAMEHAMEHA HIGHWAY	96744	RCRA-CESQG
KANEOHE	1016956263	PETCO # 1182	46-023 KAMEHAMEHA HWY, UNIT G	96744	RCRA-CESQG
KUALOA	S111704786	KUALOA PLANTATION MILL	49-586 KAMEHAMEHA HWY	96744	SHWS
MILILANI	U004228173	WAIPIO WASTEWATER PUMP STATION	95-009 KAMEHAMEHA HWY	96789	LUST, UST
MILILANI	1004688867	MILILANI CHEVRON	95-130 KAMEHAMEHA HWY	96789	RCRA-CESQG
MILILANI	1000893811	KIPAPA FUEL STORAGE ANNEX	OFF ROUTE 99 (KAMEHAMEHA HWY)	96789	CERCLIS
PUNALUU	S106820159	PUNALUU WELLS II- MERCURY SPILL	HALEAHA RD	96717	SHWS
SCHOFIELD	1007372485	POAMOHO RAG DISPOSAL AREA	SOUTHERN END OF FIELD 202A	96786	CERCLIS
SCHOFIELD BARRACKS	U003541847	POAMOHO CRATE YARD / FIELD 9	ADDRESS UNKNOWN	96786	UST
SCHOFIELD BARRACKS	U001236434	HOUSING FINANCE AND DEVELOPMENT	CALIFORNIA AVE	96786	UST
SCHOFIELD BARRACKS	U001236132	TEXACO STATION (FORMER)	95-116 KAMEHAMEHA HWY	96786	UST
WAHIAWA	1006819278	KAUKONAHUA BRIDGE	KAUKONAHUA STREAM RD & WILIKINA DR	96786	SHWS, SPILLS
WAHIAWA	1000306735	OPANA	SOUTH OF KAWELA OAHU ISLAND	96786	CERCLIS
WAHIAWA	S108008485	BUILDING QUAD-J	SCHOFIELD BARRACKS	96786	SHWS
WAHIAWA	S110061827	SCHOFIELD BARRACKS, UST QUAD E #549-1	UST QUAD E #549-1	96786	SHWS
WAHIAWA	S110061819	SCHOFIELD BARRACKS, UST QUAD B #156-1	UST QUAD B #156-1	96786	SHWS
WAHIAWA	S110061822	SCHOFIELD BARRACKS, UST QUAD B #157-2	UST QUAD B #157-2	96786	SHWS
WAHIAWA	S110061828	SCHOFIELD BARRACKS, UST QUAD E #550-1	UST QUAD E #550-1	96786	SHWS
WAHIAWA	S110061830	SCHOFIELD BARRACKS, UST QUAD E #551-1	UST QUAD E #551-1	96786	SHWS
WAHIAWA	S110061818	SCHOFIELD BARRACKS, UST QUAD B #155-1	UST QUAD B #155-1	96786	SHWS
WAHIAWA	S110061823	SCHOFIELD BARRACKS, UST QUAD B #158-1	UST QUAD B #158-1	96786	SHWS
WAHIAWA	S110061824	SCHOFIELD BARRACKS, UST QUAD B #158-2	UST QUAD B #158-2	96786	SHWS
WAHIAWA	S110061825	SCHOFIELD BARRACKS, UST QUAD C #355-1	UST QUAD C #355-1	96786	SHWS
WAHIAWA	S110061829	SCHOFIELD BARRACKS, UST QUAD E #550-2	UST QUAD E #550-2	96786	SHWS
WAHIAWA	S110061832	SCHOFIELD BARRACKS, UST QUAD E #552-2	UST QUAD E #552-2	96786	SHWS
WAHIAWA	S110061821	SCHOFIELD BARRACKS, UST QUAD B #157-1	UST QUAD B #157-1	96786	SHWS
WAHIAWA	S110061820	SCHOFIELD BARRACKS, UST QUAD B #156-2	UST QUAD B #156-2	96786	SHWS
WAHIAWA	S110061826	SCHOFIELD BARRACKS, UST QUAD C #358-1	UST QUAD C #358-1	96786	SHWS
WAHIAWA	S117391490	WHITMORE VILLAGE	WHITMORE AVE	96786	SHWS, ENG CONTROLS, INST CON

TABLE A1: Resolution of 42 record Orphan Summaries

EDR ID	Site Name and Address	Location relative to Dole Parcel(s)	Regulatory Database	Status	Potential Concern?
1003879126	Mililani Town LDFL, north east of HWY H-2 (TMK: 9-5-03-01)	>1 mile distance from nearest site boundary	CERCLIS	No Further Remedial Action Planned (NFRAP) (2013)	None: Distance
U003221987	Paumalu Earth Station – COMSAT Corporation 58-350 Kamehameha Highway	>1 mile distance from nearest site boundary	LUST	NFA (1994)	None: Distance
1006819286	Kawailoa Landfill – Kawailoa Road (62-180 Kawailoa Dr, Haleiwa)	>1 mile distance from nearest site boundary	SHWS	ISST-NFA (1996)	None: Distance
1001126976	Vitro Services Corporation IRSP Division – Satellite tracking station Kaena Point Bldg. 42, Haleiwa, HI 96712	>1 mile distance from nearest site boundary	RCRA-SQG	Small quantity generators (SQGs) - generate between 100 kg and 1,000 kg of hazardous waste per month	None: Distance
1006820954	Haleiwa Canoe Club – C St.	>1 mile distance from nearest site boundary	SHWS	NFA (2004) *Former Haleiwa Canoe Club UST Closure - no address available	None: Distance
U004109520	Kawailoa Camp – 61-676 Kamehameha Hwy, Haleiwa	>1 mile distance from nearest site boundary	UST	Permanently out of use (1999)	None: Distance and permanent closure
S110061846	Twin Bridge Road Drum Dumping Area – Cane Haul Road between Opaeha Road and Twin Bridge Road	>1 mile distance from nearest site boundary	SHWS	Hazard Present – Priority Low. Ongoing response to abandoned leaking drums; including confirmation sampling.	None: Distance
1006821012	Hanakailio Beach – Hanakailio Beach (Kahuku, North of Marconi Road)	>1 mile distance from nearest site boundary	SHWS	NFA – hazard type undetermined (1989)	None: Distance
1008171650	Poamoho Sewage Spill EPA Registry Id: 110020736881	Unknown	LUST, UST, Enforcement and Compliance History Sites (ECHO)	CWA 3- Year Compliance Status No Violation; last inspection 5/4/2001	Report indicated no current compliance issues. Sewage spills unlikely

EDR ID	Site Name and Address	Location relative to Dole Parcel(s)	Regulatory Database	Status	Potential Concern?
U004228170	C&CH Ahuimanu Wastewater Preliminary Treatment Facility 47-305 Kahekili Highway, Kahaluu, HI 96744	>1 mile distance from nearest site boundary	LUST, UST	NFA – 1997	None: Distance, located on Maui
S110169200	HECO Transformer 56646, 47-195 Kamehameha Highway, Kahaluu, HI 96744	>1 mile distance from nearest site boundary	SHWS, SPILLS, Eng Controls, IN Control	26 gallons of oil spilled, Hazard managed with controls. NFA – 2012	None. Distance
1000122673	J & M Automotive, 45-620 Kamehameha Highway, Kāneʻohe, HI 96744	>1 mile distance from nearest site boundary	RCRA NonGen/NLR, FINDS, Enforcement and Compliance History Sites (ECHO)	NonGen does not presently generate hazardous waste	None. Distance
1017770188	Safeway Store #207, 46-065 Kamehameha Highway, Kāneʻohe, HI 96744	>1 mile distance from nearest site boundary	RCRA-CESQG	Small quantity generators (SQGs) - generate between 100 kg and 1,000 kg of hazardous waste per month	None. Distance, no violations found
1016956263	Petco #1182, 46-023 Kamehameha Highway Unit G, Kāneʻohe, HI 96744	>1 mile distance from nearest site boundary	RCRA-CESQG	Small quantity generators (SQGs) - generate between 100 kg and 1,000 kg of hazardous waste per month	None. Distance, no violations found
S111704786	Kualoa Plantation Mill, 49-586 Kamehameha Highway, Kualoa, HI 96744	>1 mile distance from nearest site boundary	SHWS	NFA – 2012	None. Distance
U004228173	Waipio Wastewater Pump Station, 95-009 Kamehameha Highway, Mililani, HI 96789 (Mililani Shopping Center)	>1 mile distance from nearest site boundary	LUST, UST	Tank ID R-M-1 (560-gallons diesel), m-1 (1,000 gallons diesel), R-M-1 permanently out of use, date closed March 1996. M-1 currently in use.	None. Distance, NFA 1997

EDR ID	Site Name and Address	Location relative to Dole Parcel(s)	Regulatory Database	Status	Potential Concern?
1004688867	Mililani Chevron, 95-130 Kamehameha Highway, Mililani, HI 96789 (Mililani Shopping Center)	>1 mile distance from nearest site boundary	RCRA-CESQG	Small quantity generators (SQGs) - generate between 100 kg and 1,000 kg of hazardous waste per month	None. Distance, no violations found
1000893811	Kipapa Fuel Storage Annex, Off Route 99, Mililani, HI 96789	>1 mile distance from nearest site boundary	CERCLIS	NFA – 2012	None. Distance, Non-NPL
S106820159	Punaluu Wells II, Mercury Spill – end of Haleaha Road Punaluu	>1 mile distance from nearest site boundary	SHWS	NFA (1995) – site closure	None: Distance and approved for Unrestricted Residential Use
1007372485	Poamoho Rag Disposal Area – Southern end of Field 202A, Schofield (Wilikina Drive)	>1 mile distance from nearest site boundary	CERCLIS	No Further Remedial Action Planned (NFRAP) (2007)	None: Archived superfund site by the EPA, Non-NPL
U003541847	Poamoho Crate Yard/Field 9 – east of Kolekole Avenue and Foote Avenue intersection on Schofield Barracks, HI 96786	>1 mile distance from nearest site boundary	UST	Tank ID R-1 (6,000-gallons gasoline), R-2 (6,000 gallons diesel), R-3 (2,000 gallons diesel). Permanently out of use, date closed March 1987.	None. Distance, permanent closure
U001236434	Housing Finance and Development – California Avenue	>1 mile distance from nearest site boundary	UST	Tank ID R-1 (550-gallons gasoline) & R-2 (4,000-gallons Gasoline) Permanently Out of Use. Date closed not reported	None: Distance, permanent closure
U001236132	Texaco Station (former) – 95-116 Kamehameha Highway	>1 mile distance from nearest site boundary	UST	Tanks ID R-001 to 006 status Permanently Out of Use (20,550-gallons substance classified as “other” by EDR) Date closed not reported	None: Distance, permanent closure

EDR ID	Site Name and Address	Location relative to Dole Parcel(s)	Regulatory Database	Status	Potential Concern?
U001236407	Ameron H C&D – Kaukonahua Plant/Wilikina and Kamananui	>1 mile distance from nearest site boundary	UST	Tank ID R-1 (5,000-gallons diesel) Permanently Out of Use – closed in 1989	None: Distance, permanent closure
1006819278	Kaukonahua Bridge – Kaukonahua Stream Road and Wilikina Drive	>1 mile distance from nearest site boundary	SHWS, Spills	NFA (1996); site closure type Historic NFA – Incomplete Documentation	None: Distance and Historic NFA
1000306735	Opana – South of Kawela O‘ahu Island	>1 mile distance from nearest site boundary	CERCLIS (EPA ID# HI1170090053)	Part of NPL Site; Priority level not reported (discovery date not reported - completion date 1987)	None: Distance; incomplete EDR data available. Almost 30 years since completion.
S108008485	Building Quad J – Schofield Barracks	>1 mile distance from nearest site boundary	SHWS	NFA (1996), Historic NFA – Incomplete Documentation	None: Distance and Historic NFA
S110061827	Schofield Barracks, UST Quad E #549-1, UST Quad E #549-1	>1 mile distance from nearest site boundary)	SHWS	NFA (1996), Historic NFA – Incomplete Documentation	None: Distance and Historic NFA; UST Closed
S110061819	Schofield Barracks, UST Quad B #156-1, UST Quad B #156-1	>1 mile distance from nearest site boundary	SHWS	NFA (1996), Historic NFA – Incomplete Documentation	None: Distance and Historic NFA; UST Closed
S110061822	Schofield Barracks, UST Quad B #157-2, UST Quad B #157-2	>1 mile distance from nearest site boundary	SHWS	NFA (1996), Historic NFA – Incomplete Documentation	None: Distance and Historic NFA; UST Closed
S110061828	Schofield Barracks, UST Quad E #550-1, UST Quad E #550-1	>1 mile distance from nearest site boundary	SHWS	NFA (1996), Historic NFA – Incomplete Documentation	None: Distance and Historic NFA; UST Closed
S110061830	Schofield Barracks, UST Quad E #551-1, UST Quad E #551-1	>1 mile distance from nearest site boundary	SHWS	NFA (1996), Historic NFA – Incomplete Documentation	None: Distance and Historic NFA; UST Closed
S110061818	Schofield Barracks, UST Quad B #155-1, UST Quad B #155-1	>1 mile distance from nearest site boundary	SHWS	NFA (2001), Historic NFA – Incomplete Documentation	None: Distance and Historic NFA; Final Amended UST Closure Report

EDR ID	Site Name and Address	Location relative to Dole Parcel(s)	Regulatory Database	Status	Potential Concern?
S110061823	Schofield Barracks, UST Quad B #158-1, UST Quad B #158-1	>1 mile distance from nearest site boundary	SHWS	NFA (1996), Historic NFA – Incomplete Documentation	None: Distance and Historic NFA; UST Closed
S110061824	Schofield Barracks, UST Quad B #158-2, UST Quad B #158-2	>1 mile distance from nearest site boundary	SHWS	NFA (1996), Historic NFA – Incomplete Documentation	None: Distance and Historic NFA; UST Closed
S110061825	Schofield Barracks, UST Quad C #355-1, UST Quad C #355-1	>1 mile distance from nearest site boundary	SHWS	NFA (1996), Historic NFA – Incomplete Documentation	None: Distance and Historic NFA; UST Closed
S110061829	Schofield Barracks, UST Quad E #550-2, UST Quad E #550-2	>1 mile distance from nearest site boundary	SHWS	NFA (1996), Historic NFA – Incomplete Documentation	None: Distance and Historic NFA; UST Closed
S110061832	Schofield Barracks, UST Quad E #552-2, UST Quad E #552-2	>1 mile distance from nearest site boundary	SHWS	NFA (1996), Historic NFA – Incomplete Documentation	None: Distance and Historic NFA; UST Closed
S110061821	Schofield Barracks, UST Quad B #157-1, UST Quad B #157-1	>1 mile distance from nearest site boundary	SHWS	NFA (1996), Historic NFA – Incomplete Documentation	None: Distance and Historic NFA; UST Closed
S110061820	Schofield Barracks, UST Quad B #156-2, UST Quad B #156-2	>1 mile distance from nearest site boundary	SHWS	NFA (2001), Historic NFA – Incomplete Documentation	None: Distance and Historic NFA; Final Amended UST Closure Report
S110061826	Schofield Barracks, UST Quad C #358-1, UST Quad C #358-1	>1 mile distance from nearest site boundary	SHWS	NFA (1996), Historic NFA – Incomplete Documentation	None: Distance and Historic NFA; UST Closed
S117391490	Whitmore Village – Whitmore Avenue	>1 mile distance from nearest site boundary	SHWS, Eng. Controls, Inst. Controls	NFA with institutional controls; NFA site closure 2014	None: NFA

Poamoho

TMK#720010060000

Wahiawa, Hawaii 96786

Inquiry Number: 4518245.5

February 3, 2016

The EDR Environmental LienSearch™



6 Armstrong Road,
Fourth Floor
Shelton, CT 06484
[REDACTED]
www.edrnet.com

EDR Environmental LienSearch™ Report

The EDR Environmental LienSearch Report provides results from a search of available current land title records for environmental cleanup liens and other activity and use limitations, such as engineering controls and institutional controls.

A network of professional, trained researchers, following established procedures, uses client supplied address information to:

- search for parcel information and/or legal description;
- search for ownership information;
- research official land title documents recorded at jurisdictional agencies such as recorders' offices, registries of deeds, county clerks' offices, etc.;
- access a copy of the deed;
- search for environmental encumbering instrument(s) associated with the deed;
- provide a copy of any environmental encumbrance(s) based upon a review of key words in the instrument(s) (title, parties involved, and description); and
- provide a copy of the deed or cite documents reviewed.

Thank you for your business.
Please contact EDR at [REDACTED]
with any questions or comments.

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EDR Environmental LienSearch™ Report

TARGET PROPERTY INFORMATION

ADDRESS

POAMOHO
TMK#720010060000
WAHIAWA, HAWAII 96786

RESEARCH SOURCE

Source 1: Honolulu Assessor
Honolulu County, Hawaii

Source 2: Honolulu Recorder
Honolulu County, Hawaii

PROPERTY INFORMATION

Deed 1:

Title is vested in: State of Hawaii

Legal Description: 4390 Acres

Legal Current Owner: State of Hawaii

Property Identifiers: 720010060000

Comments: Public records of Honolulu County, Hawaii were searched from January 1, 2000 to January 22, 2016, and no deeds vesting title in the subject property were found of record during the period searched.

EDR Environmental LienSearch™ Report

ENVIRONMENTAL LIEN

Environmental Lien: Found ☐ Not Found ☒

OTHER ACTIVITY AND USE LIMITATIONS (AULs)

Other AUL's: Found ☐ Not Found ☒

EDR Environmental LienSearch™ Report

DEED EXHIBIT A

Previous Parcel	Next Parcel	Return to Main Search Page	Honolulu Home	Real Property Home
Owner and Parcel Information Print Owner Info				
Parcel Number	720010060000		Data current as of	February 1, 2016
Owner Name	STATE OF HAWAII Fee Owner UNITED STATES OF AMERICA Lessee		Project Name	
Location Address	EWA FOREST RESERVE		Plat Map	Plat Map PDF
Property Class	PRESERVATION		Parcel Map	GIS Parcel Map
Land Area (approximate sq ft)	191,228,400		Legal Information	
Land Area (acres)	4390			

Assessment Information Show Historical Assessments Print Assessment Info											
Assessment Year	Property Class	Assessed Land Value	Dedicated Use Value	Land Exemption	Net Taxable Land Value	Assessed Building Value	Building Exemption	Net Taxable Building Value	Total Property Assessed Value	Total Property Exemption	Total Net Taxable Value
2016	PRESERVATION	\$ 6,585,000	\$ 0	\$ 6,585,000	\$ 0	\$ 0	\$ 0	\$ 0	\$ 6,585,000	\$ 6,585,000	\$ 0

Appeal Information Print Appeal Info											
No appeal information on parcel.											

Land Information Print Land			
Property Class	Square Footage	Acreage	Agricultural Use Indicator
PRESERVATION	191,228,400	4390	

Improvement Information											
No improvement information available for this parcel.											

Other Building and Yard Improvements			
Description	Quantity	Year Built	Area
No information associated with this parcel.			

Sales Information Print Sales Info								
Sale Date	Sale Amount	Instrument #	Instrument Type	Instrument Description	Date of Recording	Land Court Document Number	Cert #	Book/Page
No sales information associated with this parcel.								

Current Tax Bill Information 2016 Tax Payments Division Show Historical Taxes Treasury Current Bill										
Tax Period	Description	Original Due Date	Taxes Assessment	Tax Credits	Net Tax	Penalty	Interest	Other	Amount Due	
									\$ 0.00	
No Tax Information available on this parcel.										

Previous Parcel	Next Parcel	Return to Main Search Page	Honolulu Home	Real Property Home
The Honolulu Tax Assessor's Office makes every effort to produce the most accurate information possible. No warranties,				

expressed or implied, are provided for the data herein, its use or interpretation. Website Updated: February 1, 2016

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Poamoho

Wahiawa, HI 96786

Inquiry Number: 4518245.6w

January 21, 2016

EDR DataMap™ Well Search Report

Thank you for your business.
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with any questions or comments.

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GEOCHECK VERSION 2.1 SUMMARY

FEDERAL DATABASE WELL INFORMATION

MAP ID	WELL ID
2	USGS40000270976
2	USGS40000270977

STATE WATER WELL INFORMATION

MAP ID	WELL ID
1	HI9000000002195
2	HI9000000002183
2	HI9000000002182

PUBLIC WATER SUPPLY SYSTEM INFORMATION

NO WELLS FOUND

USGS TOPOGRAPHIC MAP(S)

21157-D8 WAIPAHU, HI
21157-E8 HAUULA, HI
21158-E1 HALEIWA, HI

AREA RADON INFORMATION

Federal Area Radon Information for Zip Code: 96712

Number of sites tested: 1

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	-0.200 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

Federal Area Radon Information for Zip Code: 96730

Number of sites tested: 2

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	-0.150 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

Federal Area Radon Information for Zip Code: 96786

Number of sites tested: 3

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.700 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

GEOCHECK VERSION 2.1 SUMMARY

AREA RADON INFORMATION

Federal Area Radon Information for Zip Code: 96744

Number of sites tested: 22

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.091 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

Federal Area Radon Information for Zip Code: 96789

Number of sites tested: 15

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.053 pCi/L	100%	0%	0%
Living Area - 2nd Floor	Not Reported	Not Reported	Not Reported	Not Reported
Basement	Not Reported	Not Reported	Not Reported	Not Reported

Federal EPA Radon Zone for HONOLULU County: 3

Note: Zone 1 indoor average level > 4 pCi/L.
: Zone 2 indoor average level >= 2 pCi/L and <= 4 pCi/L.
: Zone 3 indoor average level < 2 pCi/L.

Federal Area Radon Information for HONOLULU COUNTY, HI

Number of sites tested: 209

Area	Average Activity	% <4 pCi/L	% 4-20 pCi/L	% >20 pCi/L
Living Area - 1st Floor	0.015 pCi/L	100%	0%	0%
Living Area - 2nd Floor	0.125 pCi/L	100%	0%	0%
Basement	0.415 pCi/L	96%	4%	0%

GEOCHECK VERSION 2.1

STATE DATABASE WELL INFORMATION

Water Well Information:

Map ID:	2	Site ID:	USGS40000270976
Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-213055157592501		
Monloc name:	3-3059-01 W330-1A		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.5121062
Longitude:	-157.9875293	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	986.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		
Aquifer type:	Not Reported		
Construction date:	19400828	Welldepth:	209
Welldepth units:	ft	Wellholedepth:	Not Reported
Wellholedepth units:	Not Reported		

Ground-water levels, Number of Measurements: 0

Map ID:	2	Site ID:	USGS40000270977
Org. Identifier:	USGS-HI		
Formal name:	USGS Hawaii Water Science Center		
Monloc Identifier:	USGS-213055157592502		
Monloc name:	3-3059-02 W330-1B		
Monloc type:	Well		
Monloc desc:	Not Reported		
Huc code:	20060000	Drainagearea value:	Not Reported
Drainagearea Units:	Not Reported	Contrib drainagearea:	Not Reported
Contrib drainagearea units:	Not Reported	Latitude:	21.5121062
Longitude:	-157.9875293	Sourcemap scale:	24000
Horiz Acc measure:	1	Horiz Acc measure units:	seconds
Horiz Collection method:	Interpolated from map		
Horiz coord refsys:	NAD83	Vert measure val:	986.00
Vert measure units:	feet	Vertacc measure val:	5
Vert accmeasure units:	feet		
Vertcollection method:	Interpolated from topographic map		
Vert coord refsys:	HILOCAL	Countrycode:	US
Aquifername:	Not Reported		
Formation type:	Not Reported		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Aquifer type: Not Reported
Construction date: 19410601
Welldepth units: ft
Wellholedepth units: Not Reported

Welldepth: 765
Wellholedepth: Not Reported

Ground-water levels, Number of Measurements: 0

GEOCHECK VERSION 2.1

STATE DATABASE WELL INFORMATION

Water Well Information:

Map ID:	1		
Wid:	3-3154-001	Island:	Oahu
Well name:	Kahana Tunnel 1	Old name:	Not Reported
Yr drilled:	1931		
Driller:	H Olstad		
Quad map:	8		
Long83dd:	-157.903333		
Lat83dd:	21.515278		
Gps:	0	Utm:	-1
Owner user:	Agribusiness Development Corporation, ADC		
Land owner:	Department of Land and Natural Resources, DLNR		
Pump insta:	Not Reported		
Old number:	Not Reported	Well type:	TUN
Casing dia:	Not Reported	Ground el:	800
Well depth:	2000		
Solid case:	Not Reported	Perf case:	Not Reported
Use:	UNU - Unused		
Use year:	Not Reported		
Init head:	800	Init head2:	Not Reported
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported	Test gpm:	Not Reported
Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	TKDC		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	Not Reported
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 5-2-001:001
Aqui code:	30701		
Latest hd:	Not Reported	Wcr:	01-JAN-31
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000002195

Map ID:	2		
Wid:	3-3059-002	Island:	Oahu
Well name:	Wahiawa	Old name:	Not Reported
Yr drilled:	1941		
Driller:	W. Mullin		
Quad map:	8		
Long83dd:	-157.9875		
Lat83dd:	21.512222		
Gps:	0	Utm:	-1
Owner user:	Wahiawa Water		
Land owner:	Not Reported		

GEOCHECK VERSION 2.1

STATE DATABASE WELL INFORMATION

Pump insta:	Not Reported	Well type:	Not Reported
Old number:	330-1B	Ground el:	986
Casing dia:	16		
Well depth:	765	Perf case:	Not Reported
Solid case:	162		
Use:	UNU - Unused		
Use year:	Not Reported	Init head2:	Not Reported
Init head:	304		
Init head3:	Not Reported		
Init cl:	0	Test gpm:	Not Reported
Test date:	Not Reported	Test chlor:	Not Reported
Test ddown:	Not Reported	Test unit:	Not Reported
Test temp:	Not Reported		
Pump gpm:	0	Head feet:	Not Reported
Draft mgy:	Not Reported	Min chlor:	Not Reported
Max chlor:	Not Reported		
Geology:	Not Reported		
Pump yr:	0	Bot hole:	221
Draft yr:	Not Reported	Bot perf:	Not Reported
Bot solid:	824		
Spec capac:	Not Reported		
Pump mgd:	0	Pump elev:	Not Reported
Draft mgd:	Not Reported	Trmk:	(1) 7-2-001:003
Pump depth:	Not Reported		
Aqui code:	30501	Wcr:	01-JAN-41
Latest hd:	Not Reported		
Pir:	Not Reported		
Surveyor:	Not Reported	Site id:	HI9000000002183
T:	Not Reported		

Map ID:	2	Island:	Oahu
Wid:	3-3059-001	Old name:	Not Reported
Well name:	Wahiawa		
Yr drilled:	1940		
Driller:	W. Mullin		
Quad map:	8	Utm:	-1
Long83dd:	-157.9875		
Lat83dd:	21.512222		
Gps:	0		
Owner user:	Wahiawa Water	Well type:	Not Reported
Land owner:	Not Reported	Ground el:	986
Pump insta:	Not Reported	Perf case:	Not Reported
Old number:	330-1A		
Casing dia:	18	Init head2:	Not Reported
Well depth:	209		
Solid case:	Not Reported	Test gpm:	Not Reported
Use:	UNU - Unused		
Use year:	Not Reported		
Init head:	Not Reported		
Init head3:	Not Reported		
Init cl:	0		
Test date:	Not Reported		

GEOCHECK VERSION 2.1
STATE DATABASE WELL INFORMATION

Test ddown:	Not Reported	Test chlor:	Not Reported
Test temp:	Not Reported	Test unit:	Not Reported
Pump gpm:	0		
Draft mgy:	Not Reported	Head feet:	Not Reported
Max chlor:	Not Reported	Min chlor:	Not Reported
Geology:	Not Reported		
Pump yr:	0		
Draft yr:	Not Reported	Bot hole:	777
Bot solid:	Not Reported	Bot perf:	Not Reported
Spec capac:	Not Reported		
Pump mgd:	0		
Draft mgd:	Not Reported	Pump elev:	Not Reported
Pump depth:	Not Reported	Tmk:	(1) 7-2-001:003
Aqui code:	30501		
Latest hd:	Not Reported	Wcr:	01-JAN-40
Pir:	Not Reported		
Surveyor:	Not Reported		
T:	Not Reported	Site id:	HI9000000002182

HAWAII GOVERNMENT WELL RECORDS SEARCHED

PWS: Public Water Systems

Source: EPA/Office of Drinking Water

Telephone: [REDACTED]

Public Water System data from the Federal Reporting Data System. A PWS is any water system which provides water to at least 25 people for at least 60 days annually. PWSs provide water from wells, rivers and other sources.

PWS ENF: Public Water Systems Violation and Enforcement Data

Source: EPA/Office of Drinking Water

Telephone: [REDACTED]

Violation and Enforcement data for Public Water Systems from the Safe Drinking Water Information System (SDWIS) after August 1995. Prior to August 1995, the data came from the Federal Reporting Data System (FRDS).

USGS Water Wells: USGS National Water Inventory System (NWIS)

This database contains descriptive information on sites where the USGS collects or has collected data on surface water and/or groundwater. The groundwater data includes information on wells, springs, and other sources of groundwater.

State Wetlands Data: Wetlands Inventory

Source: Office of Planning

Telephone: [REDACTED]

Well Index Database

Source: Commission on Water Resource Management

Telephone: [REDACTED]

CWRM maintains a Well Index Database to track specific information pertaining to the construction and installation of production wells in Hawaii

STREET AND ADDRESS INFORMATION

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Poamoho

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APPENDIX B – HISTORICAL RECORDS

AERIAL PHOTOGRAPHS

TOPOGRAPHIC MAPS

KAWAILOA TRAINING AREA MAP

LEASE DOCUMENTS

NAR PUBLIC HEARING DOCUMENTS

1951

3-52

2-49

GS-1

Appox. location
of Poamoho Parcel

3-52

2-50

GS-



1977

2-9-77

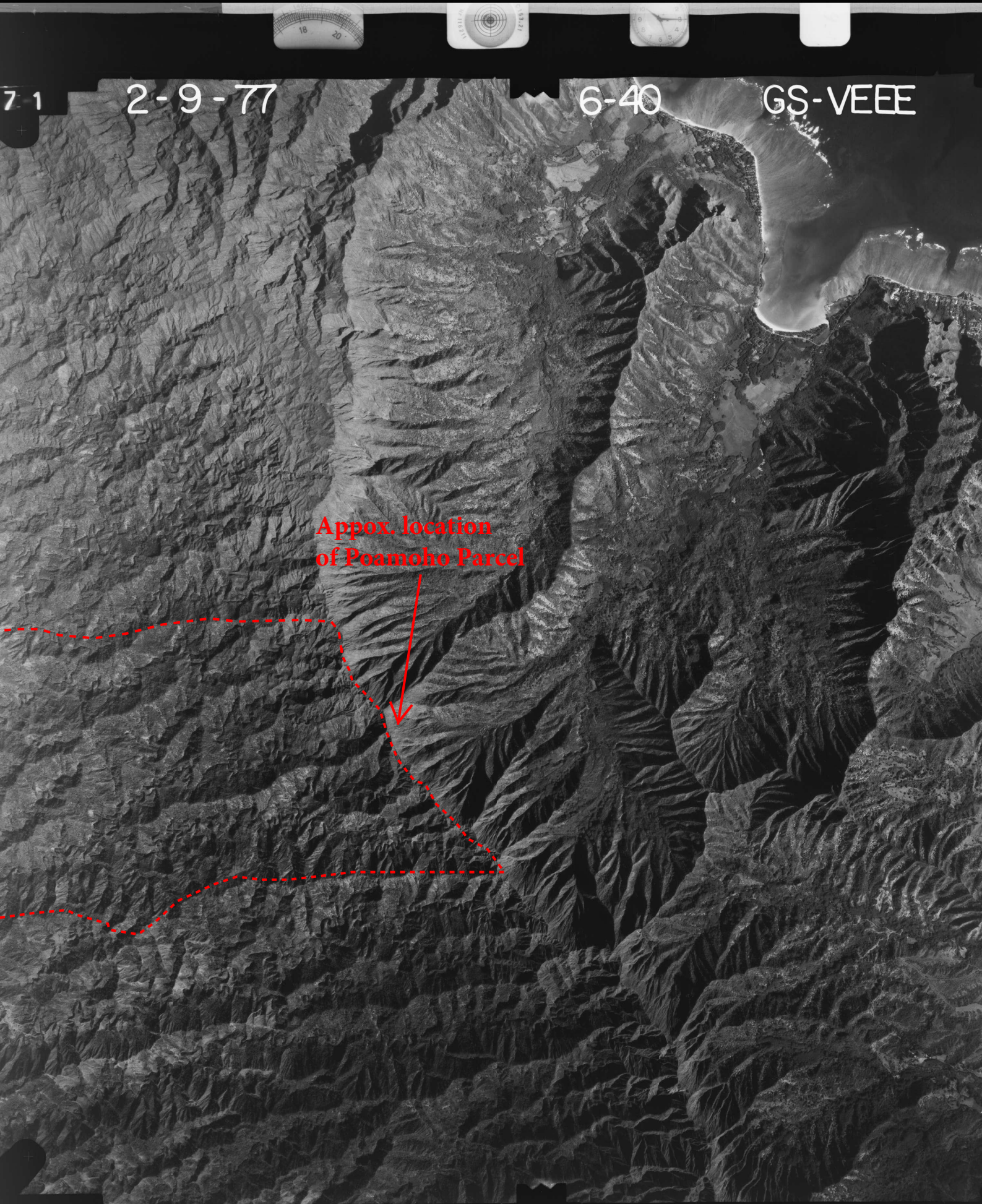
6-45

GS-VEEE

Appox. location
of Poamoho Parcel



1977



7-1

2-9-77

6-40

GS-VEEE

Appox. location
of Poamoho Parcel

1985



Appox. location
of Poamoho Parcel

1992

ATL 4105 304.97

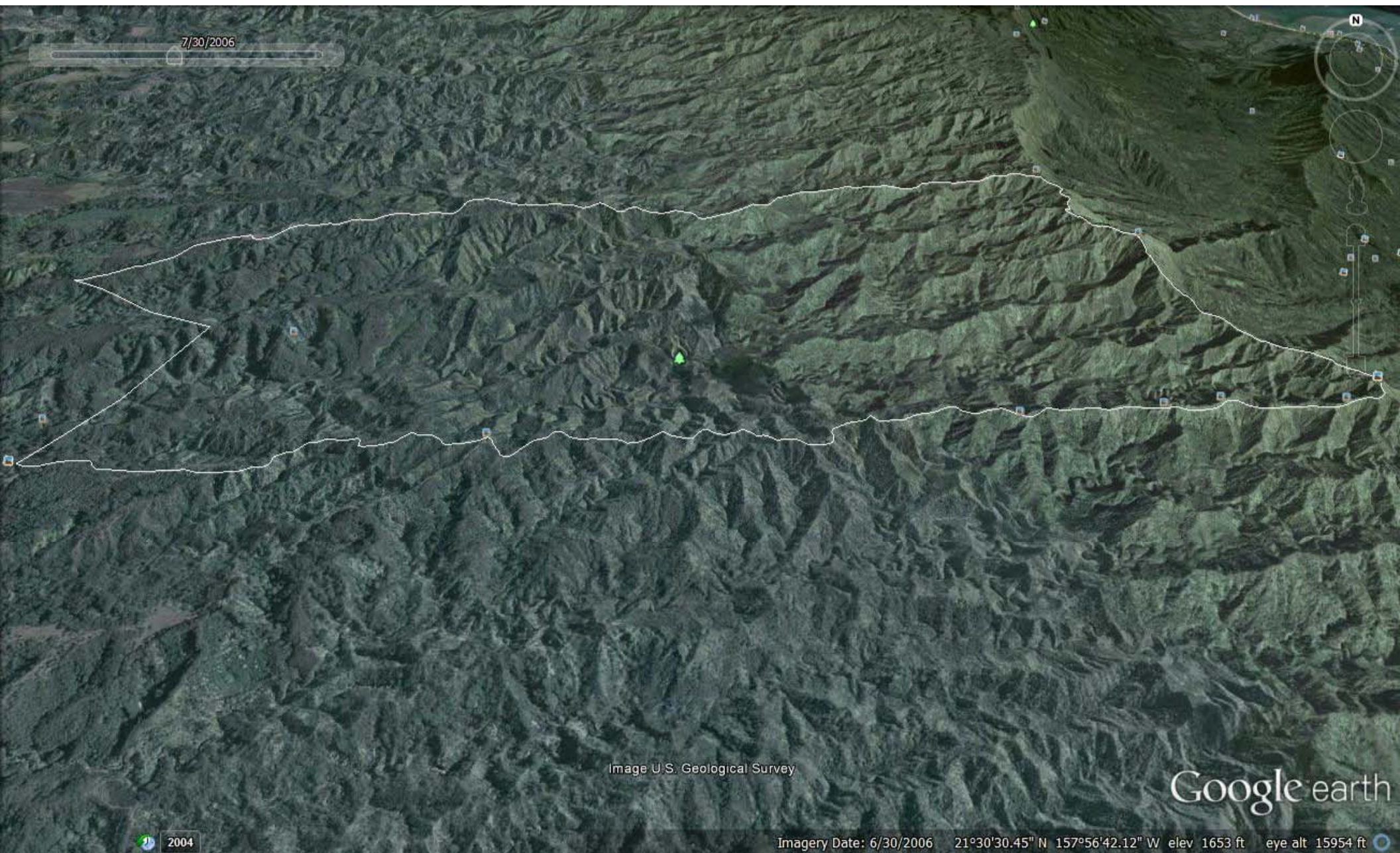
Appox. location
of Poamoho Parcel



2004



2006



7/30/2006

Image U.S. Geological Survey

Google earth

2004

Imagery Date: 6/30/2006 21°30'30.45" N 157°56'42.12" W elev 1653 ft eye alt 15954 ft

2013

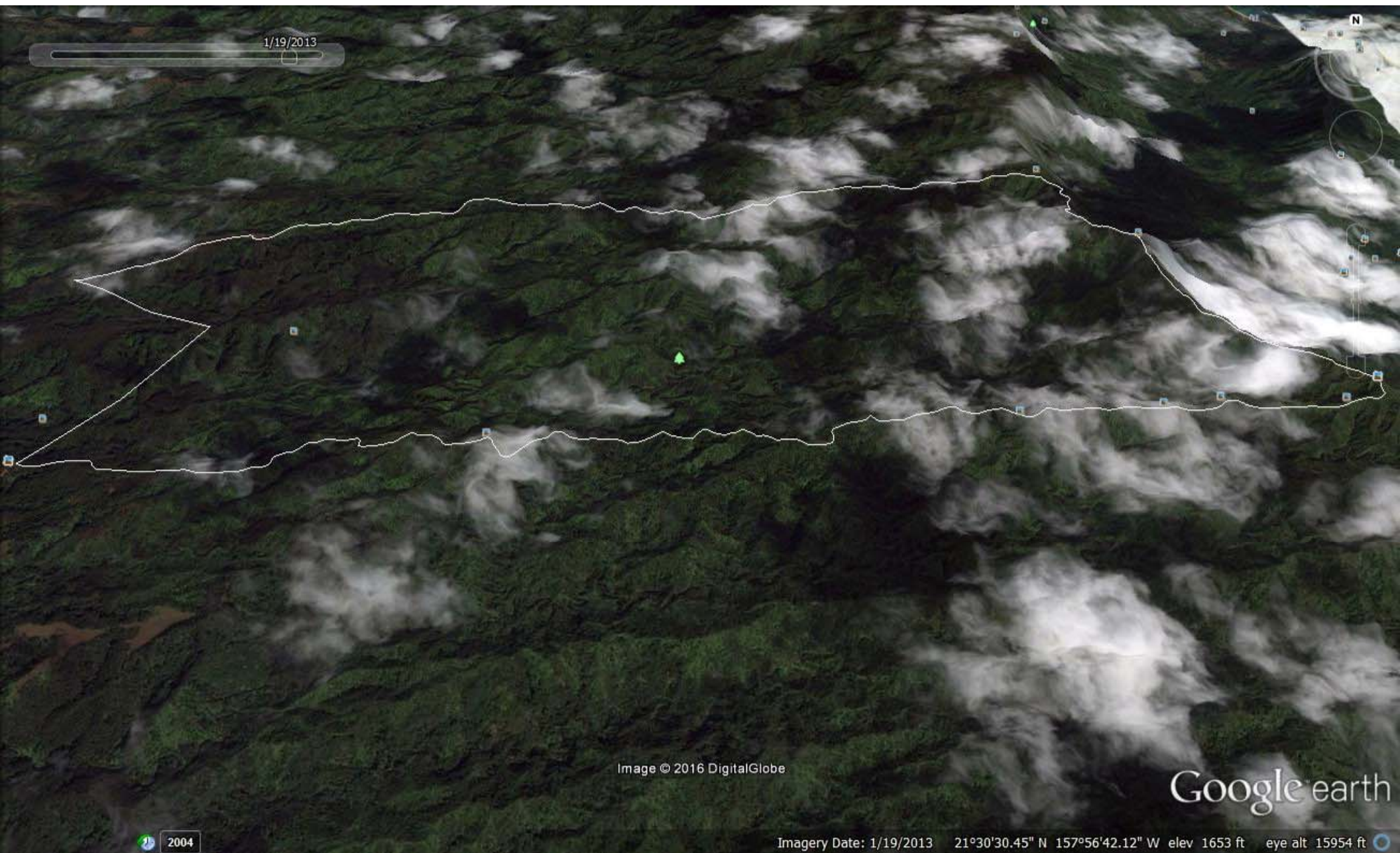


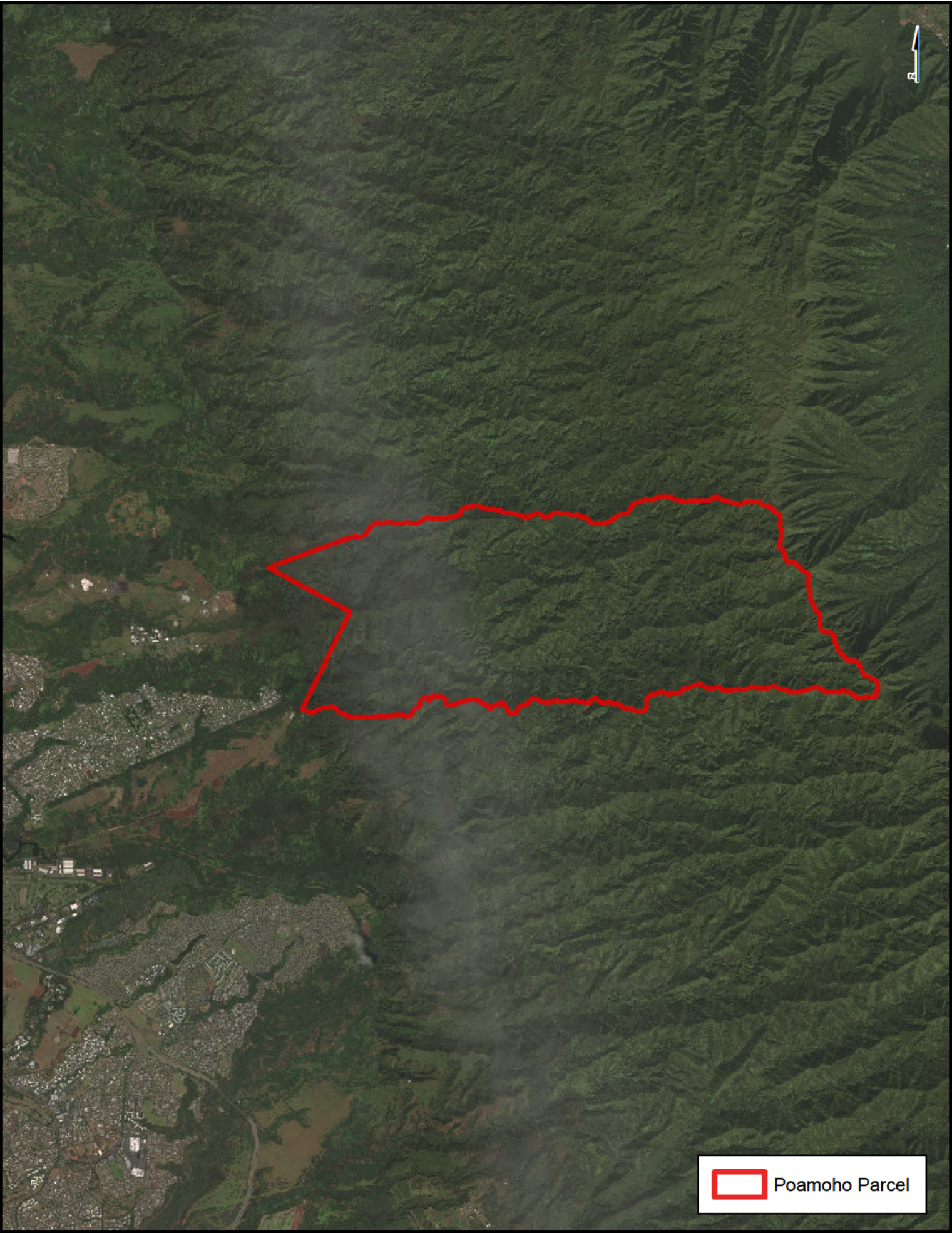
Image © 2016 DigitalGlobe

Google earth

2004

Imagery Date: 1/19/2013 21°30'30.45" N 157°56'42.12" W elev 1653 ft eye alt 15954 ft

2015 USDA Aerial



Poamoho

TMK #720010060000

Wahiawa, HI 96786

Inquiry Number: 4521621.2

January 26, 2016

EDR Historical Topo Map Report

with QuadMatch™



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

EDR Historical Topo Map Report

01/26/16

Site Name:

Poamoho

TMK #720010060000

Wahiawa, HI 96786

EDR Inquiry # 4521621.2

Client Name:

Hart Crowser, Inc.

1700 Westlake Ave

Seattle, WA 98109

Contact: Marissa Goodman



EDR Topographic Map Library has been searched by EDR and maps covering the target property location as provided by Hart Crowser, Inc. were identified for the years listed below. EDR's Historical Topo Map Report is designed to assist professionals in evaluating potential liability on a target property resulting from past activities. EDR's Historical Topo Map Report includes a search of a collection of public and private color historical topographic maps, dating back to the late 1800s.

Search Results:**Coordinates:**

Site Name: Poamoho

Address: TMK #720010060000

City,State,Zip: Wahiawa, HI 96786

P.O.# 3131-003-02

Project: NA

Latitude: 21.519987 21° 31' 12" North

Longitude: -157.9474 -157° 56' 51" West

UTM Zone: Zone 4 North

UTM X Meters: 609016.61

UTM Y Meters: 2380065.16

Elevation: 1577.22' above sea level

Maps Provided:

2013

1992

1983

1966, 1968

1954

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Topo Sheet Thumbnails

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

2013 Source Sheets



Waipahu
2013
7.5-minute, 24000



Hauula
2013
7.5-minute, 24000

1992 Source Sheets



Hauula
1992
7.5-minute, 24000
Aerial Photo Revised 1992

1983 Source Sheets



Hauula
1983
7.5-minute, 24000
Aerial Photo Revised 1977
Edited 1983



Waipahu
1983
7.5-minute, 24000
Aerial Photo Revised 1978
Edited 1983

1966, 1968 Source Sheets



Hauula
1966
7.5-minute, 24000
Aerial Photo Revised 1952



Waipahu
1968
7.5-minute, 24000
Aerial Photo Revised 1968

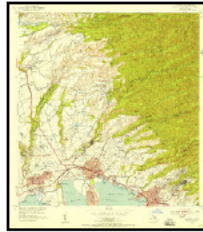
Topo Sheet Thumbnails

This EDR Topo Map Report is based upon the following USGS topographic map sheets.

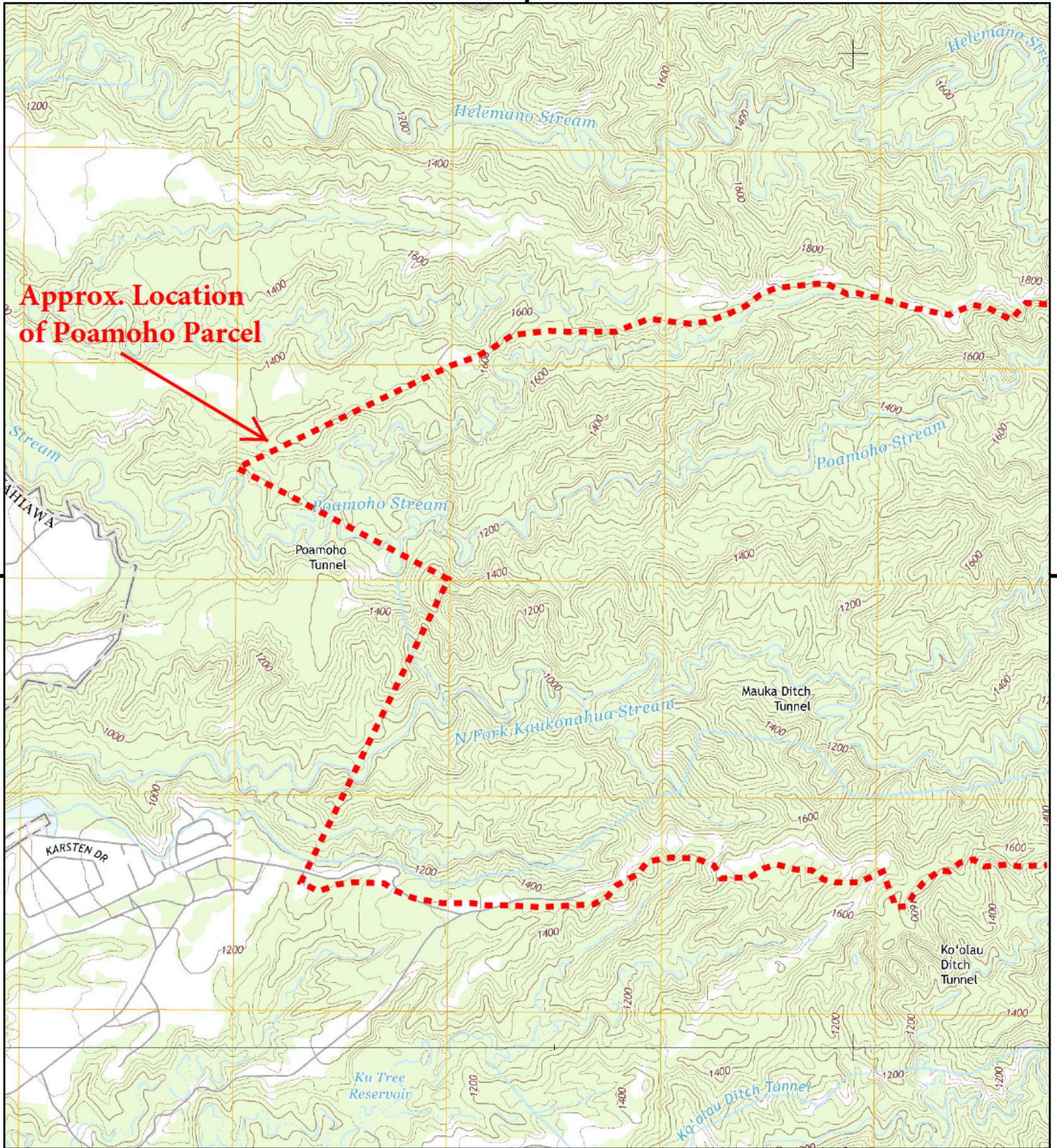
1954 Source Sheets



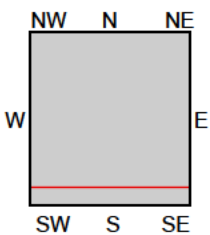
Hauula
1954
7.5-minute, 24000
Aerial Photo Revised 1952



Waipahu
1954
7.5-minute, 24000
Aerial Photo Revised 1952



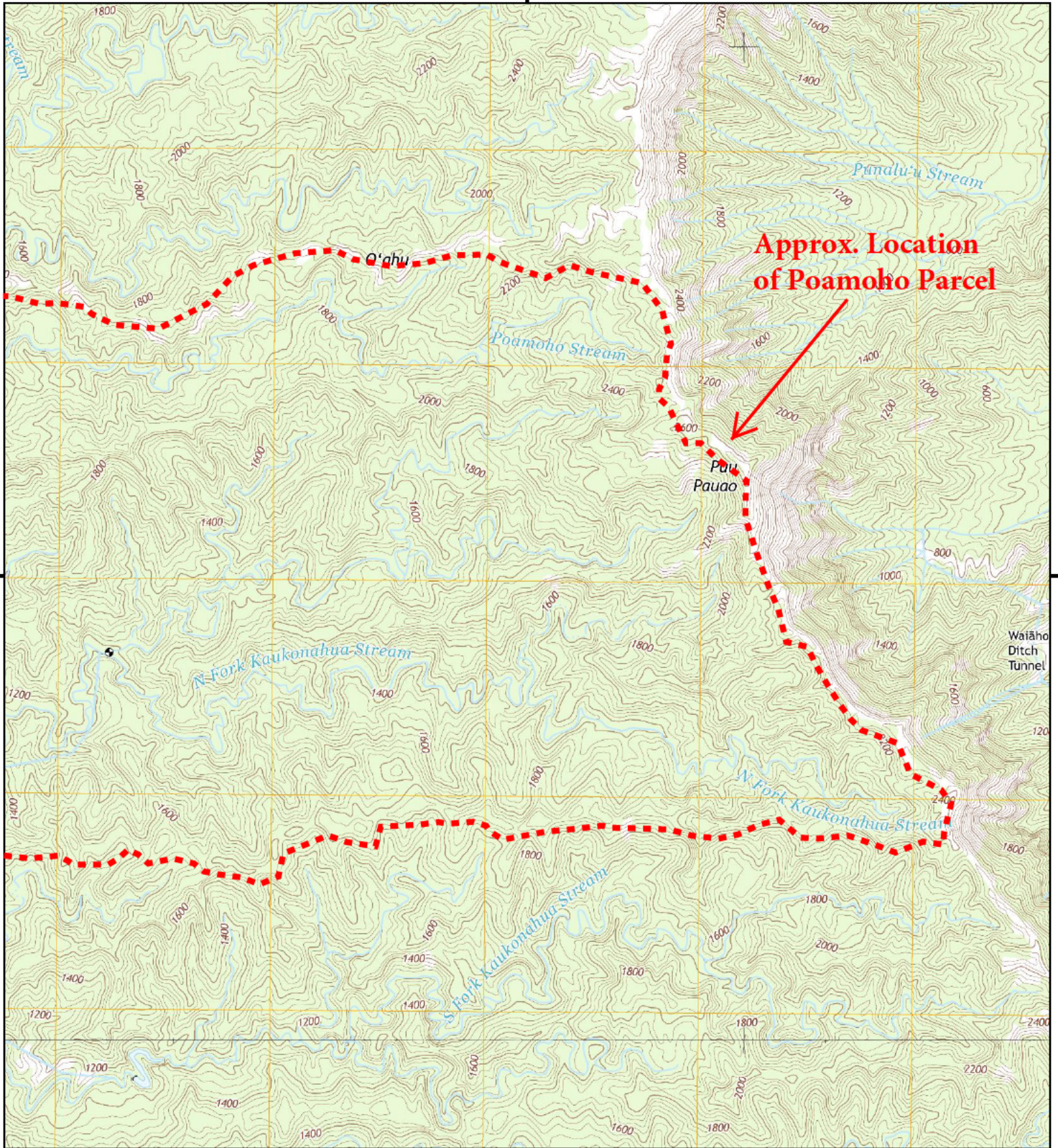
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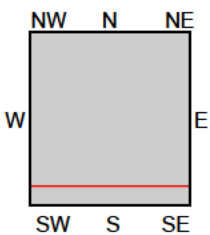
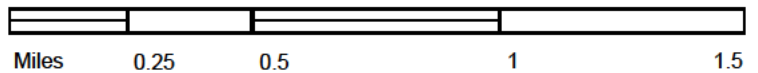
TP, Hauula, 2013, 7.5-minute
S, Waipahu, 2013, 7.5-minute

SITE NAME: Poamoho
ADDRESS: TMK #720010060000
Wahiawa, HI 96786
CLIENT: Hart Crowser, Inc.





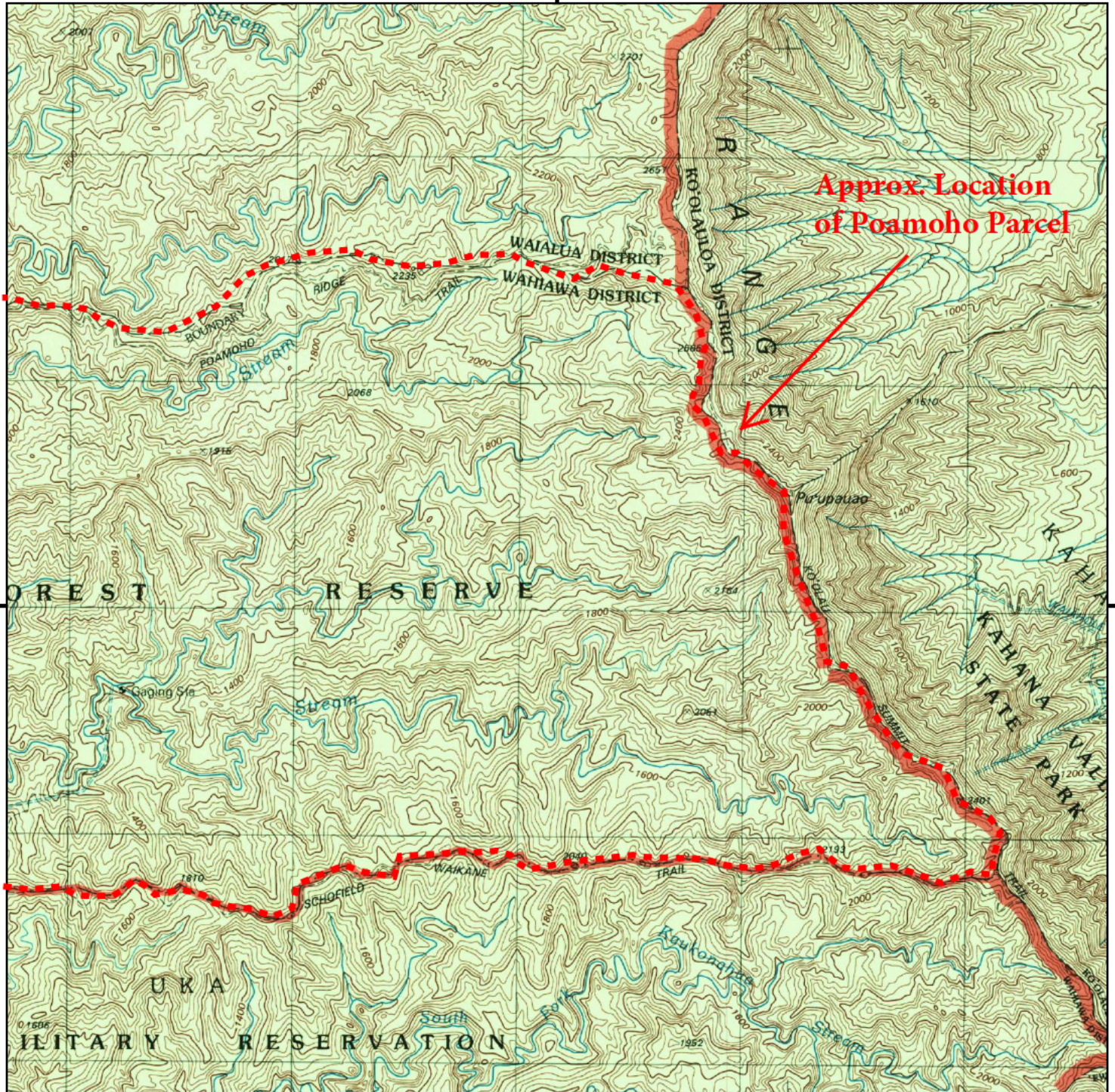
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S, Waipahu, 2013, 7.5-minute

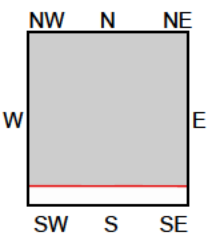
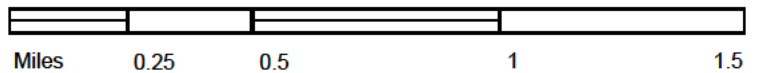
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ADDRESS: TMK #720010060000
Wahiawa, HI 96786
CLIENT: Hart Crowser, Inc.





UNMAPPED UNMAPPED UNMAPPED UNMAPPED UNMAPPED UNMAPPED

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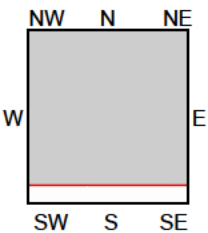
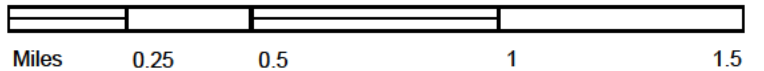
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ADDRESS: TMK #720010060000
Wahiawa, HI 96786
CLIENT: Hart Crowser, Inc.





This report includes information from the following map sheet(s).



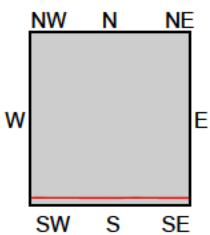
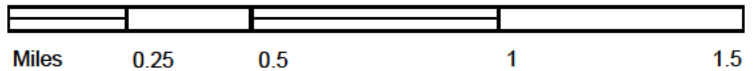
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 ADDRESS: TMK #720010060000
 Wahiawa, HI 96786
 CLIENT: Hart Crowser, Inc.





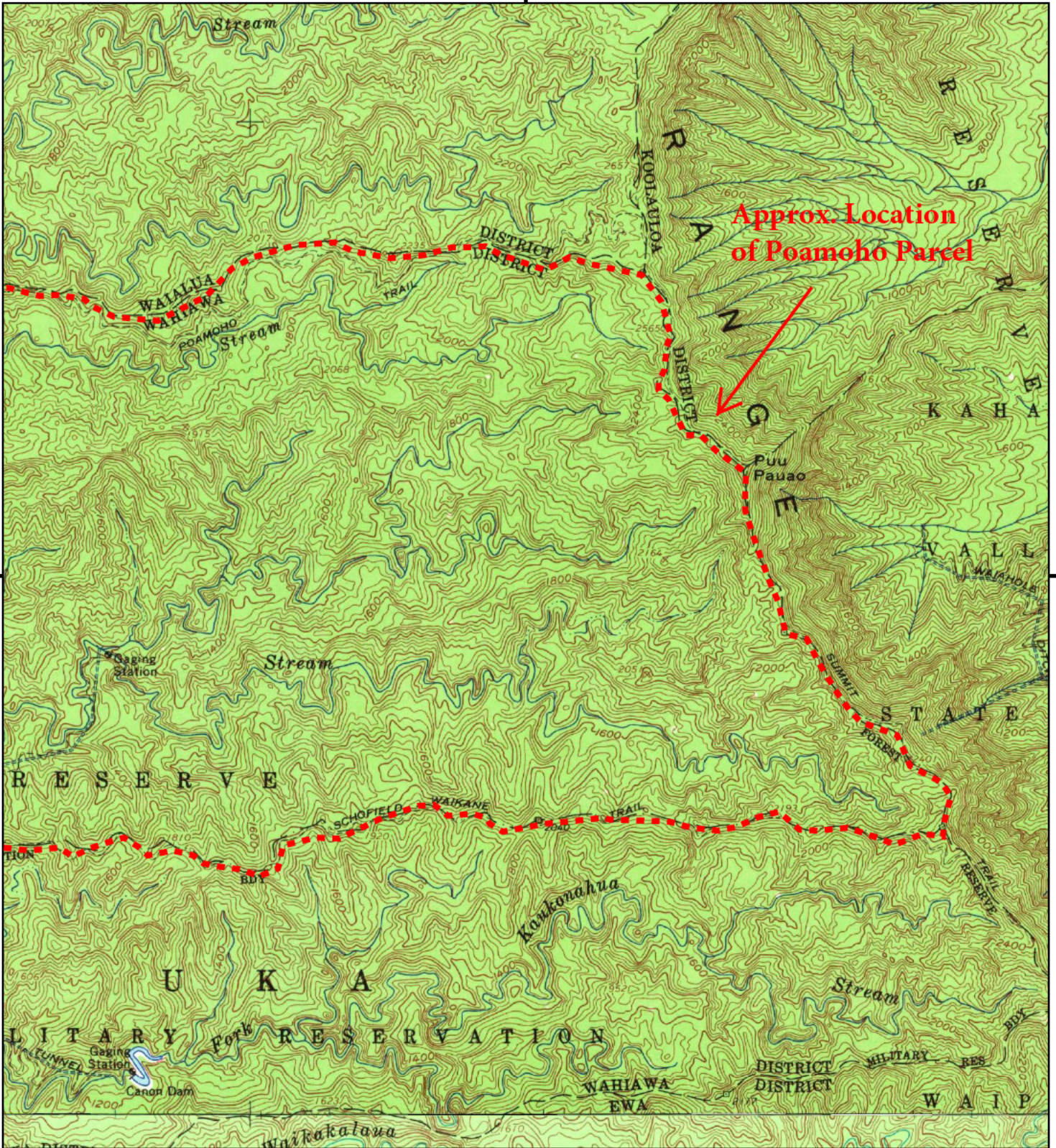
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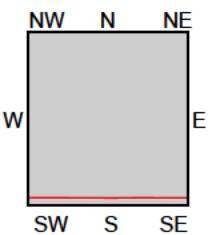
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S, Waipahu, 1983, 7.5-minute

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ADDRESS: TMK #720010060000
Wahiawa, HI 96786
CLIENT: Hart Crowser, Inc.





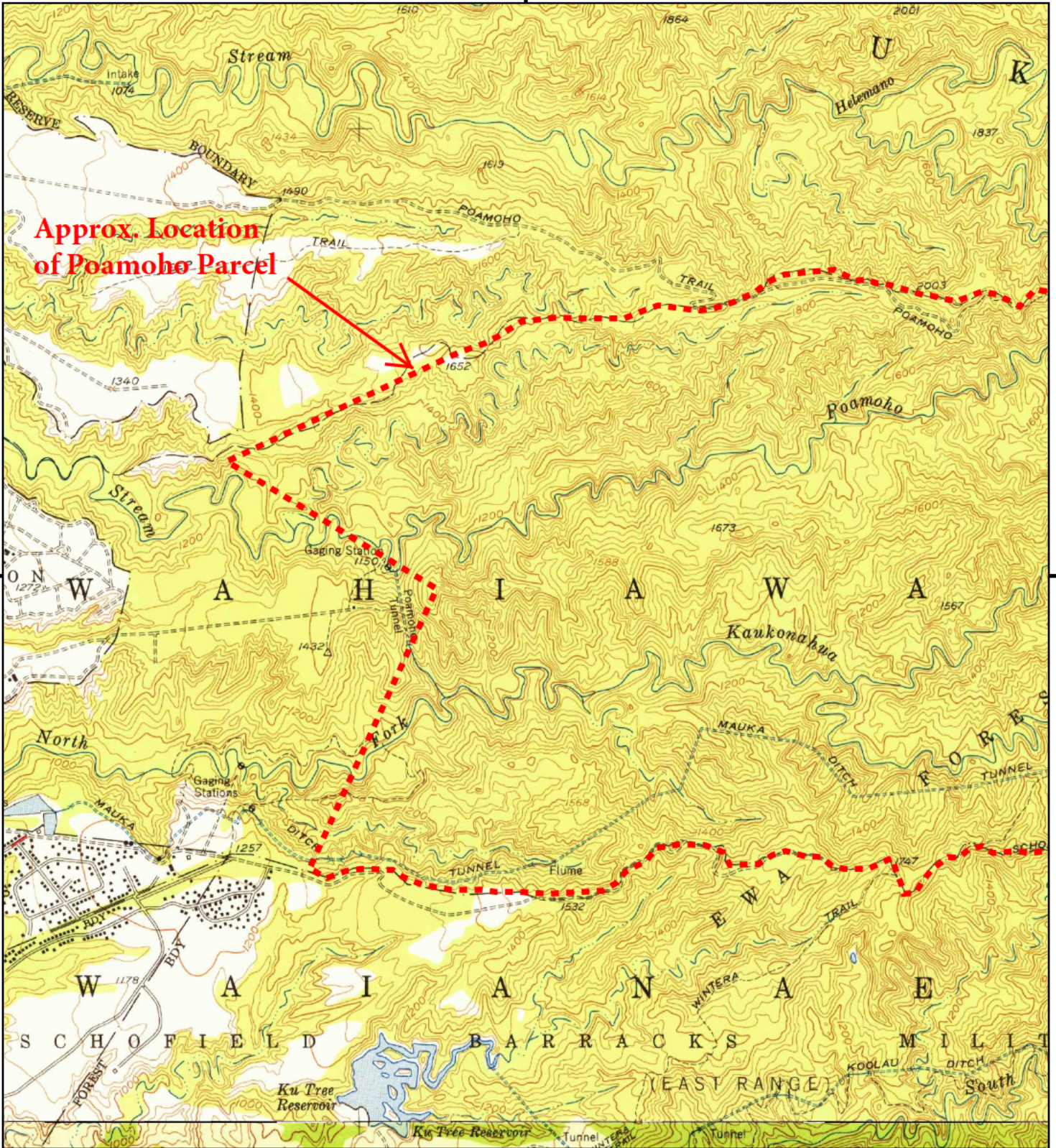
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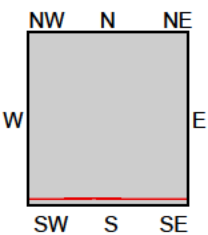
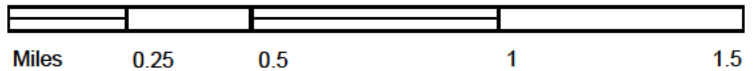
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S, Waipahu, 1968, 7.5-minute

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ADDRESS: TMK #720010060000
Wahiawa, HI 96786
CLIENT: Hart Crowser, Inc.





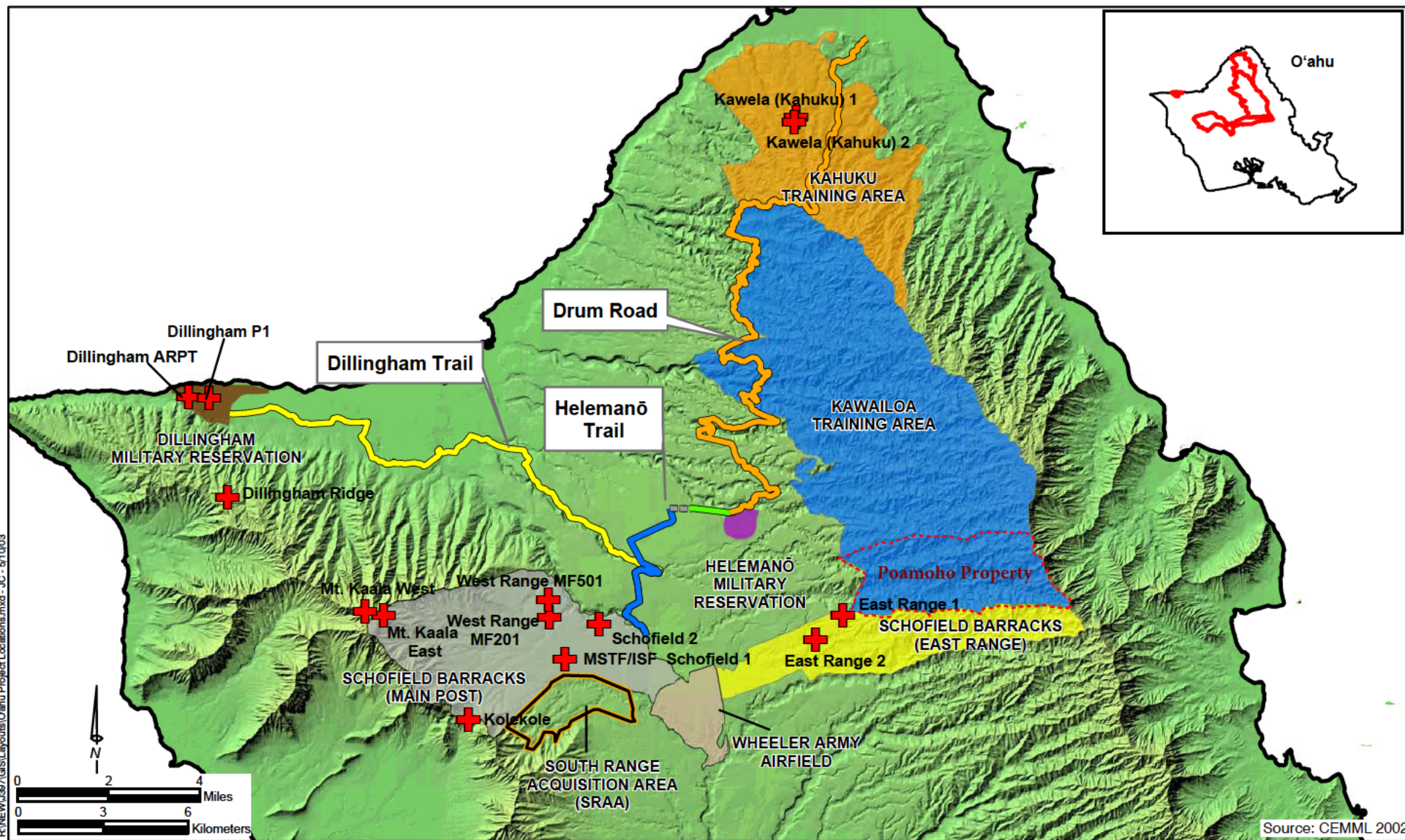
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S, Waipahu, 1954, 7.5-minute

SITE NAME: Poamoho
ADDRESS: TMK #720010060000
Wahiawa, HI 96786
CLIENT: Hart Crowser, Inc.





Source: CEMML 2002

Under the Proposed Action, the South Range Acquisition Area would be 1,400 acres (as shown) while under the Reduced Land Acquisition Alternative it would only be 100 acres (as shown on figure D-27)

Legend

- Drum Road
- K3/K4 Helemanō Trail
- Existing Military Access Road
- Pa'ala'a Uka Pūpūkea Road
- D1 Dillingham Trail
- S7 Fixed Tactical Internet (antennae locations)

Northern O'ahu Project Overview Map

O'ahu, Hawai'i

Source: Tetra Tech 2004

Figure 2-7

RECORDATION REQUESTED BY:
U. S. Army Engineer Division,
Pacific Ocean

STATE OF HAWAII
BUREAU OF CONVEYANCES
RECEIVED FOR RECORD

LIBER 4821 PAGES 394 THRU 408

AFTER RECORDATION, RETURN TO:
U. S. Army Engineer Division,
Pacific Ocean
Phone: 542986

'64 AUG 20 PM 1:37
/s/ M. Adachi

INDEXED /i/ EK REGISTRAR

RETURN BY: MAIL () PICKUP (X)

SPACE ABOVE THIS LINE FOR
REGISTRAR'S USE

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE GENERAL LEASE NO. S-3846
U. S. LEASE, CONTRACT NO. DA-94-626-ENG-78

1. THIS LEASE, made and entered into this 17th
day of August, in the year one thousand nine hundred
and sixty-four by and between the STATE OF HAWAII, represented
by its Board of Land and Natural Resources, whose address is
P. O. Box 621, Honolulu, Hawaii 96809, and whose interest in
the property hereinafter described is that of fee simple owner,
for itself, its administrators, successors, and assigns, here-
inafter called the "Lessor", and THE UNITED STATES OF AMERICA,
hereinafter called the "Government":

WITNESSETH: The parties hereto for the consideration
hereinafter mentioned covenant and agree as follows:

2. The Lessor hereby leases to the Government a
parcel of land described on Exhibit "A" attached hereto and
hereby made a part hereof, all to be used for the following
purpose: Military purposes.

3. TO HAVE AND TO HOLD the said premises for a
term of sixty-five (65) years beginning August 17, 1964
and ending August 16, 2029; subject, however, to the
rights of the Lessor and the Government respectively to
terminate this lease in accordance with provisions 6 and 19
hereof.

Ind 100

4. The Government shall pay the Lessor rent at the following rate: ONE DOLLAR (\$1.00) for the term of the lease, the receipt and sufficiency whereof is hereby acknowledged.

5. The Government shall have the right, during the existence of this lease, to attach fixtures, and erect structures or signs, in or upon the premises hereby leased, which fixtures and structures or signs, so placed in, upon or attached to the said premises shall be and remain the property of the Government and may be removed or otherwise disposed of by the Government. In addition, the Government shall post and maintain signs on roads and trails entering dangerous areas to provide a warning of any dangerous or hazardous activities; provided, that the information placed on the posted signs anywhere within the demised premises shall not be incompatible with the terms of this lease and, in those instances where joint use of an area is permitted, the information placed on the signs may include the permitted joint activities.

6. The Government may terminate this lease at any time by giving thirty (30) days' notice in writing to the Lessor.

7. This lease is subject to that certain Water License dated March 5, 1951, issued to Castle & Cooke, Inc.

8. The Lessor will not be responsible for any loss, liability, claim, or demand for property damage, property loss, or personal injury, including but not limited to death, arising out of any injury or damage caused by or resulting from any act or omission of the Federal Government in connection with the Federal Government's use of the premises described herein.

9. In recognition of public use of the demised premises, the Government shall make every reasonable effort to stockpile supplies and equipment in an orderly fashion and

away from established roads and hiking trails and to remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner.

10. The Government shall obtain the written consent of the Lessor prior to constructing any road or building of the type for which design and construction plans are normally required; provided, however, that such consent shall not be arbitrarily withheld. The Government agrees that its training roads which provide primary access within or across the demised premises will be maintained to normal standards for training area roads with due regard for preventing unnecessary erosion; provided, however, that the Government shall be under no obligation to maintain roads during periods when the necessary engineer troops are absent from Oahu.

11. The Government shall take every reasonable precaution to prevent the start of any fire in the areas herein demised and shall take immediate and continuing action to extinguish any and all fires started by or resulting from Government activities. Further, the Government shall establish and at all times maintain a standard operating procedure for fighting fires within or adjacent to the subject leased property resulting from Government training activities during its use and occupancy of the premises; provided, further, that Government personnel actually using the premises shall be familiar with said standard procedure including the means of implementation.

12. In recognition of the limited amount of land available for public use, of the importance of forest reserves and watersheds in Hawaii, and of the necessity for preventing or controlling erosion, the Government hereby agrees that, commensurate with training activities, it will take reasonable

action during its use of the premises herein demised to prevent unnecessary damage to or destruction of vegetation, wild life and forest cover, geological features and related natural resources and improvements constructed by the Lessor, help preserve the natural beauty of the premises, avoid pollution or contamination of all ground and surface waters and remove or bury all trash, garbage and other waste materials resulting from Government use of the said premises.

13. Except as required for defense purposes in times of national emergency, the Government shall not deliberately appropriate, damage, remove, excavate, disfigure, deface or destroy any object of antiquity, prehistoric ruin or monument.

14. In the event at some future date it is deemed necessary by the Lessor to use ground or surface water on the premises herein demised as a source of public water supply, the area providing said ground or surface water shall be withdrawn from military use upon request of the Lessor and with the Government's concurrence.

15. The Government shall not use any portion of the demised premises as an impact area for explosive or incendiary munitions of any type and shall limit firing on the premises to weapons not larger than .50 caliber provided, however, the Government may also fire inert 3.5-inch rockets or weapons of similar size or purpose as long as such training will not cause fires.

16. When the demised premises or any part thereof is not scheduled for Government training purposes from dusk Friday to midnight Sunday and from dawn to midnight on national holidays, the said premises shall be available to the Lessor which may open them to the general public who shall be subject to the laws of the State of Hawaii during their

presence on the premises which shall be for such limited or unlimited purposes as may be designated by the Lessor; provided, that the Lessor may declare the whole or any portion of the demised premises during such open periods as a public shooting or fishing ground, and the Lessor shall have the right to issue written permits to hunters and fishermen, subject to rules and regulations issued by the said Lessor; and, provided further, however, that permitted hunting and fishing activities shall be coordinated with the training activities of the Government on the demised premises and the Lessor shall obtain from such permittees written releases which will hold the Government and the Lessor harmless from any accidental injuries or deaths suffered by the holders of such permits; and, provided still further, that the Government shall make an effort to schedule its training exercises in such a manner as to enable the general public to use the subject area during the periods hereinabove mentioned and shall publish a notice in two papers of general circulation at least three (3) days prior to each said weekend or holiday on which the premises or any portion thereof will be used for training exercises except when prohibited therefrom by overriding military contingencies. The Government shall not be responsible for the control or safety of the general public, nor shall the Government be responsible for the correction of unsanitary conditions due to general public use of the demised premises.

17. The Lessor hereby agrees that, commensurate with the public use of the premises herein demised, it will take reasonable action during the use of the said premises by the general public; to remove or bury trash, garbage and other waste material resulting from use of the said premises by the general public.

18. The Lessor shall have the right to erect signs and construct capital improvements within the leased property at locations mutually agreed upon by the parties hereto, in connection with water conservation, public water consumption, forestry, recreational and related purposes, said capital improvements including but not limited in any way to the construction, maintenance and/or improvements of roads and trails; provided, however, that notwithstanding any other provisions of this lease to the contrary, the Government hereby accepts the responsibility and liability for repairs of any damage which can be demonstrated to have been the direct result of military activities, to improvements constructed by the Lessor subsequent to the date of this lease.

19. In the event that the leased property is not used by the Government for a period of three (3) consecutive years, this lease may be terminated upon ninety (90) days' written notice from the Lessor to the Government, provided, however, that if prior to the expiration of the aforesaid 90-day period the Secretary of the Army shall find and determine that the leased property is required for military purposes and shall notify the Lessor in writing of this finding and determination, this lease will continue in effect; provided, further, that periods during which a national emergency has been declared by the President or the Congress of the United States and periods during which major combat elements are temporarily deployed away from the State of Hawaii shall not be included in the said three-year period. During such period of temporary deployment the parties hereto shall discuss and give consideration to and provide for

the additional public use of the demised premises compatible with then existing military training requirements. The Government will assure that current military standards concerning adequate utilization are applied to these premises and will assure that such use is known and is a matter of record and available to the Lessor upon request.

20. Subject to obtaining advance clearance from the plans and training office of the Government's controlling agency, or any other designated Government agency, officials and employees of the Lessor and any person or persons duly authorized by the Lessor shall have the right to enter upon the demised premises at all reasonable times to conduct any operations that will not unduly interfere with activities of the Government under the terms of this lease; provided, however, that such advance clearance shall not be unreasonably withheld.

21. All persons legally entitled under the provisions of this lease to be on the said premises shall have a nonexclusive right to use all Government roads and trails except when such use will interfere with the training activities of the Government or said roads and trails have been restricted, by a duly posted sign, as security or danger areas by the Government.

22. The Lessor reserves unto itself all ground and surface water, ores, minerals and mineral rights of every description on, in or under the demised premises but shall exploit or permit others to exploit the said ores, minerals and mineral rights only with the consent of the Government. Notwithstanding the foregoing reservation, the Government shall have the right to develop and use for road construction projects on the demised premises sources of coral, rock and similar

materials occurring naturally on the said premises and to use said ground and surface waters for purposes incident to the rights granted by this lease.

23. The Government will not be responsible for any loss, liability, claim or demand for any property damage, property loss, or personal injury, including but not limited to death, arising out of injury or damage caused by or resulting from any act or omission of the Lessor or the general public in connection with their use of the premises described herein.

24. Any notice under the terms of this lease shall be in writing signed by a duly authorized representative of the party giving such notice, and if given by the Government shall be addressed to the Lessor at P. O. Box 621, Honolulu, Hawaii 96809, and if given by the Lessor shall be addressed to the Division Engineer, U. S. Army Engineer Division, Pacific Ocean, Building 96, Fort Armstrong, Honolulu, Hawaii, Attention: Real Estate Division, or at such location and to such other agency as may be mutually agreed upon by the parties hereto.

25. The Government hereby agrees that the use and enjoyment of the land herein demised shall not be in support of any policy which discriminates against anyone based upon race, creed or color.

26. The Government shall not grant any interest in the demised premises; provided, however, that the Government shall have the right to grant the use of portions of the premises for temporary activities of Governmental agencies or their contractors in which case any land rental derived from such use of the premises shall be covered into the Treasury of the State of Hawaii

27. Subject to obtaining the prior approval of the Government, the Lessor reserves the right to grant rights or privileges to others not inconsistent with the terms of this lease affecting the whole or any portion of the demised premises.

28. The Government agrees to reforest areas, as expeditiously as practicable and within a period mutually agreed upon, where it can be demonstrated that substantial forest cover, including trees, has been destroyed as a direct result of Government activities; provided, however, that the Lessor shall obtain advance Government approval of all future plantings proposed by the Lessor

29. The Government shall surrender possession of the premises upon the expiration or sooner termination of this lease and, if required by the Lessor, shall within sixty (60) days thereafter, or within such additional time as may be mutually agreed upon, remove its signs and other structures; provided that in lieu of removal of structures the Government may abandon them in place. The Government shall also remove weapons and shells used in connection with its training activities to the extent that a technical and economic capability exists and provided that expenditures for removal of shells will not exceed the fair market value of the land.

30. (a) That, except as otherwise provided in this lease, any dispute concerning a question of fact arising under this lease which is not disposed of by agreement shall be decided by the Division Engineer, U. S. Army Engineer Division, Pacific Ocean, Honolulu, Hawaii, hereinafter referred to as said officer, who shall within a reasonable time reduce his decision and the reasons therefor to writing and mail or otherwise furnish a copy thereof to the Lessor. The decision of

the said officer shall be final and conclusive unless, within thirty (30) days from the date of receipt of such copy, the Lessor mails or otherwise furnishes to the said officer a written appeal addressed to the Secretary of the Army. The decision of the Secretary or his duly authorized representative for the determination of such appeals shall be final and conclusive unless determined by a court of competent jurisdiction to have been fraudulent, or capricious, or arbitrary, or so grossly erroneous as necessarily to imply bad faith, or not supported by substantial evidence. In connection with any appeal proceeding under this condition, the Lessor shall be afforded an opportunity to be heard and to offer evidence in support of its appeal.

(b) This Condition does not preclude consideration of law questions in connection with decisions provided for in paragraph (a) above; provided, that nothing in this Condition shall be construed as making final the decision of any administrative official, representative, or board on a question of law.

(c) That all appeals under this provision shall be processed expeditiously.

31. The Government's compliance with all obligations placed on it by this lease shall be subject to the availability of funds.

32. The Lessor's compliance with any obligations which may be placed on it by this lease shall be subject to the availability of funds and/or personnel.

33. The Lessor warrants that no person or selling agency has been employed or retained to solicit or secure this lease upon an agreement or understanding for a commission, percentage, brokerage, or contingent fee, excepting bona fide

employees or bona fide established commercial or selling agencies maintained by the Lessor for the purposes of securing business. For breach or violation of this warranty the Government shall have the right to annul this lease without liability or in its discretion to deduct from the lease price or consideration the full amount of such commission, percentage, brokerage, or contingent fee.

34. No member of or delegate to Congress or resident commissioner shall be admitted to any share or part of this lease or to any benefit that may arise therefrom, but this provision shall not be construed to extend to this lease if made with a corporation for its general benefit.

35. (a) The Government may, by written notice to the Lessor, terminate the right of the Lessor to proceed under this lease if it is found, after notice and hearing, by the Secretary of the Army or his duly authorized representative, that gratuities (in the form of entertainment, gifts, or otherwise) were offered or given by the Lessor, or any agent or representative of the Lessor, to any officer or employee of the Government with a view toward securing a lease or securing favorable treatment with respect to the awarding or amending, or the making of any determinations with respect to the performing of such lease; provided that the existence of facts upon which the Secretary of the Army or his duly authorized representative makes such findings shall be in issue and may be reviewed in any competent court.

(b) In the event this lease is terminated as provided in paragraph (a) hereof, the Government shall be entitled (i) to pursue the same remedies against the Lessor

as it could pursue in the event of a breach of the lease by the Lessor, and (ii) as a penalty in addition to any other damages to which it may be entitled by law, to exemplary damages in an amount (as determined by the Secretary of the Army or his duly authorized representative) which shall be not less than three or more than ten times the costs incurred by the Lessor in providing any such gratuities to any such officer or employee.

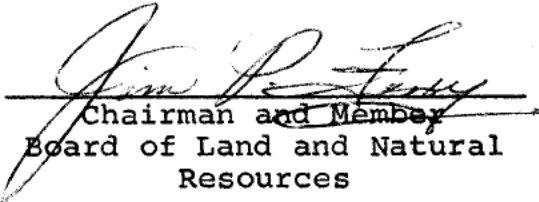
(c) The rights and remedies of the Government provided in this clause shall not be exclusive and are in addition to any other rights and remedies provided by law or under this lease.

36. This lease is not subject to Title 10, United States Code, Section 2662.

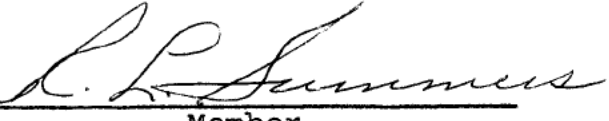
IN WITNESS WHEREOF, the parties hereto have hereunto subscribed their names as of the date first above written.

STATE OF HAWAII

By

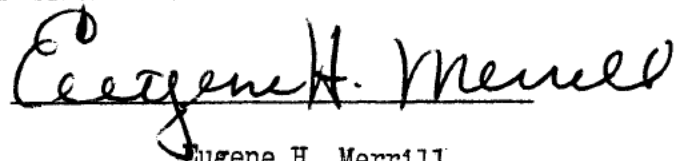

Chairman and Member
Board of Land and Natural
Resources

And By

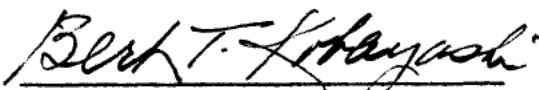

Member
Board of Land and Natural
Resources

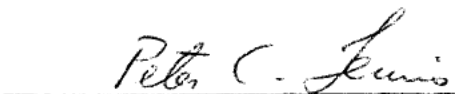
THE UNITED STATES OF AMERICA

By


Eugene H. Merrill
Deputy Assistant Secretary of the Army (I&L)
(Installations)

APPROVED AS TO FORM:


Bert T. Kobayashi
Attorney General
State of Hawaii


Peter C. Lewis
Deputy Attorney General
State of Hawaii

STATE OF VIRGINIA }
COUNTY OF ARLINGTON } SS

On this 17th day of August, 1964, before me
appeared Eugene H. Merrill, to me personally known
who, being by me duly sworn, did say that he is the DEPUTY ASSISTANT SECRETARY OF ARMY
(I&L)-Installations, and that the seal affixed to
said instrument is the seal of the Department of the Army and that the
said instrument was signed and sealed in behalf of said United States
of America under the authority therein mentioned, and said Eugene H. Merrill
acknowledged said instrument to be the free act and
deed of said United States of America.

In witness whereof I have hereunto set my hand and official seal.

Howard V. Kempter

NOTARY PUBLIC

Arlington County, Virginia

My Commission Expires November 4, 1966

FORM 314 Certificate of Official Character.

Commonwealth of Virginia

County of Arlington

to wit:

I, H. BRUCE GREEN, Clerk of the Circuit Court of the County aforesaid in the State of Virginia, the
same being a Court of record, do certify that Howard V. Kempter
whose genuine signature is attached to the foregoing certificate is, and was at the time of signing the same,
a Notary Public in and for the said County, duly commissioned and qualified, residing in said County and
duly authorized, by virtue of his office, to take acknowledgements to deeds and other writings, and to
administer oaths under the laws of this State. I further certify that the official acts of the said
Howard V. Kempter are entitled to full faith and credit; that I am
well acquainted with the handwriting of the said Howard V. Kempter
and verily believe his signature to the foregoing proof or acknowledgment to be genuine; and that his
attestation is in due form of law. I further certify that the laws of Virginia do not require the im-
print of the Notary's seal to be filed with the authenticating officer.

In testimony whereof I have hereunto set my hand and affixed the seal of the said Court this
17th day of August, 1964, and in the 189th year of the Common-
wealth.

H. Bruce Green

Clerk.

EXHIBIT "A"

KAWAILOA TRAINING AREA

PARCEL 1

Land situate at Wahiawa, Oahu, Hawaii, and
being a portion of the Land of Wahiawa.

Beginning at U. S. Military Reservation Monument No. 54 at the southeast corner of this piece of land, the northeast corner of the crown land of Waianae-Uka, on the west boundary of the Ahupuaa of Kahana and at the junction of the spur ridge (which divides the land of Wahiawa and the Ahupuaa of Waianae) with the Koolau Range, thence running by azimuths measured clockwise from true South:

In a westerly direction along the top of the ridge between the lands of Wahiawa and Waianae-Uka (U. S. Military Reservation of Schofield Barracks, Presidential Executive Order No. 2800 dated February 4, 1918) for the first eleven courses, the direct azimuths and distances being:

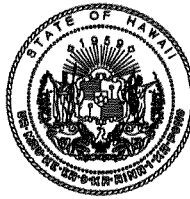
1. 91° 02' 23" 6,172.1 feet to U. S. Military Reservation Monument No. 53;
2. 86° 58' 47" 5,793.5 feet to U. S. Military Reservation Monument No. 52;
3. 85° 30' 15" 9,325.2 feet to U. S. Military Reservation Monument No. 51;
4. 94° 41' 42" 1,102.1 feet to U. S. Military Reservation Monument No. 50;
5. 84° 44' 51" 696.7 feet to U. S. Military Reservation No. 49;
6. 103° 01' 53" 964.8 feet to U. S. Military Reservation No. 48;
7. 137° 23' 13" 347.7 feet to U. S. Military Reservation Monument No. 47;
8. 85° 49' 16" 538.7 feet to U. S. Military Reservation Monument No. 46;
9. 74° 44' 22" 266.8 feet to U. S. Military Reservation Monument No. 45;
10. 60° 45' 55" 225.4 feet to U. S. Military Reservation Monument No. 44;
11. 104° 36' 38" 472.0 feet to U. S. Military Reservation Monument No. 43;
12. 205° 33' 4,800.0 feet along the remainder of the Land of Wahiawa;
13. 118° 35' 4,010.0 feet along the same;

14.

Thence along the Ahupuaa of Paalaa, along the top of the dividing ridge between the Paalaa and Wahiawa Water Sheds to the summit of Koolau Range, the direct azimuth and distance being: $262^{\circ} 11' 30''$ 22,301.6 feet;

15.

Thence along the Ahupuaas of Punaluu and Kahana, along the summit of the Koolau Range in a southeasterly direction to the point of beginning and containing an AREA OF 4,390 ACRES, more or less.



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

May 20, 2013

Ref. No.: GL3846

Colonel Douglas Mulbury
Commander, U.S. Army Garrison – Hawaii
851 Wright Avenue, WAAF
Schofield Barracks, Hawaii 96857

Dear Colonel Mulbury:

Subject: Amend General Lease No. 3846, Poamoho, Wahiawa, Oahu,
Tax Map Key (1) 7-2-001:006

Enclosed are an original and one (1) copy of the above referenced document. Please review, sign all copies in accordance with the following instructions:

1. Please sign on the appropriate signature lines provided for GOVERNMENT.
2. Do not date the document.
3. Do not make any additions, deletions or changes to the terms and conditions of the document. Any such changes will require starting the document preparation process over again.
4. Return all signed documents to our office for further process.

Please pay particular attention to these instructions, as non-adherence will delay the processing of your document. If you have any questions, please feel free to contact us at (808) 587-0430. Thank you.

Sincerely,

A handwritten signature in cursive script that reads "Barry Cheung".
Barry Cheung
District Land Agent

Enclosures

cc: DOFAW (Attn.: Emma Yuen w/encl)

Total Number of Pages:
Tax Map Key No. (1) 7-2-001:006



Government's activities to the pertinent administrative rules governing the Natural Reserve Area System.

NOW, THEREFORE, the Lessor and Government covenant and agree that:

1. paragraph 5 of General Lease No. S-3846, is hereby deleted in its entirety and replaced with the following:

"5. The Government shall have the right, during the existence of this lease, to conduct beneficial natural resource management actions, subject to Hawaii Revised Statutes chapters 195D and 183C, as applicable. During periods that the Government is conducting these actions, the Government shall provide the Lessor written monthly and annual reports containing summaries of activities conducted and scheduled future activities."

2. paragraph 15 of General Lease No. S-3846, is hereby deleted in its entirety and replaced with the following:

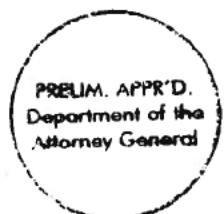
"15. The Government shall not use any portion of the demised premises for training exercises on the ground (firing and non-firing) or the construction of any structures or roads without prior written consent of the Lessor. The Government will limit training in the demised premises for aviation training, including low elevation technical operations."

3. paragraph 16 of General Lease No. S-3846, is hereby deleted in its entirety and replaced with the following:

"16. The premises shall be available to the Lessor which may open said premises to the general public who shall be subject to the laws of the State of Hawaii during their presence on the premises which shall be for such limited or unlimited purposes as may be designated by the Lessor. The Government shall not be responsible for the control or safety of the general public, nor shall the Government be responsible for the correction of unsanitary conditions due to general public use of the demised premises."

4. paragraph 22 of General Lease No. S-3846, is hereby deleted in its entirety and replaced with the following:

"22. The Lessor reserves unto itself all ground and surface water, ores, minerals and mineral rights of every description on, in, or under the demised premises."



5. paragraph 9 of General Lease No. S-3846 is deleted in its entirety.

IN CONSIDERATION THEREOF, the Lessor and Government further agree that this Amendment of Lease Agreement is subject to all the covenants and conditions in the General Lease No. S-3846, except as herein provided.

This Amendment, read in conjunction with the General Lease No. S-3846 sets forth the entire agreement between the Lessor and Government; and the general lease as amended and modified hereby shall not be altered or modified in any particular except by a memorandum in writing signed by the Lessor and Government.

IN WITNESS WHEREOF, the STATE OF HAWAII, by its Board of Land and Natural Resources, has caused the seal of the Department of Land and Natural Resources to be hereunto affixed and the parties hereto have caused these presents to be executed the day, month, and year first above written.

Approved by the Board of
Land and Natural Resources
at its meeting held on
April 26, 2013.

STATE OF HAWAII

By _____
WILLIAM J. AILA, JR.
Chairperson
Board of Land and
Natural Resources

APPROVED AS TO FORM:

LESSOR

Cindy Y. Young
CINDY Y. YOUNG
Deputy Attorney General

UNITED STATES OF AMERICA

Dated: May 15, 2013

By _____
Its _____

GOVERNMENT



NEIL ABERCROMBIE
GOVERNOR OF HAWAII



STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

November 1, 2012

WILLIAM J. AILA, JR.
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

GUY H. KAULUKUKUI
FIRST DEPUTY

WILLIAM M. TAM
DEPUTY DIRECTOR - WATER

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

Col. Douglas Mulbury
Commander, U.S. Army Garrison-Hawaii
851 Wright Ave, WAAF
Schofield Barracks, 96857

Subject: Proposed Modifications to the Ewa Forest Reserve Lease

The Department of Land and Natural Resources (DLNR) is in the process of changing the land management jurisdiction of a portion of the Ewa Forest Reserve to a Natural Area Reserve (NAR) which requires revisions to State General Lease No. S-3846, U.S. Lease Contract No. DA-94-626-ENG-78. This lease encompasses the Ewa Forest Reserve on Oahu for use by the United States of America for military purposes (see attached lease). The lease expires August 16, 2029. Another goal of the lease modification is to remove certain restrictions for public use of the area.

On September 13, 2011, representatives from the Army and the DLNR met to discuss proposed lease revisions. Army representatives included Kapua Kawelo, Supervisory Natural Resource Management Specialist, staff from the Environmental Division, and Range Control staff. The parties agreed that training use in this area has changed over time and is very limited and specialized. The Army requested the ability to continue conducting beneficial natural resource management, and **agreed to limit military training to overflights**. Staff agreed in concept to the proposed revisions listed below. Please indicate your approval of these revisions and our staff will proceed with the lease modification process. The lease revision process in the DLNR includes approval from the NAR System Commission and the Board of Land and Natural Resources.

State General Lease No. S-3846 Proposed Revisions

Replace condition 9 with: 9. Reserved.

Replace condition 5 with:

The Government shall have the right, during the existence of this lease, to conduct beneficial natural resource management actions, subject to Hawaii Revised Statutes chapters 195D and 183C, as applicable. During periods that the Government is conducting these actions, the Government shall provide the Lessor written monthly and annual reports containing summaries of activities conducted and scheduled future activities.

Replace condition 15 with:

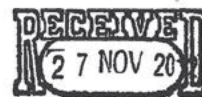


EXHIBIT "A"

The Government shall not use any portion of the demised premises for training exercises on the ground (firing and non-firing) or the construction of any structures or roads without prior written consent of the Lessor. The Government will limit training in the demised premises for aviation training, including low elevation technical operations.

Replace condition 16 with:

The said premises shall be available to the Lessor which may open them to the general public who shall be subject to the laws of the State of Hawaii during their presence on the premises which shall be for such limited or unlimited purposes as may be designated by the Lessor. The Government shall not be responsible for the control or safety of the general public, nor shall the Government be responsible for the correction of unsanitary conditions due to general public use of the demised premises.

Replace condition 22 with:

The Lessor reserves unto itself all ground and surface water, ores, minerals and mineral rights of every description on, in or under the demised premises.

Thank you for considering this request to allow DLNR to meet its management objectives of this high-priority area. For more information, please contact Emma Yuen, NARS Enhancement Coordinator at [REDACTED] or [REDACTED]

[REDACTED]

Chairperson

Department of Land and Natural Resources

Attachments



REPLY TO
ATTENTION OF:

DEPARTMENT OF THE ARMY
US ARMY INSTALLATION MANAGEMENT COMMAND, PACIFIC REGION
HEADQUARTERS, UNITED STATES ARMY GARRISON, HAWAII
851 WRIGHT AVENUE, WHEELER ARMY AIRFIELD
SCHOFIELD BARRACKS, HAWAII 96857-5000

0 8 FEB 2013

MEMORANDUM FOR Commander, US Army Engineer District, Honolulu District,
(CEPOH-RE), Bldg 230, Fort Shafter, Hawaii 96858-5440

SUBJECT: Proposed Modifications to the Ewa Forest Reserve Lease

1. Reference letter, State of Hawaii, Department of Land and Natural Resources (DLNR), dated 1 November 2012, subject as above, encl.
2. This headquarters approves the proposed modifications to the Ewa Forest Reserve lease. The modifications apply to 1,311 acres of the 4,390 acres granted to the Army in Kawaihoa Training Area.
3. The change in the land management jurisdiction of the upper portion of the Ewa Forest Reserve to a Natural Area Reserve Modification requires that the State General Lease No. S-3846, Army contract no. DA-94-626-ENG-78, be modified.
4. Request you coordinate modified lease with State DLNR, Emma Yuen, NARS Enhancement Coordinator.

Encl

7 COL, SF
Commanding

EXHIBIT "B"

5. The Government shall have the right, during the existence of this lease, to attach fixtures, and erect structures or signs, in or upon the premises hereby leased, which fixtures and structures or signs, so placed in, upon or attached to the said premises shall be and remain the property of the Government and may be removed or otherwise disposed of by the Government. In addition, the Government shall post and maintain signs on roads and trails entering dangerous areas to provide a warning of any dangerous or hazardous activities; provided, that the information placed on the posted signs anywhere within the demised premises shall not be incompatible with the terms of this lease and, in those instances where joint use of an area is permitted, the information placed on the signs may include the permitted joint activities.

Replace condition 5 with:

The Government shall have the right, during the existence of this lease, to conduct beneficial natural resource management actions, subject to Hawaii Revised Statutes chapters 195D and 183C, as applicable. During periods that the Government is conducting these actions, the Government shall provide the Lessor written monthly and annual reports containing summaries of activities conducted and scheduled future activities.

15. The Government shall not use any portion of the demised premises as an impact area for explosive or incendiary munitions of any type and shall limit firing on the premises to weapons not larger than .50 caliber provided, however, the Government may also fire inert 3.5-inch rockets or weapons of similar size or purpose as long as such training will not cause fires.

Replace condition 15 with:

The Government shall not use any portion of the demised premises for training exercises on the ground (firing and non-firing) or the construction of any structures or roads without prior written consent of the Lessor. The Government will limit training in the demised premises for aviation training, including low elevation technical operations.

EXHIBIT "C"

16. When the demised premises or any part thereof is not scheduled for Government training purposes from dusk Friday to midnight Sunday and from dawn to midnight on national holidays, the said premises shall be available to the Lessor which may open them to the general public who shall be subject to the laws of the State of Hawaii during their presence on the premises which shall be for such limited or unlimited purposes as may be designated by the Lessor; provided, that the Lessor may declare the whole or any portion of the demised premises during such open periods as a public shooting or fishing ground, and the Lessor shall have the right to issue written permits to hunters and fishermen, subject to rules and regulations issued by the said Lessor; and, provided further, however, that permitted hunting and fishing activities shall be coordinated with the training activities of the Government on the demised premises and the Lessor shall obtain from such permittees written releases which will hold the Government and the Lessor harmless from any accidental injuries or deaths suffered by the holders of such permits; and, provided still further, that the Government shall make an effort to schedule its training exercises in such a manner as to enable the general public to use the subject area during the periods hereinabove mentioned and shall publish a notice in two papers of general circulation at least three (3) days prior to each said weekend or holiday on which the premises or any portion thereof will be used for training exercises except when prohibited therefrom by overriding military contingencies. The Government shall not be responsible for the control or safety of the general public, nor shall the Government be responsible for the correction of unsanitary conditions due to general public use of the demised premises.

Replace condition 16 with:

The said premises shall be available to the Lessor which may open them to the general public who shall be subject to the laws of the State of Hawaii during their presence on the premises which shall be for such limited or unlimited purposes as may be designated by the Lessor. The Government shall not be responsible for the control or safety of the general public, nor shall the Government be responsible for the correction of unsanitary conditions due to general public use of the demised premises.

22. The Lessor reserves unto itself all ground and surface water, ores, minerals and mineral rights of every description on, in or under the demised premises but shall exploit or permit others to exploit the said ores, minerals and mineral rights only with the consent of the Government. Notwithstanding the foregoing reservation, the Government shall have the right to develop and use for road construction projects on the demised premises sources of coral, rock and similar materials occurring naturally on the said premises and to use said ground and surface waters for purposes incident to the rights granted by this lease.

Replace condition 22 with:

The Lessor reserves unto itself all ground and surface water, ores, minerals and mineral rights of every description on, in or under the demised premises.

9. In recognition of public use of the demised premises, the Government shall make every reasonable effort to stockpile supplies and equipment in an orderly fashion and away from established roads and hiking trails and to remove or deactivate all live or blank ammunition upon completion of a training exercise or prior to entry by the said public, whichever is sooner.

State of Hawai'i
DEPARTMENT OF LAND AND NATURAL RESOURCES
Division of Forestry and Wildlife
Honolulu, Hawaii 96813

April 12, 2013

Chairperson and Members
Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Land Board Members:

SUBJECT: ACCEPTANCE OF HEARING MASTER'S REPORT, WITHDRAWAL
OF APPROXIMATELY 1,500 ACRES OF A PORTION OF
GOVERNOR'S PROCLAMATION DATED MARCH 9, 1906 FROM THE
EWA FOREST RESERVE AND RE-SET ASIDE AS THE POAMOH
NATURAL AREA RESERVE, TMK (1) 7-2-001:006 por, WAHIAWA,
OAHU

BACKGROUND:

A portion of the Ewa Forest Reserve, Poamoho Section, (established by Governor's Proclamation dated March 9, 1906), on the leeward slopes of the Koolau Mountains, is proposed to become part of the State of Hawaii Natural Area Reserves System (NARS) as the Poamoho Natural Area Reserve (NAR). The Poamoho NAR would include an area of approximately 1,300 acres in the Protective Subzone of the Conservation District. A map and a description of the important and unique resources that led to the nomination of this area as a NAR is attached.

Approval to hold a public hearing on the proposed Poamoho Natural Area Reserve was granted by the Board of Land and Natural Resources (BLNR) on October 28, 2005. Notice of public hearing was published in newspapers statewide pursuant to Hawaii Revised Statutes (HRS) §183 and §195. A public hearing was held on April 30, 2008. A press release and notice of the hearing was sent to newspapers and interested parties listed in Section VI of the attached nomination, in addition to signs posted in the subject area. DLNR received 16 testimonies in support of the proposal, two opposed, and one commenting, which are attached along with the minutes of the hearing. A public hearing was held to withdraw the area from the Forest Reserve on May 26, 2009 pursuant to HRS §195, after receiving approval to hold a hearing from the BLNR on December 12, 2008. No testimony was received on that item. The BLNR accepted the hearing masters report on September 28, 2009.

The Poamoho Section of the Ewa Forest Reserve is encumbered by State General Lease S-3846 for military purposes by the United States of America. The lease expires on August 16, 2029, and includes the area proposed as a NAR. Hawaii Administrative Rules (HAR) § 13-209 prohibit activities in Natural Area Reserves that are inconsistent with Hawaii Revised

Statutes (HRS) § 195. To make the NAR designation consistent with the lease overlay, modifications to the lease are needed for uses in the proposed NAR. Approval to modify the lease has been secured from the Department of the Army, and will be presented to the Board in a separate agenda item from the Land Division.

DISCUSSION

Supporting testimony indicated that the NAR designation would increase protection for the native ecosystems and important populations of endangered species in Poamoho. Additionally, Poamoho was deemed by some to help fulfill the NAR statute to represent Hawaii's natural communities, as there are no Natural Area Reserves in the Koolau Mountains. Others testified that NAR designation would aid management of feral pigs and strawberry guava, benefiting the watershed.

Others highlighted the importance of the Poamoho, Schofield-Waikane, and Koolau Summit Trails, and recalled the large amount of trail maintenance work and effort to regain access to the Poamoho trail through a Memorandum of Agreement with Dole Foods, Inc.

Opposing testimonies were concerned that NAR designation would create barriers to accessing the area.

Public access has also been a priority for DOFAW through the efforts of the Na Ala Hele program and partner support in this area. NAR designation does not change access for hikers in small groups and will likely have little impact on this activity. NAR rules allow hiking, nature study in group sizes of ten or less, as well as hunting pursuant to Hawaii Administrative Rules § 13-209. Other activities are allowed for users who have obtained a permit.

A forest protection project is currently ongoing in the proposed Natural Area Reserve, which includes fence construction to exclude non-native pigs. The boundaries of the Natural Area Reserve have been modified to approximate the proposed fence.

The proposed Poamoho Natural Area Reserve is recommended for inclusion in the Natural Area Reserve System, for containing native forests on the leeward Koolau mountains and rare species that are not represented in the NARS. This includes 11 rare or endangered animal species and 13 rare or endangered plant species not known from the proposed Kaluanui NAR, which has been nominated to represent windward Koolau ecosystems.

CHAPTER 343 – ENVIRONMENTAL ASSESSMENT:

This action before the Board represents a transfer in management jurisdiction and does not constitute a use of State lands or funds, and therefore, this action is exempt from the provisions of Chapter 343, HRS, relating to environmental impact statements. The Division of Forestry and Wildlife shall be responsible for compliance with Chapter 343, HRS, as amended for NARS program activities on the land that are not otherwise included in existing environmental compliance documents for that parcel. Pursuant to HAR § 11-200-8, foreseeable uses of the State lands by the NARS program include:

Exemption Class: DLNR, Division of Forestry and Wildlife, Class 1, Item 8

Exempt Item Description: Weed, brush and noxious tree control using hand tools, small motorized equipment (chainsaws and weedeaters), and approved herbicides on DOFAW program areas, campsites, picnic grounds, viewpoints, baseyards, wildlife water units, trails, captive propagation facilities, arboreta, plant nurseries, checking stations, and public use facilities.

Exemption Class: DLNR, Division of Forestry and Wildlife, Class 1, Item 17

Exempt Item Description: Animal damage control actions, when needed to maintain resource values, in Division of Forestry and Wildlife (DOFAW) program areas, including application of approved rodenticides, and ungulate removal.

Exemption Class: Department of Land and Natural Resources Class 3, Item 1

Exempt Item Description: Fences around or to manage threatened or endangered plants; covered and open areas for endangered species, game birds and mammals; auxiliary buildings for food storage, equipment storage, incubators and brooders; open-top breeding and release pens, field aviaries and hacking boxes; and for watershed and native forest management and restoration. Fences shall contain step-overs or other features that permit pedestrian access for cultural and recreational use.

Exemption Class: Department of Land and Natural Resources Class 3, Item 2

Exempt Item Description: Cabins, resident workers' quarters, warehouse workshops, mobile camping structures, weather stations, checking stations for hunters, hikers, and campers; meat safes, viewing kiosks and platforms, wildlife viewing towers, sanitary facilities, trail shelters, equipment shelters, fire equipment caches, arboreta, and plant nurseries.

Exemption Class: Department of Land and Natural Resources Class 4, Item 1

Exempt Item Description: Establishment of helispots.

Exemption Class: Department of Land and Natural Resources Class 4, Item 7

Exempt Item Description: Establish temporary or permanent vegetative cover including trees, shrubs and grasses for landscaping, reforestation, soil stabilization, and wildlife habitat.

Exemption Class: Department of Land and Natural Resources Class 5, Item 2

Exempt Item Description: Game and non-game wildlife surveys, inventory studies, new transect lines, photographing, recording, sampling, collection and captive propagation (involves walking, driving, and flying in the field, helicopters, light aircraft), use of nets and firearms, temporary traps including snares, mist nets, corral traps, drop door traps or leg hold traps.

Dates of Agency Exemption Lists: July 18, 2011, June 12, 2008

RECOMMENDATIONS: That the Board:

- 1) Accept the Hearing Master's Report (Attachment 2).
- 2) Approve of and recommend to the Governor the issuance of an executive order withdrawing approximately 1,500 acres from the Ewa Forest Reserve, TMK (1) 7-2-001:006 por, Wahiawa, Oahu and further subject to the following:
 - a. The standard terms and conditions of the most current executive order form, as may be amended from time to time;
 - b. Disapproval by the Legislature by two-thirds vote of either the House of Representatives or the Senate or by a majority vote by both in any regular or special session next following the date of the setting aside;
 - c. Review and approval by the Department of the Attorney General; and
 - d. Such other terms and conditions as may be prescribed by the Chairperson to best serve the interests of the State.
- 3) Approve of and recommend to the Governor the issuance of an executive order setting aside approximately 1,500 acres from the Ewa Forest Reserve, TMK (1) 7-2-001:006 por, Wahiawa, Oahu, to the State of Hawaii, Department of Land and Natural Resources, Division of Forestry and Wildlife, for the Poamoho Natural Area Reserve, under the terms and conditions cited above, which are by reference incorporated herein and subject further to the following:
 - a. The standard terms and conditions of the most current executive order form, as may be amended from time to time;
 - b. Disapproval by the Legislature by two-thirds vote of either the House of Representatives or the Senate or by a majority vote by both in any regular or special session next following the date of the setting aside;
 - c. Review and approval by the Department of the Attorney General; and
 - d. Such other terms and conditions as may be prescribed by the Chairperson to best serve the interests of the State.

Respectfully Submitted,

[Redacted Signature]

Administrator
Division of Forestry and Wildlife

APPROVED FOR SUBMITTAL:

[Redacted Signature]

Chairperson

Attachments



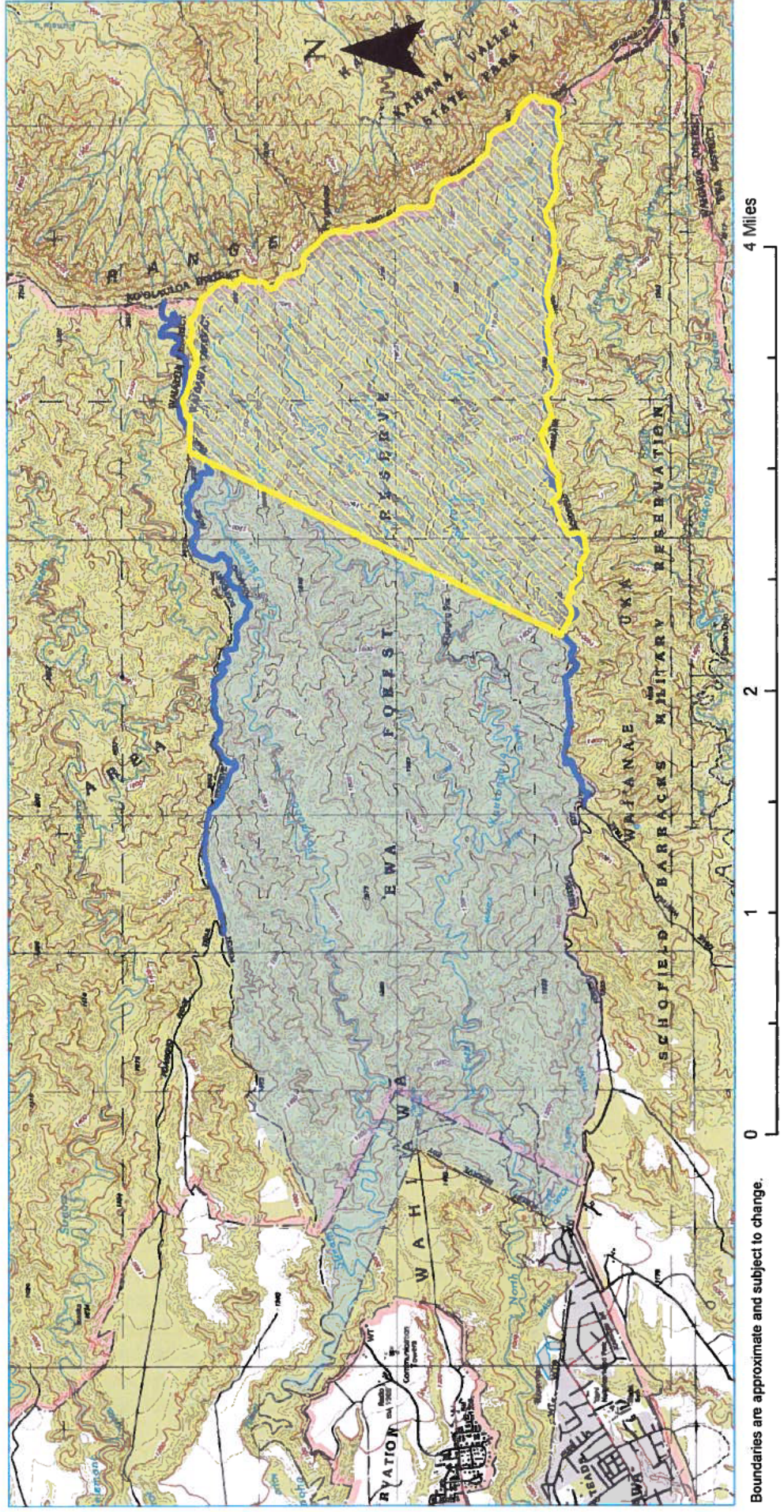
Proposed withdrawal from Ewa Forest Reserve for set-aside as the Poamoho NAR

Legend

 Proposed Poamoho NAR

 Ewa Forest Reserve

 Trails



Boundaries are approximate and subject to change.

PROPOSAL FOR THE POAMOHU NATURAL AREA RESERVE **2013**

I. EXECUTIVE SUMMARY

The Natural Area Reserve System Commission recommends a portion of the native forest located on the forested leeward slopes of the northern Koolau Mountains currently known as the Poamoho Public Hunting Area (PHA) become established as the Poamoho Natural Area Reserve (NAR). The proposed reserve would encompass approximately 1,500 acres of state-owned land that is currently part of the Ewa Forest Reserve (TMK (1) 7-2-001-006 por. The proposed NAR is bounded by the Poamoho Trail to the north, the Schofield-Waikane Trail to the south, the summit of the Koolau Mountains to the east. The western boundary approximates a proposed fenceline.

II. INTRODUCTION

Scientific Value, Rarity, and Representativeness

The proposed NAR contains four native natural communities: Mixed Fern/Shrub Cliff; Ohia Shrubland; Ohia/Uluhe Forest; and Koa/ Ohia Forest. Twenty-five rare plant species and thirteen rare animals have been reported in the area (Table 1). The forest communities found in the wet summit crest zone of the Koolau Mountains are not well represented in the State of Hawaii Natural Area Reserve System.

Biological/Ecological Design

The designation of the Poamoho NAR would create a band of forest managed primarily to protect native species and ecosystems. This band of protection would consist of the U. S. Army Garrison-Hawaii managed Kawaihoa Training area in the north, the proposed Poamoho NAR in the center, and the U. S. Fish and Wildlife Service managed Oahu Forest National Wildlife Refuge to the south.

III. BACKGROUND/HISTORY

Past Land Use

The Koolau Mountains were used as grazing land from the mid 1800's to the turn of the century. Ungulate damage to the forest led many organizations, including the Hawaii Sugar Planters Association, to recognize the value of these forests as watersheds for urban Oahu and the agricultural ventures in central Oahu. These proponents called for a government system of protection for forested areas. Finally, in 1903, the Territorial Legislature passed Act 44, which established the Board of Commissioners of Agriculture and Forestry and the Department of Forestry in the Territorial Government. Act 44 also created the legal framework for the establishment of Forest Reserves that included public as well as private lands. On Oahu, Governors Proclamation No. 13 dated March 9, 1906, created the Ewa Forest Reserve.

Present Land Use

The State of Hawaii, Department of Land and Natural Resources, Division of Forestry and Wildlife (DOFAW) currently manages the area as a Forest Reserve and the area is designated as a Public Hunting Area (PHA). It is one of 12 designated Public Hunting Areas (totaling 24,443 acres) on the Island of Oahu. Hunting is allowed year-round on Saturdays, Sundays, and State Holidays.

To protect the native forests and watersheds of this area, a fence is proposed to exclude feral pigs from approximately 1,500 acres, in the most remote, inaccessible summit regions of Poamoho, in the Ewa Forest Reserve and approximating the boundaries of the proposed NAR. This project affects approximately 1/3 of the Public Hunting Area at Poamoho in the upper summit regions of the reserve - an area rarely visited by hunters due to its remoteness. This project does not affect hunting opportunities in the lower two thirds of the Ewa Forest Reserve, which is the primary hunting location in Poamoho. DOFAW continues to address and improve public access for hunters, hikers and other recreational groups through trails, service roads and permits. Walkovers and gates will be installed to allow public access to the protected areas. The public

will have the opportunity to participate in staff led hunts to remove feral pigs from fenced areas. Access to priority protected areas for traditional Hawaiian cultural practices is not restricted by this project. Protecting the native species of this area from damage and extinction will perpetuate traditional cultural practices associated with these upland forests.

The area is also served by three main hiking trails: the Poamoho Trail, the Schofield/Waikane Trail, and the Koolau Summit Trail. Public hikers use these trails on a regular basis. Permission to reach the trailheads must be obtained from the Division of Forestry and Wildlife for the Poamoho trail, and the Division of Forestry and Wildlife and U. S. Army Garrison – Hawaii for the Schofield/Waikane trail. These trails lead to the Koolau Summit Trail that joins these trails at the top. The Civilian Conservation Corp built the Koolau Summit trail in the mid-1930's.

The U. S. Army signed a Military Training Area lease overlay with the State of Hawaii in 1964. This lease incorporates the entire Poamoho portion of the Ewa Forest Reserve into the Kawailoa Training Area. The Kawailoa Training Area lease is State of Hawaii General Lease number S-3846 and U. S. Contract number DA-94-626-ENG-78. The lease is effective from August 17, 1964 to August 16, 2029.

IV. JUSTIFICATION

The proposed Poamoho Natural Area Reserve (NAR) supports a variety of native habitats, several very rare plants and animals, and a diversity of other more common native species. The native natural communities occur primarily in the mid and upper reaches of the current Poamoho Public Hunting Area from approximately 427 to 823 meters (1,400 feet to 2,700 feet). The habitat below this elevation is a band of alien dominated vegetation that extends to the agricultural fields and other human related development.

There are four native natural community types in the Poamoho area. These community classification descriptions are taken from a biological survey done for the Division of Forestry and Wildlife by the Hawaii Natural Heritage Program (HINHP) in 1994. None of the four native natural community types are considered rare. Above the band of alien-dominated vegetation, is a mosaic of Koa (*Acacia koa*)/Ohia (*Metrosideros polymorpha*) Lowland Mesic Forest and Ohia/Uluhe (*Dicranopteris linearis*) Lowland Wet Forest. Along the summit crest, on the cliffs and steeper slopes is a complex mosaic of Mixed Fern/Shrub Montane Wet Cliff and Ohia Montane Wet Shrubland.

Wet Summit Crest Zone

Above 670 meters (ca. 2,200 feet) elevation along the Koolau summit crest, prevailing conditions are cool, usually wet, windswept, and often cloud-shrouded. The topography ranges from cliffs to moderate slopes. On the cliffs and steeper slopes were a mosaic of Mixed Fern/Shrub Montane Wet Cliff and Ohia Montane Wet Shrubland. These two Wet Summit Crest communities are described below.

Mixed Fern/Shrub Montane Wet Cliff Community

At elevations generally above 905 meters (3,000 feet) on steep valley walls and cliff faces of the windward slopes of Kauai, Oahu, Maui, and the Kohala Mountains of Hawaii is a community dominated by a variable association of native ferns and shrubs. Rainfall is very high on these windward cliffs, generally exceeding 3,800 millimeters (150 inches) per year. Adjacent communities generally include Ohia Montane Wet Shrubland and Ohia Wet Forest, but may also include bogs, uluhe-dominated slopes, and (only in the Koolau Mountains of Oahu) stands of Loulu Hiwa Lowland Wet Forest. Although the Mixed Fern/Shrub Montane Wet Cliff community type is not considered rare, nearly all examples contain rare plants and, on Oahu, endangered tree snails (*Achatinella* spp.) are known from this community type.

Mixed Fern/Shrub Montane Wet Cliffs are represented in protected areas such as Haleakala National Park, Kipahulu District, and the Waikamoi Preserve of The Nature Conservancy of Hawaii. They are also found in several of the Hawaii State Natural Area Reserves: Puu O Umi NAR in Kohala, Hawaii; Hanawi NAR and West Maui NAR on Maui; and Mt. Kaala NAR on Oahu. None of the Koolau range examples are in the designated protected areas.

The proposed Poamoho NAR examples of Mixed Fern/Shrub Montane Wet Cliff are representative of this community in the Koolau Mountains. It occupies moderate to very steep, windward-facing slopes only in the vicinity of the summit crest. Ferns, such as 'ama'u (*Sadleria pallida*) and hapu'u (*Cibotium* spp.) and the native mat ferns, uluhe (*Dicranopteris linearis* and *Diplopterygium pinnatum*) were important components. Shrubs such as puahanui (*Broussaisia arguta*), manono (*Hedyotis* spp.), kookoolau (*Bidens macrocarpa*), Ohia, ohelo (*Vaccinium* spp.), kopiko (*Psychotria* spp.), and naenae (*Dubautia laxa*) were also an important component. The wet cliffs also included endemic lobelioids such as *Trematolobelia macrostachys*. Many species of small ferns such as *Elaphoglossum* spp. and *Adenophorus* spp., and mosses were found in the epiphyte and herb layer. This community has a restricted range and a global rank of G3 (HINHP 1994a).

Ohia Montane Wet Shrubland Community

On the windward faces of Kauai, Oahu, East Molokai, and the upper ridge crests and steep slopes of windward West Maui and the Kohala Mountains of Hawaii are very wet shrub communities composed of stunted Ohia and a number of other dwarfed endemic trees and shrubs. The elevation range of this community is from about 760 meters (2,500 feet) to more than 1,525 meters (5,000 feet). The climate of these summit communities is cool and extremely wet with an annual rainfall well over 2,500 millimeters (100 inches), and in some places approaching 5,000 millimeters (200 inches). Winds are typically strong as they sweep up the steep ridges from the windward slopes. Substrates are shallow soils over weathered rock or thin organic peat over clay and ironstone. Although not considered a rare natural community type, a variety of rare plants has been reported from examples of Ohia Montane Wet Shrubland on all islands, and endangered tree snails (*Achatinella* spp.) are known from Oahu examples.

In the proposed Poamoho NAR, Ohia Montane Wet Shrubland occupied exposed ridge crests and gulch slopes from about 730 to 850 meters (2,400 to 2,600 feet) elevation. Another adjacent community included Ohia/Uluhe Lowland Wet Forest in gulch bottoms and lower slopes. The shrubland components included manono (*Hedyotis* spp.), alani (*Melicope* spp.), kawau (*Ilex* sp.), puahanui (*Broussaisia arguta*), hapuu (*Cibotium* spp.), kolea (*Myrsine* spp.), 'ohelo (*Vaccinium* spp.), naupaka (*Scaevola* spp.), stunted 'olapa and lapalapa (*Cheirodendron* spp.), pilo (*Comprosmia longifolia*), uki (*Machaerina angustifolia*), amau (*Sadleria* spp.), and lobeliads such as *Trematolobelia macrostachys*. The groundcover was composed of a thick mat of mosses, herbs such as 'ala'alawainui (*Peperomia* spp.) and makole (*Nertera grandensis*), and a variety of native ferns. Epiphytic mosses, liverworts, ferns, and lichens were conspicuous on the gnarled trunks and branches of small trees and shrubs. Rare plant species found in this community type included *Viola oahuensis*, kolea (*Myrsine juddii*), *Cyanea koolauensis*, hea'e (*Zanthoxylum oahuensis*), and *Hesperomannia aborescens*. This community has a restricted range and a global rank of G3 (HINHP 1994a).

Lowland Forest Zone

Between approximately 180 and 670 meters (590 and 2,200 feet) elevation, conditions are warm, mesic to wet, and generally wind-sheltered. Rainfall diminishes away from the summit crest. In the Poamoho and Schofield-Waikane Trails survey area, there are two forest types within this zone. Ohia Lowland Wet Forest occurred in higher elevations and graded into Koa/Ohia Lowland Mesic Forest below approximately 580 meters (1,900 feet) elevation.

Ohia/Uluhe Lowland Wet Forest Community

Wet forests dominated by Ohia are widespread in the lowland zone of windward Kauai, Oahu, Molokai, Maui, and Hawaii. On Oahu, this is a common vegetation type of upper slopes in the Koolau Mountains and is found along wetter parts of the Waianae summit ridge as well. This community type is not considered rare, though a variety of rare plants have been reported from this and other Ohia Lowland Wet Forest communities.

Ohia is the dominant forest tree in this community, but other trees frequently seen are manono (*Hedyotis terminalis*), mehame (*nttdesma platyphyllum*), kolea (*Myrsine lessertiana*), and Ohia ha (*Syzygium*

sandwicensis). Uluhe and, in some places, uluhe lau nui (*Diploterium pinnatum*) form a dense ground cover generally 0.5 to 1.5 meters (2 to 5 feet) deep below the Ohia canopy. Native trees and shrubs are scattered throughout this layer of matted ferns.

In the proposed Poamoho NAR, Ohia/Uluhe Lowland Wet Forest occurred in gulches and ridges immediately behind the summit crest, as high as 825 meters (2,700 feet) to about 580 meters (1,900 feet) elevation where mesic forest (Koa/Ohia Lowland Mesic Forest) becomes the dominant vegetation type. Rare plants observed in this community in the Poamoho and Schofield-Waikane Trails survey area included *Cyanea acuminata*, *Cyanea lanceolata* spp. *calycina*, nanu (*Gardenia manii*), *Hesperomannia aborescens*, and *Lindsaea repens* var. *macraeana*.

Koa/Ohia Lowland Mesic Forest Community

Lowland mesic forests dominated by koa and Ohia occur on the islands of Kauai, Oahu, Maui, Lanai, and Hawaii. Annual rainfall for this forest type ranges from less than 770 millimeters (30 inches) to more than 1,920 millimeters (75 inches), but substrates supporting Koa/Ohia Lowland Mesic Forest are generally well drained, and often leeward-facing, where dry season conditions may range from dry to mesic. Adjacent communities include mesic forest types dominated by lama (*Diospyros* spp.), Ohia, or, rarely, dominated by Ohia, or into uluhe-dominated slopes.

In the Poamoho and Schofield-Waikane Trails survey area Koa/Ohia Lowland Mesic Forest occupied ridge tops below Ohia-dominated mesic and wet forests of the upper ridges, generally below 580 meters (1,900 feet) elevation. The associated trees consisted of such species as Ohia ha (*Syzygium sandwicensis*) mehame (*Antidesma platyphyllum*), ahakea (*Bohea elatior*), iliahi (*Santalum freycinetianum*), kopiko (*Psychotria* spp), kalia (*Elaeocarpus bifidus*), and alani (*Melicope* spp.). Understory components included manono (*Hedyotis terminalis*), akia (*Wikstroemia oahuensis*), olomea (*Perrottetia sandwicensis*), puahanui (*Broussaisia arguta*), maile (*Alyxia oliviformis*), and ieie (*Freycinetia arborea*). Uluhe was often a dominant understory component. Although not considered a rare community type, several rare plants, including nanu (*Gardenia manii*) occur here. This community has a restricted range and a global rank of G3 (HINHP 1994a).

Present Level of Protection

The area is currently protected under the Conservation District classification of Preservation or "P-1". The proposed NAR is also currently protected under the State Forest Reserve System (Administrative Rules 13-104).

Long-term Ecological Viability – Environmental Consequences of No Action

Designating this important core section of lowland wet forest as a NAR would enhance the ability of the System to participate and contribute to conservation and restoration actions across the entire watershed. As this area has already experienced native species extinctions, and contains many species that are in danger of extinction, it is projected that no management action would lead to eventual loss of additional species.

V. MANAGEMENT NEEDS

Threats Requiring Management

Management priorities include removing feral pigs, which trample and devour vegetation and spread the seeds of invasive weeds. Removal of invasive plant species is also a very high priority management action. Removing or reducing the amounts of predatory mammals and invertebrates, such as rats and the cannibal snail *Euglandia rosea*, is needed near the existing snail and rare plant populations. Outplanting may be needed to preserve populations of very rare and endangered species. Infrastructure to support management may also be required, including helicopter landing zones, weatherports/cabins, monitoring equipment, and trails.

VI. PUBLIC NOTIFICATION

The Nature Conservancy
 NARS Commission
 Division of Aquatic Resources
 Conservation Council of Hawai'i
 Sierra Club – O'ahu chapter
 Oahu Pig Hunters Association
 Environment Hawai'i, Inc.
 Hawai'i Trail and Mountain Club
 Hawai'i Audubon Society
 Hawaiian Botanical Society
 Hawai'i Nature Center
 National Oceanic and Atmospheric
 Administration
 Office of Hawaiian Affairs
 O'ahu Invasive Species Council
 UH Environmental Center
 Oahu NAH Trails and Access Advisory Council
 Representative Marcus Oshiro
 Senator Robert Bunda
 Councilperson Donovan Dela Cruz

North Shore Neighborhood Board
 Division of Conservation and Resources
 Enforcement

 Ko'olau Mountains Watershed Partnership:
 Bishop Museum
 Board of Water Supply
 Department of Hawaiian Home Lands
 Tiana Partners
 Dole Foods Company, Inc.
 Oahu Country Club
 Hawai'i Reserves, Inc.
 Kualoa Ranch
 Department of Land & Natural Resources
 Kamehameha Schools
 U.S. Army
 Queen Emma Land Company
 Agribusiness Development Corporation
 U.S. Fish and Wildlife Service
 University of Hawaii / Lyon Arboretum

VII. BIBLIOGRAPHIES/REFERENCES

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- 1991 Recovery Plan for the Oahu Tree Snails of the Genus *Achatinella*. U.S. Fish and Wildlife Service, Portland, OR. pp. 55+61 pages of appendices.
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 - 1994a Endangered and Threatened Wildlife and Plants. *Federal Register*. 50CFR 17.11 & 17.12 U.S. Government Printing Office, U.S. Fish and Wildlife Service, Washington, D.C.
 - 1994b [Pacific Islands Office] Plants. Hawaiian Islands. Listed, proposed or candidate species under the U.S. Endangered Species Act. Updated November 2, 1994. Unpublished.
 - 1994c Endangered and Threatened Wildlife and Plants. *Federal Register*. 50CFR. Part 17. (217):56333-56351.
 - 1994d [Pacific Islands Office] Animals. Hawaiian Islands. Listed, proposed or candidate species under the U.S. Endangered Species Act. Updated March 17, 1994. Unpublished.
- 2000 Final rule to list as endangered the O'ahu 'Elepaio from the Hawaiian Islands and determination of whether designation of critical habitat is prudent. *Federal Register*. 20760-20769.
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- 1982 *A Field Guide to Mammals in Hawaii*. Oriental Publishing Company, Honolulu, Hawaii.

Table 1: Rare Species of the Proposed Poamoho Natural Area Reserve

SCIENTIFIC NAME	COMMON NAME	FEDERAL STATUS	TYPE
<i>Asio flammeus sandwichensis</i>	Pueo, Short-eared Owl	C	Bird
<i>Chasiempis sandwichensis ibidis</i>	O'ahu 'Elepaio	E	Bird
<i>Paroreomyza maculata</i>	'Alauahio, O'ahu Creeper**	E	Bird
<i>Loxops coccineus wolstenholmi</i>	'Akepeu'ie, O'ahu 'Akepa**	None	Bird
<i>Vestiaria coccinea</i>	'I'iwi	None	Bird
<i>Lasiurus cinereus semotus</i>	'Ope'ape'a, Hawaiian Hoary Bat	E	Bat
<i>Achatinella apexfulva</i>	Pūpū kani'oe, tree snail	E	Snail
<i>Achatinella bulimoides</i>	Pūpū kani'oe, tree snail	E	Snail
<i>Achatinella byronii</i>	Pūpū kani'oe, tree snail	E	Snail
<i>Achatinella decipiens</i>	Pūpū kani'oe, tree snail	E	Snail
<i>Achatinella lila</i>	Pūpū kani'oe, tree snail	E	Snail
<i>Achatinella sowerbyana</i>	Pūpū kani'oe, tree snail	E	Snail
<i>Megalagrion nigrohamatum nigrolineatum</i>	Pinao, damselfly	C	Damselfly
<i>Chamaesyce rockii</i>	'Akoko, koko kokomalei	E	Plant
<i>Cyanea acuminata</i>	'Ōhā, hāhā, 'ōhāwai	E	Plant
<i>Cyanea humboldtiana</i>	'Ōhā, hāhā, 'ōhāwai	E	Plant
<i>Cyanea koolauensis</i>	'Ōhā, hāhā, 'ōhāwai	None	Plant
<i>Cyanea lanceolata</i> ssp. <i>calycina</i>	'Ōhā, hāhā, 'ōhāwai	None	Plant
<i>Cyanea st.-johnii</i>	'Ōhā, hāhā, 'ōhāwai	E	Plant
<i>Doodia lyonii</i>		None	Plant
<i>Exocarpos gaudichaudii</i>	Heau	None	Plant
<i>Gardenia manii</i>	Nānū, nā'ū	E	Plant
<i>Hesperomannia arborescens</i>		E	Plant
<i>Joinvillea ascendens</i> ssp. <i>ascendens</i>	'Ohe	C	Plant
<i>Lindsaea repens</i> var. <i>macraeana</i>		None	Plant
<i>Lobelia oahuensis</i>	'Oha, hāhā, 'ōhāwai	E	Plant
<i>Lycopodium mutans</i>	Wāwae'iole	E	Plant
<i>Melicope lydgatei</i>	Alani	E	Plant
<i>Myrsine fosbergii</i>	Kōlea	C	Plant
<i>Myrsine judii</i>	Kōlea	E	Plant
<i>Phyllostegia hirsuta</i>		E	Plant
<i>Phyllostegia parviflora</i> var. <i>parviflora</i>		E	Plant
<i>Plantago princeps</i> var. <i>longibracteata</i>	Ale	E	Plant
<i>Psychotria hexandra</i> ssp. <i>oahuensis</i>	Kōpiko, 'opiko	None	Plant
<i>Sanicula purpurea</i>		E	Plant
<i>Thelypteris boydiae</i>		C	Plant
<i>Viola oahuensis</i>		E	Plant
<i>Zanthoxylum oahuense</i>	Hea'e, a'e	None	Plant

*Federal Status: E = Endangered, C = Candidate, SOC = Species of concern, **Probably extinct.

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
Land Division
Honolulu, Hawaii 96813

April 26, 2013

Board of Land and Natural Resources
State of Hawaii
Honolulu, Hawaii

Ref No.: GL 3846

Oahu

Amend General Lease No. 3846 to Allow Lessee to Conduct Activities that are Consistent with the Administrative Rules Governing the Natural Reserve Area System, United States of America, Lessee, Poamoho, Wahiawa, Oahu, Tax Map Key: (1) 7-2-001:006.

BACKGROUND:

General Lease No. 3846 was issued to the United States of America for military purposes for a term of 65 years commencing from August 17, 1964. The leased area consists of 4,309 acres, which is a portion of the Ewa Forest Reserve pursuant to the Governor's Proclamation dated March 9, 1906.

Around 2005, the Natural Area Reserve System of the Division of Forestry and Wildlife ("DOFAW") planned to withdraw about 1,300 acres of the leased area from the Ewa Forest Reserve and designate such area as the Poamoho Natural Area Reserve ("NAR"). In October 2005, the Board authorized the holding of a public hearing regarding the proposed NAR, and the hearing was conducted in April 2008. Under separate cover in today's agenda, the DOFAW will be seeking Board authorization for the withdrawal of this area from forest reserve and setting aside for NAR as described above.

In view of the forthcoming NAR, DOFAW started discussion with the Lessee regarding the possible conflicts between the Lessee's activities under the lease and the governing administrative rules for the NAR. Subsequently, both parties agreed to request the Board to revise the lease conditions of GL 3846, with the intent to conform the Lessee's activities to the pertinent administrative rules. Additionally, the proposed lease revisions provide DOFAW with more flexibility to provide public access to the area.

By its letter dated November 1, 2012, DOFAW proposed the revised lease language, and the Lessee indicated its agreement in its response dated February 8, 2013. DOFAW advised the staff that the Department of the Attorney General has also participated in the discussion and formulation of the revised lease conditions. Both letters are attached as **Exhibit A** and **B** for the Board's reference.

A comparison of the current conditions versus the revised conditions is attached as **Exhibit C¹**, and the proposed Poamoho NAR is outlined in blue on the map attached to Exhibit A. Staff has no objection to the request.

RECOMMENDATION: That the Board authorize the amendment of General Lease No. 3846 as described in Exhibit C under the terms and conditions cited above, and further subject to the following:

1. Review and approval by the Department of the Attorney General; and
2. Such other terms and conditions as may be prescribed by the Chairperson to best serve the interests of the State.

Respectfully Submitted,



District Land Agent

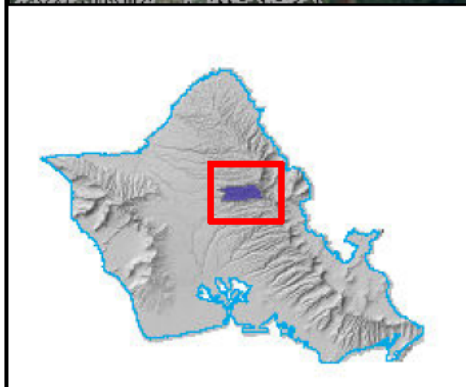
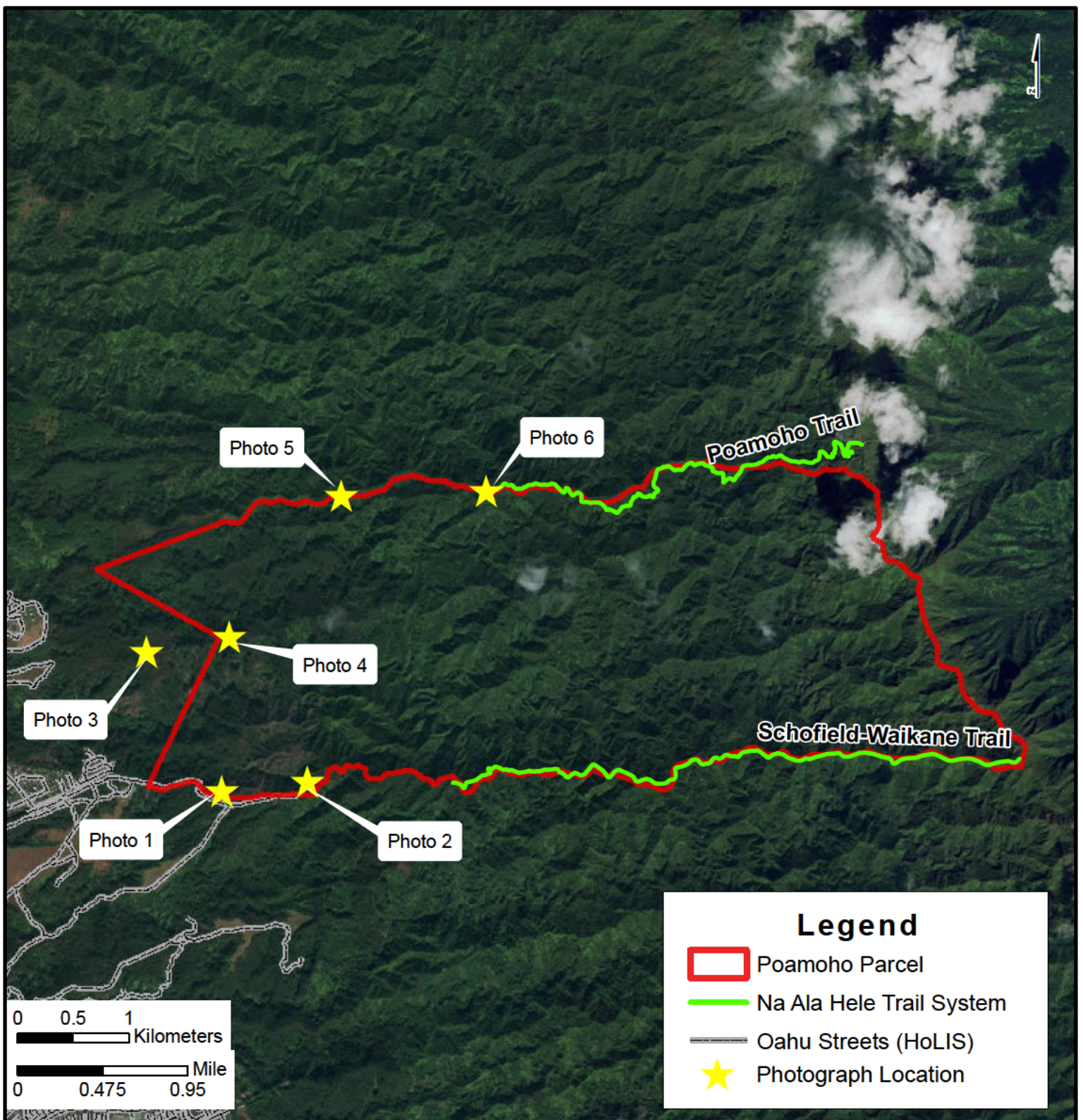
APPROVED FOR SUBMITTAL:



Chairperson

¹ Revised language for conditions 5, 15, 16, and 22 is provided immediately below the respective original conditions on Exhibit C. Condition 9 is to be deleted in its entirety.

APPENDIX C – SITE RECONNAISSANCE PHOTOGRAPHS



Contract No. W9128A-12-D-0005
Date: March 2017

Appendix C

Subject Property Photo Directory Poamoho Parcel

Environmental Condition
of Property (ECOP)
Report for U.S. Army
Land Acquisition, Oahu



Photograph 1 - View of start of southern road, facing east from southwestern corner of Property.



Photograph 2 - View of central portion of parcel, facing north east from southwestern corner of Property.



Photograph 3 - View of central parcel access, facing east from central western access trail to Property near NCTAMS.



Photograph 4 - View of southern portion of parcel, facing south from central western portion of Property.



Photograph 5 - View of central portion of parcel, facing southwest from northwestern corner of Property.



Photograph 6 - View of Poamoho Hele Loa Access trail, facing east from northwestern portion of Property.

APPENDIX D – INTERVIEWS AND CORRESPONDENCE

**ENVIRONMENTAL SITE ASSESSMENT
USER QUESTIONNAIRE**

Project or Facility Name: Poamoho Property

Facility address: Central O'ahu

Facility TMK Parcel(s): 7-2-01-06 (2,371 acres)

Type of Property Transaction: ☒ Purchase ☐ Sale ☒ Lease ☐ Exchange

1. Environmental cleanup liens that are filed or recorded against the site (40 CFR 312.25).

Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?

- ☒ I have reviewed reasonably ascertainable recorded land title records and lien records and am not aware of environmental cleanup liens against the *property*.
- ☐ I am aware of cleanup liens against the *property*, and provide the following information:

2. Activity and land use limitations (AULs) that are in place on the site or that have been filed or recorded in a registry (40 CFR 312.26 (a)(1)(v) and (vi)).

Are you aware of any AULs, such as engineering controls (e.g., engineered caps, liners, treatment systems), land use restrictions, or institutional controls in place at the *property* that are filed or recorded in a registry under federal, tribal, state or local law?

- ☐ I have reviewed reasonably ascertainable recorded land title records and lien records and am not aware of AULs in place at the *property* or that have been filed or recorded.
- ☒ I am aware of AULs associated with the *property*, and provide the following information: *Eastern section forced by the State of Hawaii for Conservation.*

3. Specialized knowledge or experience of the person seeking to qualify for the LLP (40 CFR 312.28).

As the User of this ESA, do you have any specialized knowledge or experience related to the *property* or nearby properties? For example, are you involved in the same line of business as the current or former *occupants* of the *property* or an adjoining *property* so that you would have specialized knowledge of the chemicals and processes used by this type of business?

- ☒ I have no specialized knowledge or experience related to the *property* or nearby properties.
- ☐ I have specialized knowledge or experience, and provide the following related information:

**ENVIRONMENTAL SITE ASSESSMENT
USER QUESTIONNAIRE**

4. Relationship of the purchase price to the fair market value of the property if it were contaminated (40 CFR 312.29).

Does the purchase price being paid for this *property* reasonably reflect the fair market value of the *property*? If you conclude that there is a difference, have you considered whether the lower purchase price is because contamination is known or believed to be present at the *property*??

- ☒ The purchase price reasonably reflects the fair market of the *property*.
☐ The purchase price may not reflect the fair market value of the *property*, for the following reasons:

5. Commonly known or reasonably ascertainable information about the property (40 CFR 312.30).

Are you aware of commonly known or *reasonably ascertainable* information about the *property* that would help the environmental professional to identify conditions indicative of releases or threatened releases? For example:

a) Do you know the past uses of the *property*?

☒ Yes ☐ No

If yes, provide info: *Training land.*

b) Do you know of specific chemicals that are present or once were present at the *property*?

☐ Yes ☒ No

If yes, provide info:

c) Do you know of spills or other chemical releases that have taken place at the *property*?

☐ Yes ☒ No

If yes, provide info:

d) Do you know of any environmental cleanups that have taken place at the *property*?

☐ Yes ☒ No

If yes, provide info:

**ENVIRONMENTAL SITE ASSESSMENT
USER QUESTIONNAIRE**

e) Do you know of any environmental documents relative to the property?

☐ Yes ☒ No If yes, check applicable document:

- | | |
|---|---|
| <input type="checkbox"/> <i>ESA reports</i> | <input type="checkbox"/> <i>Reports regarding hydrogeologic conditions on the property or for the surrounding area</i> |
| <input type="checkbox"/> <i>Environmental compliance audit reports</i> | <input type="checkbox"/> <i>Notices or other correspondence from any government agency relating to past or current violation of environmental laws with respect to the property or relating to environmental liens encumbering the property</i> |
| <input type="checkbox"/> <i>Environmental permits (waste water, hazardous waste, etc.)</i> | <input type="checkbox"/> <i>Hazardous waste generator notices or reports</i> |
| <input type="checkbox"/> <i>Under/above-ground storage tank registration</i> | <input type="checkbox"/> <i>Geotechnical studies</i> |
| <input type="checkbox"/> <i>Underground injection systems registration</i> | <input type="checkbox"/> <i>Risk assessments</i> |
| <input type="checkbox"/> <i>Safety Data Sheets</i> | <input type="checkbox"/> <i>Recorded Activity and Land Use Limitations</i> |
| <input type="checkbox"/> <i>Community right-to-know plan</i> | |
| <input type="checkbox"/> <i>Safety plans; preparedness & prevention plans; spill prevention, countermeasures, control plans, etc.</i> | |

Checked documents are attached. ☐ Yes ☒ No

6. The degree of obviousness of the presence or likely presence of contamination at the property, and the ability to detect the contamination by appropriate investigation (40 CFR 312.31).

As the user of this ESA, based on your knowledge and experience related to the property are there any obvious indicators that point to the presence or likely presence of contamination at the property?

- ☒ I am not aware of obvious indicators of the presence or likely presence of contamination.
- ☐ I am aware of the presence or likely presence of contamination, and provide the following related information:

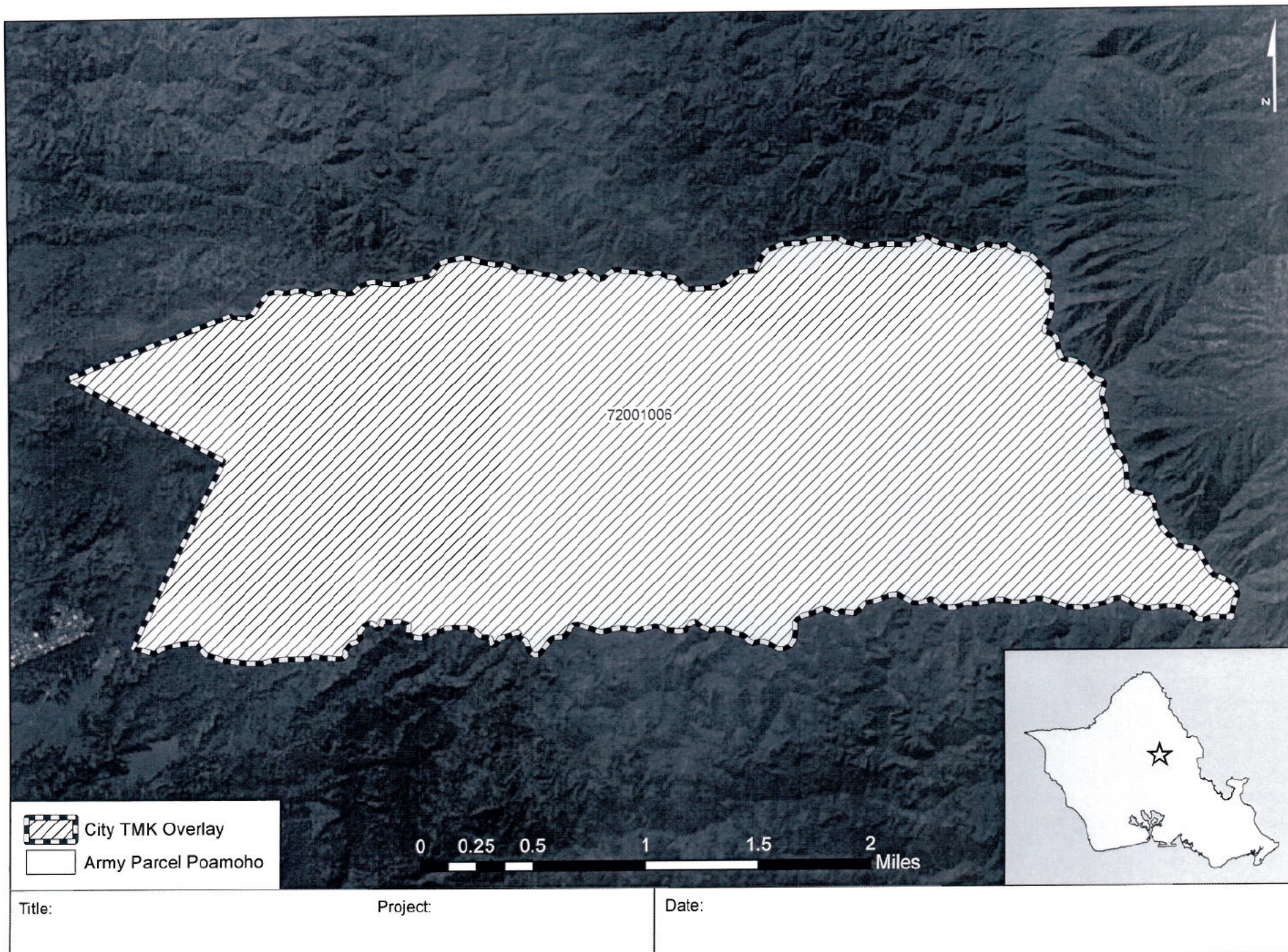
I have responded to the previous questions to the best of my knowledge and belief.

Signature: _____

Print Name: _____

Title: Real Property Accountable Officer

Date: _____



Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community

Record of Interview with DLNR

February 19, 2016

Present: Hart Crowser: [REDACTED] and [REDACTED]
Department of Land & Natural Resources: [REDACTED]

I. Agenda

Poamoho parcel 7-2-01-03 potential overlap with Natural Area Reserves (NAR)

II. Background

- a. [REDACTED] gave background on the Phase I Environmental Site Assessment (ESA) project goals and parcel location.
- b. [REDACTED] discussed his role in DLNR's Na Ala Hele Trails & Access Program in relation to Poamoho parcel. Overall he focuses on negative impact mitigation or natural resource improvement.

III. Discussion

1. [REDACTED] stated that there is a complex ownership and use situation with the parcel. The DLNR currently leases land to the Army.
2. [REDACTED] provided maps to access Poamoho Parcel 7-2-01-03.
 - DLNR made an MOA with Dole to gain access, around Helemano Reservation, through two gate access points to reach the Poamoho trail head. The trail is 3.5 miles to the summit.
 - He will forward [REDACTED] inquiry email to Marigold for confirmation of NAR boundary.
3. Natural Area Reserve:
 - DLNR is purposing a NAR site in the upper area of Poamoho Parcel.
 - [REDACTED] stated that there is a sensitive natural area within the NAR that was fenced for ungulate control and fencing material was delivered via helicopter.
4. Leases:
 - DLNR trying to amend the army leases when they expire so that the DLNR can get weekday use and also to get the NAR areas excluded so that DLNR can get full management; [REDACTED] unsure of status of this effort.

Record of Interview with DLNR

April 5, 2016

Present: Hart Crowser: [REDACTED]

Department of Land and Natural Resources: [REDACTED]

I. Agenda

- Poamoho parcel 7-2-01-03 Natural Area Reserve (NAR) activities

II. Discussion

- a. [REDACTED] gave background on the environmental survey effort at Poamoho in relation to army activities.
- b. Marigold discussed her role in DOFAW's effort to expand Poamoho NAR to protect to a total of 1,300 acres. This expansion would include the eastern portion of Poamoho Parcel (Figure 2).

III. Summary

- 1. Marigold provided documentation and public hearing notes related to the 2013 Public Proposal for the Poamoho NAR
 - The Poamoho proposed NAR contains four native natural communities: Mixed Fern/Shrub Cliff, Ohia Shrubland; Ohia/Uluhe Forest; and Koa/Ohia Forest.
 - Twenty-five rare plant species and thirteen rare animals have been reported in the NAR area.
 - Designation of the Poamoho NAR would create a band of forest managed primarily to protect native species and ecosystems and would consist of U.S Army Garrison-Hawai'i managed Kawaihoa Training area in the north, the proposed Poamoho NAR in the center, and the US Fish and Wildlife Service managed O'ahu Forest National Wildlife Refuge to the south.
- 2. After NAR discussion, [REDACTED] asked Marigold questions related to the fence installation within Poamoho parcel and discovered the following:
 - The entire proposed NAR is not yet fenced.
 - Helicopters provided site access and materials.
 - Fuel spills or other environmental issues while building the fence were not encountered.
 - Signs of environmental issues (drums, waste, other contaminants) were not observed by DOFAW in the NAR work area.
 - The Board of Land and Natural Resources (BLNR) submittal approving the NAR designation is still pending an executive order from the Governor to make the designation official. The BLNR report is dated April 12, 2013.

From: "Huelsman, Ivan Kamakaualani CIV USARMY USARPAC (US)"

<[REDACTED]>

Date: September 14, 2016 at 5:41:03 AM HST

To: [REDACTED] Woo <[REDACTED]>

Subject: RE: [Non-DoD Source] Army Training Areas

1. For Kawaihoa and Kahuku training areas, what types of munitions are used in training? [Blanks](#)
2. Is UXO (unexploded ordnance) a possibility at both sites? [Yes, old stuff that was used previously have been found during training or surveys](#)
3. For the "landing zones", are there any known accidents or releases of fuel at these locations? [None that I am aware of and I have been at RC since 2007.](#)

Respectfully,

Ivan K. Huelsman
Range Training Manager
Work [REDACTED]
Mobile [REDACTED]

PART 2:

PHASE II ENVIRONMENTAL SITE ASSESSMENT

Section 1: Summary

A Phase I Environmental Site Assessment (ESA) was prepared for a parcel of O'ahu real estate, TMK 7-2-01-06, referenced as the "Poamoho Parcel." The Phase I ESA revealed no evidence of recognized environmental conditions associated with the Property. Use of the Property for military training represents a notable finding for the possible presence of unexploded ordnance; however, specific locations of potential UXO were not identified.

No additional investigation or sampling of the Subject Property is recommended.
Therefore, a Phase II ESA will not be conducted.

PART 3:

CATEGORIZATION OF PROPERTY

Section 1: Summary

A Phase I Environmental Site Assessment (ESA) was prepared for a parcel of O'ahu real estate, TMK 7-2-01-06, referenced as the "Poamoho Parcel." The Phase I ESA revealed no evidence of recognized environmental conditions associated with the Property, and a Phase II investigation was not recommended.

Environmental Condition of Property (ECoP) guidance³ provides for properties to be categorized into one of seven categories:

- Category 1: Areas where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas).
- Category 2: Areas where only release or disposal of petroleum products has occurred.
- Category 3: Areas where release, disposal, and/or migration of hazardous substances has occurred, but at concentrations that do not require a removal or remedial response.
- Category 4: Areas where release, disposal, and/or migration of hazardous substances has occurred, and where all remedial response actions necessary to protect human health and the environment have been taken.
- Category 5: Areas where release, disposal, and/or migration of hazardous substances has occurred, and where all remedial response actions necessary to protect human health and the environment have not yet been taken.
- Category 6: Areas where release, disposal, and/or migration of hazardous substances has occurred, but where required actions have not yet been implemented.
- Category 7: Areas that are not evaluated or require additional evaluation.

Based on the results of the Phase I ESA, **the Poamoho Property is categorized as Category 1**, i.e., an area where no release or disposal of hazardous substances or petroleum products has occurred (including no migration of these substances from adjacent areas).

³ US Army Public Health Command (undated), Environmental Condition of Property (ECoP) Investigations, Technical Information Paper No. 380001-0312.