

Final Environmental Condition of Property Report Phase I State-Owned Parcels Pohakuloa Training Area, Hawaii, HI

Prepared for



HHF Planners

Prepared in support of:



US Army Corps of Engineers – Honolulu District



US Army Garrison - Hawaii



Prepared by



**EA Engineering,
Science, and
Technology, Inc., PBC**

March 2017

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EXECUTIVE SUMMARY

The United States (U.S.) Army is preparing an Environmental Condition of Property (ECOP) Report for the Army-leased lands in the State of Hawaii. The Army currently leases 22,971 acres from the State of Hawaii for use at Pohakuloa Training Area (PTA), County of Hawaii, Hawaii (hereafter referred to as the “Subject Site”) consisting of three parcels, Parcel A (A-105-1), Parcel B (A-105-2), and Parcel C (A-105-3) (Appendix A: Figure 1) as identified in the Hawaii State Lease No. S-3849, U.S. Lease DA-94-626-ENG-80. A visual inspection and interviews were conducted at the Subject Site on 7 to 9 June 2016 in support of this ECOP Report.

Findings of this ECOP Report are based on existing environmental information, including visual observations made during the 7 to 9 June 2016 site visit, readily available site records, staff interviews, and federal, state, and local database and file information related to the storage, release, treatment, or disposal of hazardous substances or petroleum products or derivatives of the Subject Site.

This ECOP Report serves as the means to establish baseline environmental conditions at the Subject Site. This ECOP Report meets the Department of Defense (DoD) requirement for preparation of an ECOP Report under provisions of the Base Redevelopment and Realignment Manual (DoD 4165.66-M, March 1, 2006), Section C8.3; and was also performed in substantive compliance with the ASTM International (ASTM) Standard Practice ASTM E1527-13 (Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process) and the U.S. Environmental Protection Agency All Appropriate Inquiry Rule (40 Code of Federal Regulations Part 312).

The ECOP Report was prepared in accordance with applicable federal, state, and local laws and regulations, including:

- Army Regulation (AR) 200-1, “Environmental Protection and Enhancement”
- AR 405-10, “Acquisition of Real Property and Interests Therein”
- ASTM E1527-13, “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process”
- ASTM E2247-08, “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property”
- ASTM D6008-96 (Reapproved 2014), “Standard Practice for Conducting Environmental Baseline Surveys”
- ASTM D5746-98 (Reapproved 2010), “Standard Classification of Environmental Condition of Property Area Types for Defense Base Closure and Realignment Facilities.”

ECOP Type Classification

In accordance with ASTM D6008-96 (Reapproved 2014), the Subject Site is classified by ECOP area type. There are seven ECOP area types:

- ECOP Area Type 1 – An area where no release or disposal of hazardous substances or petroleum products or their derivatives has occurred, including no migration of these substances from adjacent areas.
- ECOP Area Type 2 – An area where only release or disposal of petroleum products has occurred.
- ECOP Area Type 3 – An area where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred but at concentrations that do not require a removal or remedial action.
- ECOP Area Type 4 – An area where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred, and all remedial action necessary to protect human health and the environment have been taken.
- ECOP Area Type 5 – An area where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred and removal or remedial actions, or both, are under way, but all required remedial actions have not yet been taken.
- ECOP Area Type 6 – An area where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred, but required response actions have not yet been initiated.
- ECOP Area Type 7 – An area that is unevaluated or requires additional evaluation.

The parcels at PTA include several ECOP Area types (Appendix A: Figure 1, Table ES-1):

- Parcel A (A-105-1) is the largest parcel at 15,420 acres. It includes TMK 3-4-4-015:008, TMK 3-7-1-004:007, and portions of TMK 3-4-4-016:005. An estimated 3.5 acres of the parcel is the closed and capped former Landfill 2 (POTA-6). This landfill was closed in 1993 and covered in 1996. Long-term monitoring at the landfill recorded zero findings for four consecutive quarters between 2009 and 2012 (U.S. Army Defense Environmental Restoration Program 2013). This former landfill portion is classified as ECOP Area **Type 4**.

An additional estimated 40 acres of the Parcel includes a portion of Range 13/13A, and an area south of the cinder pit at Puu Puahi, which would also be classified as ECOP Area **Type 4**. From 1962 to 1968, the Davy Crockett Weapons System was intermittently used at this range. The body of the Davy Crockett Weapons System spotting round was made of a depleted uranium alloy. A site investigation and the Final PTA Firing Range Baseline Human Health Risk Assessment for Residual Depleted

Uranium was completed and found no adverse human health impacts likely to occur as a result of exposure to the uranium present in the soil at PTA under current land uses (Cabrera Services 2010). Should land uses change, this area within the Subject Site should be reassessed.

The remainder of Parcel A (A-105-1) is classified as ECOP Area **Type 7**. This site is recommended for additional evaluation based on historical land uses.

- Parcel B (A-105-2) is approximately 1,944 acres and is north of the cantonment area. It includes a portion of TMK 3-4-4-016:005, and is classified as ECOP Area **Type 1** due to limited training usage.
- Parcel C (A-105-3) is approximately 5,607 acres and is located in the eastern portion of the Subject Site. It includes a portion of TMK 3-4-4-016:005, and is classified as ECOP Area **Type 7**. This site is recommended for additional evaluation based on historical land uses.

Site-Specific Recognized Environmental Conditions

ASTM E1527-13, “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process” includes four Recognized Environmental Condition (REC) land classifications including *de minimis* conditions, RECs, Historical RECs (HRECs), and Controlled RECs (CRECs).

De minimis Conditions

De minimis conditions generally do not present a material risk of harm to the public or environment, and generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions assessed to be *de minimis* would include minor spills of petroleum products as a result of equipment usage or storage, temporary staging of non-hazardous waste or materials, etc. *De minimis* releases relating to release of petroleum products resulting from vehicle accidents is not considered in this document. No *de minimis* conditions were identified at the Subject Site.

Historical Recognized Environmental Conditions

An HREC refers to a past release that has been remediated to below “residential” standards and given regulatory closure with no use restrictions. HREC is defined by ASTM in the E1527-13 standard as “a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).” No HRECs were identified at the Subject Site.

Controlled Recognized Environmental Conditions

CREC is a new term introduced in the ASTM E1527-13 standard. The CREC concept was introduced to address contaminated sites that have received risk-based regulatory closure, where no further remediation is required but residual contamination still exists at a site and the property is subject to some sort of control or use restriction. These sites, where contamination is controlled but could still pose ongoing or future obligations on the owner (such as special precautions during construction or grading activities), have been a source of some confusion to the environmental due diligence industry with regards to how they should be classified.

The ASTM definition of CREC in the E1527-13 standard is as follows: “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).”

CRECs are presented in Table ES-1.

Recognized Environmental Conditions

REC is one of the terms used to identify environmental liability within the context of a Phase I Environmental Site Assessment. ASTM defines REC in the E1527-13 standard as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to 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 Subject Site includes site-specific RECs, and may include general training areas (TAs)/firing points (FPs) RECs (see Table ES-1 and Appendix A: Figure 4). The general conditions of the Subject Site are unknown due to limited confirmation sampling.

**Table ES-1: Subject Site HRECs, CRECs, and Potential RECs
(Appendix A: Figure 4)**

Figure 4 Site ID	Site Name	ECOP Area Type	PTA Lease Parcel	TMK	HREC, CREC, and Potential REC	Location Description	Recommendations
1	Former Bazooka Range	7	Parcel A A-105-1	3-7-1-004:007	Unexploded ordnance (UXO), munitions and explosives of concern (MEC), and metals.	Former firing range. Material clean up completed. Soil testing not yet conducted.	Sample to determine presence or absence of potential contamination.
2	Former Tank Gunnery Range	7	Parcel A A-105-1	3-4-4-015:008	UXO, MEC, and metals.	Site identified north of the Military Operations on Urban Terrain (MOUT) Area in the 1959 Range Control Map. Area is visible on current aerial photos. No information on UXO/MEC cleanup located.	Sample to determine presence or absence of potential contamination.
3	Current Burn Pan Area	7	Parcel A A-105-1	3-4-4-016:005	Potential MEC, metals, and dioxins.	Burn Pan is located off of Subject Site. Investigate area near current burn pan.	Sample to confirm if potential aerial drift is occurring.
4	Potential Former Burn Pan	7	Parcel A A-105-1	3-4-4-016:005	Potential MEC, metals, and dioxins.	Former potential burn pan/cinder pit area at Puu Puahi. No documentation located. Unknown if contamination is present.	Sample to determine presence or absence of potential contamination.
5	Former Davy Crockett Weapons System Range	4	Parcel A A-105-1	3-4-4-016:005	CREC - potential radiological materials.	Range 13/13A and south of the cinder pit of Puu Puahi. Human Health Risk Assessment Completed and found no adverse human health impacts are likely to occur as a result of exposure to the uranium present in the soil at PTA.	CREC: No sampling or further evaluation required. Hawaii State Department of Health (HDOH) concurs that current land use does not present a risk to current users.

Figure 4 Site ID	Site Name	ECOP Area Type	PTA Lease Parcel	TMK	HREC, CREC, and Potential REC	Location Description	Recommendations
6	Former Target Vehicle Storage Site at Forward Arming and Refueling Point (FARP) 18	7	Parcel C A-105-3	3-4-4-016:005	Potential petroleum, oil and lubricants (POL) constituents and metals.	Former Target Vehicle Storage Site at FARP 18. Debris has been removed. Unknown if any contamination is present.	Sample to determine presence or absence of potential contamination.
7	Landfill 2. Also identified as “POTA-6”	4	Parcel A A-105-1	3-4-4-016:005	Controlled REC – Remedial Action complete	Closed, capped landfill.	No sampling or further evaluation required. Long-term monitoring ongoing. The landfill was closed in 1993 and capped in 1996 and approved by HDOH.
8	Ammunition Supply Point (ASP): Building 601. Aboveground Storage Tank (AST)	7	Parcel A A-105-1	3-4-4-016:005	Potential POL constituents. The AST lacks complete secondary containment but no evidence of staining or leaks were observed. The AST is approximately 20 years old.	Outdoor AST adjacent to Building 601 (Emergency Generator Building).	Install secondary containment and update Spill Prevention, Control, and Countermeasure Plan.
9	Former Debris Pile TA 21	7	Parcel C A-105-3	3-4-4-016:005	Potential POL constituents and metals.	Former metal debris pile TA 21. Material has been removed from site. Unknown if any contamination present.	Sample to determine presence or absence of potential contamination.
10	All TAs/FPs	7	Parcel A A-105-1, Parcel C A-105-3	Emphasis on 400 Series FP located within TAs 9, 12, and 13.	UXO, MEC, and metals.	Heaviest use anticipated at the 400 Series FP based on past use.	Sample to determine presence or absence of potential contamination.

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LIST OF ACRONYMS AND ABBREVIATIONS

ACM	asbestos-containing material
AR	Army Regulation
ASP	Ammunition Supply Point
ASR	Area of Species Recovery
AST	aboveground storage tank
ASTM	ASTM International
ATSDR	Agency for Toxic Substances and Disease Registry
BAX	Battle Area Complex
BHHRA	Baseline Human Health Risk Assessment
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CERCLIS	CERCLA Information System
CESQG	Conditionally Exempt Small Quantity Generator
CFR	Code of Federal Regulations
CMU	concrete masonry unit
COPC	contaminant of potential concern
CORRACTS	Federal RCRA Corrective Action Sites
CREC	Controlled Recognized Environmental Condition
DNT	dinitrotoluene
DPW	Directorate of Public Works
DoD	Department of Defense
DU	depleted uranium
EA	EA Engineering, Science, and Technology, Inc., PBC
ECHO	Enforcement and Compliance History Online
ECOP	Environmental Condition of Property
EDR	Environmental Data Resources, Inc.
ERNS	Emergency Response Notification System
FARP	Forward Arming and Re-fueling Point
FEMA	Federal Emergency Management Agency
FP	Firing Point
ft	foot/feet
HDLNR	State of Hawaii Department of Land and Natural Resources
HDOH	Hawaii State Department of Health
HDOT	State of Hawaii Department of Transportation
HEER	Hazard Evaluation Emergency Response
HHF	HHF Planners
HIARNG	Hawaii Army National Guard
HMX	cyclotetramethylenetetranitramine

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HREC	Historical Recognized Environmental Condition
in.	inch(es)
kg	kilogram(s)
LBP	lead-based paint
LCC	large capacity cesspool
LTM	long-term monitoring
LUST	leaking underground storage tank
MEC	munitions and explosives of concern
MOUT	Military Operations on Urban Terrain
NPL	National Priority List
NRCS	Natural Resources Conservation Service
NRC	Nuclear Regulatory Commission
PCB	polychlorinated biphenyl
PETN	pentaerythritoltetranitrate
POL	petroleum, oil, and lubricants
POW	Prisoner of War
PTA	Pohakuloa Training Area
RCRA	Resource Conservation and Recovery Act of 1976
RDX	cyclotrimethylenetrinitramine
REC	Recognized Environmental Condition
TA	Training Area
TMK	Tax Map Key
TNT	trinitrotoluene
TSD	Transport, Store, Treat and/or Dispose
UH	University of Hawaii
U.S.	United States
USACE	United States Army Corps of Engineers
USAEC	United States Army Environmental Command
USAG-HI	United States Army Garrison – Hawaii
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
UST	underground storage tank
UXO	unexploded ordnance
WP	white phosphorus

1. SIGNATURE OF ENVIRONMENTAL PROFESSIONAL(S)

EA Engineering, Science, and Technology, Inc., PBC (EA) is an environmental firm with over 43 years of experience in the environmental field. EA declares that, to the best of our professional knowledge and belief, we meet the definition of an Environmental Professional as defined in Section §312.10 of 40 Code of Federal Regulations (CFR). The EA personnel involved in the preparation of this Environmental Condition of Property (ECOP) report have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject Site. The Subject Site consists of the Army-leased, State of Hawaii-owned land located at Pohakuloa Training Area (PTA), County of Hawaii, Hawaii. EA has developed and performed the all appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

Signature:

Scott Moncrief
Project Manager/Environmental Professional

Date

David Straume
Technical Review/Environmental Professional

Date

1.1 QUALIFICATIONS OF ENVIRONMENTAL PROFESSIONAL(S)

Name	Degree	Years of Experience	Project Responsibilities
Scott Moncrief	B.S., Geology & Geophysics	20	Report Review
David Straume	B.S., Industrial Technology	25	Data Review Report Review

1.2 ENVIRONMENTAL PROFESSIONAL CERTIFICATION

All information/documentation provided accurately reflects the environmental condition of the Subject Site. This ECOP Report is in general accordance with the United States (U.S.) Department of Defense (DoD) requirements for completion of an ECOP Report.

Scott Moncrief Project Manager/Environmental Professional	Date
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David Straume Technical Review/Environmental Professional	Date
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1.3 GARRISON COMMANDER CERTIFICATION

All information/documentation provided accurately reflects the environmental condition of the Subject Site. This ECOP Report is in general accordance with the U.S. DoD requirements for completion of an ECOP Report.

Stephen E. Dawson, Colonel, U.S. Army U.S. Army Garrison, Hawaii Commander	Date
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2. INTRODUCTION

The U.S. Army is preparing an ECOP Report for the Army-leased lands in the State of Hawaii. The Army currently leases 22,971 acres from the State of Hawaii for use at PTA, County of Hawaii, Hawaii (hereafter referred to as the “Subject Site”) and consists of three parcels, Parcel A (A-105-1), Parcel B (A-105-2), and Parcel C (A-105-3) (Appendix A: Figure 1) as identified in the Hawaii State Lease No. S-3849, U.S. Lease DA-94-626-ENG-80.

The ECOP Report required records research, interviews, and a visual inspection at the Subject Site, which took place 7 to 9 June 2016 (Appendix B: Site Visit Photos, Appendix C: EDR Report, Appendix D: Supporting Documents, and Appendix E, Interviews).

2.1 PURPOSE

The purpose of the ECOP Report is to establish baseline environmental conditions at PTA. The ECOP was prepared in accordance with applicable federal, state, and local laws and regulations, including:

- Army Regulation (AR) 200-1, “Environmental Protection and Enhancement”
- AR 405-10, “Acquisition of Real Property and Interests Therein”
- ASTM International (ASTM) E1527-13, “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process”
- ASTM E2247-08, “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property”
- ASTM D6008-96 (Reapproved 2014), “Standard Practice for Conducting Environmental Baseline Surveys”
- ASTM D5746-98 (Reapproved 2010), “Standard Classification of Environmental Condition of Property Area Types for Defense Base Closure and Realignment Facilities.”

The information gathered during this ECOP evaluation is intended to reduce uncertainty relating to the environmental condition. The specific purposes of this document include the following:

- Categorize the Subject Site into one of seven ECOP area types based on regulations and guidance stated above.
- Identify, characterize, and document the presence or likely presence of a release or a material threat of a release of hazardous substances or petroleum products into associated environmental media (soil, groundwater, or surface water) as a result of current and historical uses of the Subject Site.

- Identify, characterize, and document the release or suspected release of hazardous substances or petroleum products from an adjacent property that would likely cause or contribute to contamination on the Subject Site.
- Provide a basis for determining if the Subject Site is suitable for transfer, lease, or assignment.
- Provide information to help satisfy legal requirements.

Although the ECOP Report is designed to reduce uncertainty regarding the potential for recognized environmental conditions (RECs) to the minimum practicable level, this report does not completely eliminate that uncertainty. Further, the purpose as stated above does not include *de minimis* conditions that generally do not present a material risk of harm to the public or the environment, and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions determined to be *de minimis* are not addressed, as noted in Section 7.3.1.

2.2 SCOPE

This ECOP Report addresses three state-owned parcels that the U.S. Army is currently leasing for military training use at PTA. A Subject Site map is provided as Figure 1 in Appendix A. Appendix B provides photographs taken during the 7 to 9 June 2016 Subject Site visit.

The Phase I ECOP Report classifies the Subject Site property into one of seven ECOP area types, as defined by AR 200-1, used to indicate the degree of contamination and the environmental condition of the property. The ECOP area types include the following:

- ECOP Area Type 1 – An area where no release or disposal of hazardous substances or petroleum products or their derivatives has occurred, including no migration of these substances from adjacent areas.
- ECOP Area Type 2 – An area where only release or disposal of petroleum products has occurred.
- ECOP Area Type 3 – An area where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred but at concentrations that do not require a removal or remedial action.
- ECOP Area Type 4 – An area where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred, and all remedial action necessary to protect human health and the environment have been taken.
- ECOP Area Type 5 – An area where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred and removal or remedial actions, or both, are under way, but all required remedial actions have not yet been taken.

- ECOP Area Type 6 – An area where release, disposal, or migration, or some combination thereof, of hazardous substances has occurred, but required response actions have not yet been initiated.
- ECOP Area Type 7 – An area that is unevaluated or requires additional evaluation.

2.3 SIGNIFICATION ASSUMPTION

This ECOP Report was prepared to permit formulation of an opinion of the environmental condition of the Subject Site (state-owned, Army leased lands). Opinions on environmental conditions at the Subject Site are based on information from visual reconnaissance, interviews, and collection and review of readily available information. New information or changes in the Subject Site use could require a review and possible modification of findings and conclusions contained in this report.

The information obtained from readily available documents for review was considered to be accurate unless reasonable inquiries indicated otherwise. Conditions observed were considered representative of similar areas that were not accessible unless otherwise indicated.

This ECOP Report presents a summary of readily available information on the environmental conditions of, and concerns relative to, the land, facilities, and real property assets at the Subject Site. The findings are based on the records search, interviews, and visual site reconnaissance conducted on 7 to 9 June 2016. No sampling or analysis of media was conducted during the survey.

2.4 LIMITATIONS AND EXCEPTIONS

EA does not warrant that there are no toxic or hazardous materials or contamination, nor does EA accept any liability if such are found at some future time, or could have been found if sampling or additional studies were conducted at the Subject Site. EA does not assume responsibility for other environmental issues that may be associated with this Subject Site.

In view of the rapidly changing status of environmental laws, regulations, and guidelines, EA cannot be responsible for changes in laws, regulations, or guidelines that occur after the study has been completed and that may affect the Subject Site.

This report was prepared by EA and is based in part on third-party information not within the control of the U.S. Army or EA. While it is believed that the third-party information contained herein will be reliable under the conditions and subject to the limitations set forth herein, neither the U.S. Army nor EA guarantee the accuracy thereof.

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3. SITE LOCATION AND PHYSICAL DESCRIPTION

3.1 SITE LOCATION

The Subject Site consists of approximately 22,971 acres of Army-leased, State of Hawaii-owned land within PTA, County of Hawaii, Hawaii. It consists of three parcels, Parcel A (A-105-1), Parcel B (A-105-2), and Parcel C (A-105-3) (Appendix A: Figure 1) as identified in the Hawaii State Lease No. S-3849, U.S. Lease DA-94-626-ENG-80.

The Subject Site is located on the lower slopes of Mauna Kea and broad plain between Mauna Kea and Mauna Loa. It is accessible via the Daniel K. Inouye Highway and Saddle Road (Route 200). The Subject Site is 30 miles west of Hilo and 42 miles east of Kona. Waikoloa Village and Waimea-Kamuela are approximately 25 miles to the west and northwest (Appendix A: Figure 1).

3.2 ASSET INFORMATION

Property Name:	Pohakuloa Training Area
Property Owner:	State of Hawaii
Current Lessee:	U.S. Army
County, State:	County of Hawaii, Hawaii

3.3 PHYSICAL DESCRIPTION

A general location map of the Subject Site is provided in Figure 1 in Appendix A.

3.4 SITE VICINITY GENERAL CHARACTERISTICS

The Subject Site is located within PTA, the largest live-fire and maneuver training complex in the U.S. Army Garrison – Hawaii (USAG-HI). PTA is used by Marines, U.S. Air Force, Hawaii Army National Guard (HIARNG), and Army Reserves. Surrounding land uses include Mauna Kea Forest Reserve Lands to the north and Department of Hawaiian Homelands (ranch lands) and Mauna Kea State Park to the east. U.S. Army-owned parcels including the PTA cantonment area and Bradshaw Army Airfield are located between Parcels A and B. The PTA impact area is located to the south. Additional training areas (TAs) are located to the northwest. A State of Hawaii Game Management Area is also located to the west of the Subject Site.

3.4.1 Topography

The Subject Site is divided by the Daniel K. Inouye Highway and Saddle Road (Route 200), splitting the Subject Site between the steeper slopes of Mauna Kea and the broad plateau between Mauna Kea and Mauna Loa. The ground surface generally slopes up to the east/northeast. The portion south of Saddle Road rises gradually from the west to east along the slopes of Mauna Loa, with a starting elevation of approximately 4,200 feet (ft) on the western end and reaching 6,800 ft on the eastern end. North of Saddle Road, Mauna Kea rises sharply from 5,600 ft in the west to 7,600 ft to the east.

The depth to basal groundwater at PTA is estimated to be 4,500 ft above sea level in a perched aquifer. Surface water runoff at PTA is limited due to low rainfall, and permeable volcanic soils. There are no surface water bodies (streams or lakes) within 2 miles downgradient of waste sources at PTA. There are no perennial streams; the only surface water bodies in the vicinity of PTA are three intermittent streams: Waikahalulu Gulch, Pohakuloa Gulch, and an unnamed gulch. All are approximately 1 mile north of the installation and hydraulically upgradient of potential contamination sources at PTA. These influent streams lose surface water to the underlying bedrock before they reach the contaminant sources at PTA. The nearest downgradient surface water body is Popoo Gulch, an intermittent stream, which converges with Auwaiakeokua Gulch, about 15 miles downgradient of PTA (EA 2009). The Pacific Ocean is located approximately 24 to 30 miles to the west and east of PTA.

The Subject Site has a mean annual rainfall ranging from 16 to 30 inches (in). The majority of the Subject Site has a mean annual rainfall of less than 20 in. (Giambelluca et al. 2013). Winds are generally from the east and average approximately 10 miles per hour (EA 2009).

3.4.2 Geology

The main Hawaiian archipelago is part of the Hawaiian-Emperor Seamount Chain, which extends 3,600 miles along a line trending southeast to northwest beneath the northern Pacific Ocean. The Island of Hawaii is the largest and youngest of the eight main Hawaiian Islands and is approximately 460,000 years old. It was built from five separate shield volcanoes that erupted somewhat sequentially, one overlapping the other. These are (from oldest to youngest) Kohala, Mauna Kea, Hualalai, Mauna Loa, and Kilauea. The Subject Site is located on the lower slopes of Mauna Kea and the broad shelf of Mauna Loa area (U.S. Geological Survey 2007). Multiple cinder cones (Puu) are scattered across the site and identified by name as geographic reference points.

3.4.3 Soils

The soils at the Subject Site are dominated by geologically recent lava flows, including the 19th and 20th century Mauna Loa lava flows. Soils are generally coarse to medium textured, excessively drained, and formed on volcanic ash pumice and cinders (EA 2009). Soils at the Subject Site are primarily classified as rCL, cinder land; rHLD, Huikau extremely stony loamy sand; rKDH, Kekake extremely rocky muck; KTB, Keekee loamy sand; KZD, Kilohana loamy fine sand; rLV, lava flows aa; rLW, lava flows pahoe-hoe; rRo, rock outcrop; and rVS, very stony land (U.S. Department of Agriculture [USDA] Natural Resources Conservation Service [NRCS] 2016a). A soil map is included as Figure 2 in Appendix A. The following identify the dominant soil types on the Subject Site:

- Cinder land: Loose cinders and other scoriaceous magmatic ejecta. Water-holding capacity is very low, and trafficability is poor.
- Huikau series: Deep, somewhat excessively drained soils that formed in basic volcanic ash and cinders over aa lava. Slopes range from 2 to 50 percent.

- Kekake series: Very shallow, moderately well drained organic soils. These soils formed in organic material mixed with minor amounts of basic volcanic ash over pahoehoe lava. Slopes range from 2 to 20 percent.
- Keekee series: Deep and very deep, somewhat excessively drained soils that formed in material weathered from volcanic ash and alluvium. Keekee soils are on alluvial and glacial outwash fans, and have slopes of 2 to 6 percent.
- Kilohana series: Very deep, well drained soils formed in deep volcanic ash. Slopes range from 10 to 40 percent.
- Lava Flows aa: Basaltic lava characterized by a clinkery, hard, glassy, sharp surface.
- Lava Flows pahoehoe: Basaltic lava characterized by a smooth, billowy or ropy surface.
- Rock outcrop: Exposed bedrock on more than 90 percent of the surface, primarily basalt and andesite.
- Very stony land: 50 to 90 percent of the surface is covered in rocks and boulders (USDA NRCS 2016b).

3.4.4 Water Supply Wells and Wastewater

Recharge to groundwater of the area typically occurs at the base of the surrounding volcanic mountains (EA 2009). A perched groundwater reserve was located at approximately 4,500 ft above sea level in 2015. Additional test wells are being drilled at the cantonment site. The facility currently trucks in approximately 11.8 million gallons of water annually and stores it in onsite water tanks (Yager 2015).

On Mauna Kea, a non-potable spring located on the upslope of PTA, off of the Subject Site, provides water for PTA and Mauna Kea State Park. The Park receives the first 10,000 gallons per day of spring production. PTA receives the balance, estimated to be on the order of 1,499,836 gallons per year. It is stored in holding tanks within the Subject Site on lease parcel A-105-2 (Hawaii Institute of Geophysics and Planetology, University of Hawaii [UH] 2012).

Vehicle washing does not occur on the Subject Site. On the adjacent cantonment area, vehicle wash water is recycled, but the majority of the wastewater goes to large capacity cesspools (LCCs) onsite before being trucked away (Miller 2013). No LCCs are located on the Subject Site. Portable toilets and latrines are used. The adjacent cantonment site was fined by the U.S. Environmental Protection Agency (USEPA) in June 2016 for operating the LCCs past their 2005 consent decree closure date, with a new required closure date of 30 September 2016 (USEPA 2016).

3.5 REVIEW OF SPECIAL RESOURCES

3.5.1 Land Use

PTA is an active U.S. Army training facility in Hawaii. The facility provides TAs and supports full-scale combined arms live-fire and field training military exercises at all levels from squad to brigade for Army Active Component units stationed in Hawaii, and supports similar training up to company level for the Army Reserve and HIARNG units stationed in Hawaii (United States Army Environmental Command [USAEC] 2013). The Subject Site has been leased from the State of Hawaii (Hawaii State Lease No. S-3849, U.S. Lease DA-94-626-ENG-80) since August 1964. The lease is set to expire in 2029 (Appendix C).

Non-Military Land Use

Under the terms of the lease, “to the extent permitted by training requirements the Government will cooperate with the Lessor (state) in the game development and hunting program.” The lease stipulates that Parcels B (A-105-2) and C (A-105-3) and Parcel A (A-105-1) north of [old] Saddle Road are to be made available for hunting between 1 July to 15 July and 1 December to 15 January, and on national holidays from dawn to midnight and on weekends from midnight Friday through midnight Sunday during 1 November to 30 November and 16 January through 31 January. However, active training on the lands can take precedence over hunting access.

Recreational hunting primarily takes place within TAs 1 through 4 and TAs 9 through 16 (Appendix A: Figure 3). Live-fire hunting (bird shot) is only allowed during upland bird season (November through mid-January). Bird hunting is usually conducted on Saturdays, Sundays, and state holidays. Game mammal hunting is restricted to archery and includes feral sheep, goats and pigs (Portage, Inc. 2013).

Restricted access Critical Habitat Areas are located in portions of TAs 17 and 18, and TAs 19 through 22 (Buffer) on the western portion of the Subject Site. No training occurs within these areas.

3.5.2 Wetlands

According to U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory map, no jurisdictional wetland areas have been identified at the Subject Site or the adjacent areas (USFWS 2016a). The majority of the Subject Site receives less than 20 in. of rainfall annually, and only the furthest eastern portion of the Subject Site receives more than 30 in. annually (Giambelluca et al. 2013). There are no surface water bodies (e.g., lakes, ponds) and no perennial streams.

3.5.3 500-Year Floodplain

The Subject Site is at a high elevation (4,200-6,800 ft), approximately 30 miles from the coast and is classified as a Federal Emergency Management Agency (FEMA) Flood Zone X, indicating an area between the limits of the base flood and the 0.2-percent-annual-chance (or

500-year) flood under the 2010 FEMA Flood Insurance Rate Map revisions for Hawaii County (Map #15516600550C, 15516600575C, 15516600775; 15516600800) (State of Hawaii Department of Land and Natural Resources [HDLNR] 2016).

3.5.4 Natural Resources

The Subject Site climate is classified as cool tropical, upper montane to alpine ecosystem (Shaw 1997). Much of the Subject Site is recent lava flows with a rare sub-alpine tropical dryland ecosystem (Appendix A: Figure 3). Recent lava flows are colonized by ohia lehua (*Metrosideros polymorpha*), dryland native shrubs, including naio (*Myoporum sandwicense*) and mamane (*Sophora chrysophylla*), and dominated by non-native grasses including the highly invasive fountaingrass (*Pennisetum setaceum*) (TetraTech 2004). At the time of the site visit, drought conditions had further stressed the plant communities.

As of 2016, the Subject Site provides potential habitat for 20 endangered plant species, 1 endangered mammal species (*Lasiurus cinereus semotus*), 1 endangered invertebrate species (*Hylaesus anthracinus*), 4 endangered bird species, and is a designated critical habitat of the palila (*Loxioides bailleui*) (USAG-HI 2010; USFWS 2016b, 2016c). Not all of the species have been specifically identified within the Subject Site, but the area provides potential habitat for them.

The designated critical habitat for the palila is located on the upslope of Mauna Kea. There are approximately 5,110 acres of designated critical habitat within the Subject Site including Parcel B (A-105-2), and the upslope portions of Parcel C (A-105-3). The palila has not been observed at PTA since 1980, and is typically seen at higher elevations than the Subject Site. The critical habitat was established based on the historical range, and to promote species recovery (Appendix A: Figure 3).

The endangered nene (*Branta sandvicensis*) and Hawaii's only native mammal, the endangered Hawaiian hoary bat/opeapea (*Lasiurus cinereus semotus*), have been identified at the Subject Site. The endangered band-rumped storm petrel (*Oceanodroma castro*), Hawaiian hawk/ʻio (*Buteo Solitarius*), and Hawaiian petrel/uaa (*Pterodroma sandwichensis*) have been observed south of the Subject Site. The band-rumped storm petrel is known to breed seasonally within PTA. The Natural Resources staff is actively involved in managing these species. The staff survey nest sites, assess chick survival rates, develop no-go areas, and map locations for general avoidance (USAG-HI 2010).

Ungulates pose a serious threat to native plant species at PTA. Over 37,000 acres at PTA have been fenced-off from roaming herds of sheep (*Ovis aries*), goats (*Capra hircus*), and pigs (*Sus scrofa*). The fenced-off areas include approximately 8,500 acres of designated "restricted areas" within Parcels A, B, and C (Appendix A, Figure 3: See "restricted areas"). The restricted areas include portions of the east and west Puu Kipuka Kalawamauna Fence Unit, Puu Ka Pele Fence Unit, Haplostachys Fence Unit, the northern portion of the Puu Koli Fence Unit, and scattered Areas of Species Recovery (ASR) for individual plants and plant communities. Ungulate removals within the fenced areas are on-going. Barbed wire was removed from the fences beginning in 2008 to prevent accidental bat and bird damage, and fence heights were increased to

prevent goats from accessing the sites. Rodents and mongoose (*Herpestes javanicus*) are also undergoing active controls at various locations within the Subject Site.

3.5.5 Cultural Resources

Historically, the PTA area was primarily used for transportation, bird hunting, and resource gathering prior to and after European contact. The Mauna Kea adze quarry northeast of the general PTA area provided valuable basalt tools from 1000 AD to the mid-17th century (National Aeronautics and Space Administration 2004). This quarry was one of the largest in Polynesia, and covered 4,800 acres (State of Hawaii Department of Transportation [HDOT] 2012). Five miles west of PTA is the 16th century Ahu-a-Umi heiau, which may have been built for the court of Umi, or to commemorate his winning battle (Taomia et al. 2008).

Cultural resources studies began at PTA in 1977, and an archaeologist has been permanently stationed at PTA since 1997. The cultural resource management projects are designed to meet the requirements under Section 106 of the National Historic Preservation Act, the Archaeological Resources Protection Act, the Native American Graves Protection and Repatriation Act, and AR Regulation AR-200-4 among others. Prior to, and during construction projects, the Cultural Resources Section performs archaeological surveys within the proposed project area(s), monitors construction activities, and gathers additional information to facilitate drafting site protection plans (Taomia et al. 2008). If needed, additional contracts are used to conduct field work on larger-scale projects.

Approximately 64 percent of PTA has been surveyed for archaeological sites. The richest archaeological sites have been found within lava tube caves south of the Subject Site. The sites appeared to be active from the 1400 to the 1900s AD and include fire pits, campsites, war refuges, burial sites, pictographs, and cultural shrines (Mouze 2011; Taomia et. al 2013). As most sites have not been evaluated for National Register eligibility, avoidance is the primary form of mitigation as recommended under AR 200-1. Cultural site evaluations are on-going. In some cases, it is found that the Army has no further historic preservation responsibilities. In other cases, data recovery and documentation is conducted. Identified cultural sites are not used for active training and are categorized as off-limits for training (Taomia et. al 2008).

3.5.6 Site Investigation

An archival records search was conducted prior to the site visit at the USAG-HI archives, the Hawaii State Department of Health (HDOH) online databases and archives, and the UH-Manoa online map depository. Additional electronic resources included scans of historical maps from PTA and data requests from Environmental Data Resources, Inc. (EDR). The records include, but were not limited to maps, land uses, underground storage tanks (USTs), asbestos-containing material (ACM), lead, polychlorinated biphenyls (PCBs), landfills, and information on spills/releases. Specific records requests and results are identified in Section 6. Interviews were conducted primarily on 7 and 9 June 2016. Findings documented in the following subsections are based on the 7 to 9 June 2016 site inspection and review.

3.5.7 Site Visit Methodology and Limiting Conditions

EA staff (Renee Kinchla and Scott Moncrief) conducted a site visit of the state-owned, Army-leased parcels at PTA, Hawaii from 7 to 9 June 2016. A brief meeting was held on 7 June 2016 to introduce Ms. Kinchla and Mr. Moncrief and to solicit input from PTA staff for interviews and documentation. Due to the size of the Subject Site, the onsite inspection was performed over two days on 7 and 8 June 2016, between 0830 and 1500 hours. Mr. Quester Lau of HHF Planners (HHF) was present during the site visit and meeting on 7 June 2016.

Prior to conducting the onsite inspection portion of the project, historical and current range control maps, topographic, and aerial maps were reviewed to identify areas of interest or unusual conditions. Areas of interest (i.e., locations with dumps or structures) or areas previously identified as potentially impacted were marked on hard copy aerial photographs that were referenced during the onsite inspection. During the onsite inspection, all areas of interest at the Subject Site were accessible and were visited. The onsite inspection included a driving tour, site specific inspection of key sites, and observation of accessible areas. EA staff were accompanied by Mr. Loren Zulick of U.S. Army Corps of Engineers (USACE), Mr. David “Mac” McBride of PTA Directorate of Public Works (DPW) Environmental Compliance (partial day 7 June 2016), and the Range Support Supervisor (7 and 8 June 2016) during the onsite inspection. These PTA staff members provided information on the recent and historical uses of the Subject Site.

Weather during the site visit was sunny to partially overcast, in the low 70s degrees Fahrenheit and breezy. The facility is primarily rough lava rock terrain with dirt/gravel/cinder roads. The Subject Site was experiencing drought conditions during the site visit, and vegetation was sparse to non-existent across much of the acreage.

3.5.8 Field Observations

Despite the size of the Subject Site, there are relatively few permanent facilities on the Subject Site. The majority were constructed between the mid-1990s and 2012. Site visit photographs and a site visit map are included in Appendix B.

Landing Zone (LZ)/TA 1: LZ/TA 1 is a graded cinder landing zone. No debris or staining was noted. This area has had very little use since the 1990s (Appendix A: Figure 4, Appendix B: Photo 1).

Ammunition Supply Point/TA 4, 5: The Ammunition Supply Point (ASP) was constructed in the mid-1990s. Photographs were not authorized for the ASP. The ASP includes an unused generator building, ammunition magazines, office space, and a storage yard. Ammunition is brought over from Schofield Barracks on Oahu for training exercises. No ammunition is stored permanently onsite (Appendix A: Figure 4).

- **Building 601 (Emergency Generator Building):** This is a single-story concrete masonry unit (CMU) wall and poured concrete floor structure. There were no visible spills or releases. There were no identified spills from historical records (Phelps 2016). The building has an adjacent outdoor 250-gallon (estimated) diesel aboveground storage tank

(AST) for the associated, but non-functioning, emergency generator. This tank was most likely constructed during the mid-1990s. There are no recorded spills associated with this AST. The AST has an incomplete secondary containment area. It includes a low concrete curb, but the floor is open to the soil below and gravel-filled (Phelps 2016).

There is a white, pole-mounted transformer on the powerline adjacent to the generator building. It was likely constructed in tandem with the building in the 1990s. Staining was not present at the time of the site visit. No records of PCB transformers on the Subject Site were identified during the historical records review (USACE 1991).

- **Building 600 (Field Office and Guard House):** Building 600 is constructed of wide-wale corrugated metal and single wall wood paneling from the 1990s. It serves as an office space with desks and storage. There are no known issues (Harvey 2016).
- **Building 602 (Segregation and Surveillance Building):** Building 602 was not authorized for access as part of the ECOP. The structure has a corrugated roof and open storage yard. There are several metal shipping containers being used for temporary storage and construction materials stored across from Building 602. There are smaller storage containers in the baseyard. Access to the site is restricted, and materials are kept organized.

Approximately half a mile east of the ASP, at the intersection with the Armor Road and the old Saddle Road alignment (Appendix B: Photo 2), unused portable latrines are stored in an open gravel yard. No visible staining, leaking, or other debris are present.

Guard Shack/TA 6: This guard shack is located on Menehune Road, approximately 700 ft south of Mauna Kea State Park, and 800 ft west of the old Saddle Rod intersection. It is a small single-story, poured concrete wall guard shack. The construction date is unknown and estimated to be approximately late 1940s-1950s based on the similarly constructed buildings on other Hawaii military bases. The building is an abandoned shell with leaf debris and miscellaneous debris (water bottles, snack wrappers) inside, and electrical components are absent. A concrete conduit channel is located inside. The exterior appears to be stained from dirt, and it is unknown if it was painted (Appendix B: Photo 3).

Battle Area Complex/TA 7, 8: Structures in the Battle Area Complex (BAX) were built between 2011 and 2012. The land was previously vacant. The BAX includes the range control center/camera tower, operations/storage building, latrine, a battery storage building, and a maintenance building (Appendix B: Figure B1, Appendix B: Photos 4-10).

The operations and maintenance building, battery storage facility, and rear maintenance enclosure area were inspected. Access was not permitted at the range control center/camera tower. Parking is on an open gravel parking lot, which includes a pad mounted emergency generator and transformer that were constructed during 2012. The transformer and generator are protected by concrete barricades. The generator has an integrated 100- to 200-gallon fuel tank that is within secondary containment (Phelps 2016), and there is no evidence of staining.

- The range control center/camera tower interior was not inspected. It is a two-story CMU building on a concrete pad with a standing seam metal roof. The building is surrounded by a 6-ft tall chain-link fence and exterior metal stairs to the second level. A portion of the building is used as office space (Appendix B: Photo 4).
- The battery storage facility is a single-story CMU building with on a concrete slab and standing seam roof. Latrines are located outside of the building, under the roof overhang. Dozens of moving target batteries (12-volt) are charged onsite. A small workspace/office space is present. There are no visible staining or leaks, and material is organized (Appendix B: Photos 5 and 7).
- The BAX maintenance building is a single-story CMU building with a concrete slab floor and standing seam metal roof. Moving target equipment is brought in temporarily for maintenance. The interior is organized with no visible spills or staining. There is an exterior, uncovered, materials stockpile associated with the building. The stockpile includes plywood, scrap wood, target dummies, solar panels, empty buckets, lumber, metal conduits, metal fence posts, and railings. Vehicle batteries (used for moving targets) were stored outside temporarily on a pallet (Appendix B: Photos 6 and 8).

Cooper Airstrip - Warrior Forward Operating Base/TA 3: This facility was constructed in 2010, and was previously identified as Firing Points (FPs) 120 and 117. The primary purpose of the site is the landing and maintenance of unmanned aircraft. The paved unmanned aircraft landing strip is approximately 750 ft long by 85 ft wide. There is an empty single-story, multi-bay gravel-reinforced corrugated metal maintenance/storage structure, and a wooden workshop constructed between 2015 and 2016. The storage bay structure was clean with no visible staining or debris. Several recently built plywood and corrugated roofed storage/wind shelters are located at the Subject Site, and these storage buildings were empty. There is also an uncovered material storage area near the entrance of the facility, primarily for additional corrugated metal panels and plastic barricade blocks. The entire area (approximately 35 acres) is fenced using additional reinforced corrugated metal panels and concertina wire (Appendix B: Figure B1, Appendix B: Photo 11).

The site has scattered debris including wood scraps, broken concrete blocks, and empty plastic 250-gallon liquid totes that were used to dispense dust palliative (lignin sulfonate). Old transmission blocks and World War II era vehicle components have previously been observed in the brush by PTA staff.

Former Debris Pile/TA 21: This is the site (approximately 0.22 acres) of a former metal and debris dump that was present until 2015. It has since been cleared of debris and graded. The soil consists of loose cinders. Small rusty, metal components and scrap are still visible on the site due to difficulty with removing all scrap from loose rough cinders. A small pile of wooden debris was stockpiled by PTA, but this pile has already been planned for removal in 2016 by Christine Phelps, staff member of the Environmental Program Evaluation Program, DPW at PTA. Historical conditions of the debris pile are shown in Photo 1a (Appendix B: Figure B1, Appendix B: Photos 12 and 13 [current conditions] and 1a [historical]).

Forward Arming and Re-fueling Point (FARP) 18/TA 5: This location has four FARP points and allows for a more rapid re-fueling and re-arming of helicopters during training. Temporary secondary containment is brought onsite when vehicles are re-fueling. The concrete pads appeared free of staining. The area is primarily empty and includes graded gravel roads. A few miscellaneous materials (chairs, wooden targets) were noted onsite, but there were no liquids or storage containers (Appendix B: Figure B1, Appendix B: Photo 14).

Former Target Vehicle Storage Site (FARP 18)/TA 5: This area is approximately 0.37 acres and was used to stockpile vehicle shells that were used for target practice. The vehicles were drained of fluids and were brought onsite between 2006 and 2009 until their removal in 2015. The graded gravel yard appeared clean and free of debris. Historical conditions are shown in Photo 1b (Appendix B: Figure B1, Appendix B: Photos 15 [current conditions] and 1b [historical]).

Storage and Maintenance Yard (FARP 18)/TA 5: This outdoor storage yard site is approximately 1 to 1.8 acres (depending on the extent of equipment). The area is used to store materials for range operations including stationary targets and materials for moving targets. Materials include, but are not limited to, metal tracks and railings, wooden targets, wooden boxes, flatbed trailers, and battery storage boxes. Batteries are stored offsite and not at this yard. No fluids or leaking containers were identified (Appendix B: Figure B1, Appendix B: Photos 16-18).

Assorted Ranges/FPs: The 100 series FPs (TAs 1-4) were used by the U.S. Army. However, these FPs required soldiers to shoot over the publicly accessible Saddle Road and required additional coordination and road closures at the former Saddle Road. This is less of a concern due to the closure of this portion of Saddle Road, and the opening of Daniel K. Inouye realignment. Today, the Marines often use the 400 series FPs (TAs 9-14). The 500 series are available, but are less popular due to their firing angles. The 300 series FPs were located within the BAX, and are no longer present (Range Operations Supervisor – PTA 2016). The 700 series are present, but have not been used since the 1990s (Appendix B: Figure B1).

During use, the soldiers fire 100-200 rounds per day. The average training phase is two to three weeks. Currently, there is no brass recycling for spent munitions at PTA. Soldiers are required to clean up their ranges and return the brass to Schofield Barracks for recycling. Range Operations visits the in-use ranges when the soldiers are finished and oversees the cleanup. The moving targets are inspected every morning that they are in use. The batteries in the moving targets are protected by metal “coffins” and are located behind berms; therefore very few batteries are damaged by direct fire or shrapnel. Despite clean-up efforts, erratic bullets and gun components have been found onsite (Puniwai 2016).

During the Daniel K. Inouye Highway construction, multiple rounds, including mortars, were found below ground surface. Active training, and an unknown amount of live-fire training, may have occurred across the entire facility, with limited record-keeping. Due to use as a training facility, unexploded ordnance (UXO) and munitions and explosives of concern (MEC) can be found in many areas of the Subject Site. There has not been a complete UXO sweep of areas that

are fenced off as critical habitat, and bombs have been found within these restricted areas on the western portion of the Subject Site (TAs 17-22 and 22 Buffer).

Prior to fencing, PTA was primarily open, and trespassers were common. UXO and MEC could also be contributed from local hunters. Bow hunting is allowed for game mammals, and shotguns are only approved for game bird hunting. No other firearms are approved for use, and hunting is limited to certain dates.

Potential Former Burn Pan/Cinder Pit/TA 9: Puu Puahi was identified in the 1959 Range Control map as an “Impact Area: Infantry and Armor Tactical Exercises Only.” It is not specified in subsequent maps (Appendix B: Figure B1, Appendix B: Photo 19). This feature was identified under several other names on various site maps (Pauahi in 1929, Puu Ahi in 1959, 1965, and 1984, and Puu Puahi 1992 [Appendix D Figures D-7 through D-11]).

Approximately 2 to 3 acres of the upper site has been used for cinder mining. The cinder pit expanded in size between the 1954 and 1965 aerials (Appendix D: Figures D1 and D2), and it is identified in the 1984 Range Control base map (visible on Appendix D: Figure D10) as a cinder pit. It is unknown if this site will continue to be used for cinder mining, now that the Daniel K. Inouye Highway and the BAX site construction projects have been completed.

The graded lower portion of the site (approximately 0.4 acres) was identified by PTA staff as the site of the former, pre mid-1990s burn pan. The staff did not work at PTA at the time, but had been informed by their predecessors of the site. No staff members at PTA who worked at this location and were present during this period of operations were located. No documentation relating to this site was identified.

The cantonment area at PTA had a former burn pit near the Bradshaw Airfield that was decommissioned in 1983, and a new fire training facility was constructed in 1994. It is unknown if an additional burn pan was located at this cinder pit, or if this was an “informal” burn pan. The construction of the burn pan, use, and materials burned are unknown. It is also possible that the location may be inaccurate. The presence or absence of potential contamination and/or clean-up activities is unknown. The site is currently a level, cinder/gravel area. Used, empty, portable latrines and a non-functioning road grader are on site. There are no visible stains or leaks emerging from the latrines or road grader.

Former Davy Crockett Weapons System Range Area/TA 9: This site was identified as Range 13 and was used for firing Davy Crockett Weapons Systems with M101 spotting rounds. These spotting rounds were used at PTA between 1960 through 1968 (Appendix D: Figure D9). The range was closed pending the depleted uranium (DU) study. The ranges were surveyed for MEC/UXO and specially DU material (USAEC 2013). During a 2007 survey, a single spotting round was found at PTA (Agency for Toxic Substances and Disease Registry [ATSDR] 2008). Soil samples were collected from around the perimeter of the suspected impact areas where sediment had accumulated from past runoff or erosion. Naturally occurring uranium was identified but there was no indication of DU. Soil samples did not exceed exposure standards for current land use and site users (Cabrera Services 2010). Air monitoring was conducted in 2009 and no uranium levels above ambient conditions were identified (ATSDR 2008; Morrow 2010).

The ranges were recently reopened for use based on acceptable soil and air sampling results. Additional information is provided in Section 6.7.10 (Appendix B: Figure B1, Appendix B: Photo 20).

Tank Gunnery Range/North of the Military Operations on Urban Terrain (MOUT) area/TA 12: In 1959, this area was identified as an airstrip and tank gunnery range within the moving target range firing area. The airstrip was located just south of Malahini Road. The oval tank gunnery range included and encircled Puu Lehue. The tank gunnery range did not appear on the 1965 map, but the roadways remain visible today. Today, the former tank gunnery range area appears to have been used as a cinder pit (Appendix B: Figure B1, Appendix B: Photos 21-25, Appendix D: Figure D8).

In 2013, the area was converted to a mock-up of three “villages” to simulate urban warfare. The “buildings” are CONEX units stacked one to three units high on concrete pads and arranged into structures and courtyards over approximately 10 acres. Various “abandoned” vehicles (empty shells) lie about the site along with mock gardens, animals, and bazaars. The MOUT is actively used for training, but no live fire is used.

A “Prisoner of War (POW)” mockup camp lies in a gully behind the MOUT. The site was identified on the 1984 Range Control map (Appendix D: Figure D10). It includes two weathered wood framed/plywood sided structures, guard shacks, and several older abandoned vehicles. There is little to no living vegetation on the site.

Gravel Quarry/TA 13: This gravel quarry is located in TA 13. It was not identified in the 1984 topographic PTA range map, but it appears to be present based on the 1964 and 1977 aerial photos (Appendix D). The quarry was expanded by a private contractor during the 2004-2013 construction of the Daniel K. Inouye Highway. Currently, it is approximately 45 acres in size. During the highway construction, the quarry also held an asphalt plant, but the plant is no longer present. Multiple two to three-story tall gravel piles are present on the site. The area contains a small rock crusher and bulldozers. The ground is level and primarily clear. PTA Environmental Compliance required that the quarry operations remove debris, buckets, and fluids from the site prior to contract completion (Appendix B: Figure B1, Appendix B: Photos 26 and 27).

A concrete secondary containment area is located at the quarry. There was a smear of asphalt, but no other significant staining. There were approximately 30 large caliber bullets left on a concrete barrier showing signs of rust (Appendix B: Photo 28). These were removed by range control.

FARP 17/TA 18: This location is a combination FARP and range, and was previously identified as Range 17 when it was used for firing Davy Crockett Weapons Systems (Appendix D: Figure D9). The range was closed pending the DU study, and was recently reopened for use (additional information is included in this section under TA 9/Range 13, 13A). The four FARP pads are located off of the Subject Site. Fuel is not stored onsite. Support structures for the range, including a CONEX unit and a water tank, are present on the Subject Site. Additional information is provided in Section 6.7.10 (Appendix B: Figure B1, Appendix B: Photo 29).

Former Bazooka Range Site (Puu Kapele)/TA 17: This approximately 60-acre site was identified in the 1959 and 1965 historical maps as the “Rocket Launcher and Practice Range.” It was not identified in the 1984 maps as an active range. The site included a moving target for practice mortars, M29A2, M31-Heat-T, M2, and M15 weapons practice. Over 1,000 to 1,100 pounds of debris were removed from the site in 2015. Ordnance was concentrated heavily within an 11-acre central location. The site is currently a graded cinder, rough aa lava area with a few pieces of small miscellaneous debris. The area has little to no vegetation. Soil sampling has not been conducted on the site (Appendix B: Figure B1, Appendix B: Photo 30, Appendix D: Figures D8 and D9).

Stressed vegetation or evidence of releases: All vegetation appears stressed due to drought conditions.

3.6 CURRENT USES OF ADJOINING PROPERTIES

The areas around the Subject Site are primarily used for military training and facility lands. Undeveloped lands are used for game management, forest reserves, and ranching/pasture.

The cantonment area for PTA and the 3,700-ft runway of the Bradshaw Army Airfield are located between PTA Parcels A and B. This area is excluded from the Subject Site. It is approximately 800 acres and includes the airfield, support structures, and the 80-acre cantonment area. The cantonment can support up to 2,300 military personnel and includes barracks and personnel support buildings, offices, maintenance, storage and facility buildings. A former landfill is also located on the excluded parcel. Additional PTA U.S. Army training lands and the PTA impact area lie south of the Subject Site.

State Conservation land (Koahē Game Management Area) and the Mauna Kea Forest Reserve lie north and northeast of the Subject Site. The Department of Hawaiian Homelands owns lands to the east. These parcels are currently classified as “Special Use” and are leased for cattle ranching. The Mauna Loa Forest Reserve is also located to the east and is managed by the Division of Forestry and Wildlife under HDLNR (Portage, Inc. 2013). Federally owned lands, ranching lands, and the state owned Puuanahulu Game Management Area lie to the west.

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4. USER PROVIDED INFORMATION

Multiple staff members of PTA were interviewed on 7 to 9 June 2016 by Ms. Kinchla and Mr. Moncrief of EA for the purpose of requesting site-specific information. Additional background information was provided by Ms. Carrie Nelson of USAG-HI on 25 April 2016.

4.1 TITLE RECORDS

The Subject Site consists of three state-owned parcels. The parcels were government lands prior to the overthrow of the Hawaiian monarchy in 1893. The Republic of Hawaii ceded these lands to the United States under the 1898 Joint Resolution of Annexation (Hawaiian Annexation Resolution 1898), and the Parcels became part of the Territory of Hawaii (USACE 2016). When Hawaii became a state in 1959 (Admissions Act 1959), the ceded lands were transferred to the state of Hawaii. In 1964, the Subject Site parcels were leased to the United States of America (DoD) from the HDLNR under a 65-year state lease S-3849 (DA-94-626-ENG 80) dated 19 August 1964 (HDLNR 2009). The parcels are identified as Parcel A (A-105-1) (also known as APOHTA-112675), Parcel B (A-105-2) (also known as APOTHA-112676), and Parcel C (A-105-3) (also known as APOTHA-112677) (USACE 2016). A copy of the lease is provided in Appendix D.

The neighboring Impact Area south of the Subject Site and the Cantonment Area in-between the Subject Site Parcels A and B was withdrawn from the Territory of Hawaii lands in 1956 under Executive Order No. 1719 (Territory of Hawaii 1956a) and the Maneuver Agreement (Territory of Hawaii 1956b). In 1964, these neighboring parcels were “set aside” for the use of the United States in fee simple through Executive Order No. 11167 under Section 5(d) of the Admission Act and the 1956 Maneuver Agreement (USACE 2016).

4.2 ENVIRONMENTAL LIENS OR ACTIVITY AND USE LIMITATIONS

The PTA Natural Resources Program has established land-use and activity use restrictions due to sensitive environmental areas within the Parcels (Appendix A: Figure 3).

- Parcel A (A-105-1): An estimated 7,660 acres of 15,540 total acres are restricted from use by the PTA Natural Resources Program.
- Parcel B (A-105-2): All of Parcel B (1,944 acres) falls within the designated palila (*Loxioides bailleui*) critical habitat.
- Parcel C (A-105-3): An estimated 4,035 acres of 5,607 total acres are restricted from use. Approximately 3,175 acres are within the palila (*Loxioides bailleui*) critical habitat and 860 acres are restricted from use by the PTA Natural Resources Program.

4.3 SPECIALIZED KNOWLEDGE

Ms. Kinchla and Mr. Moncrief interviewed PTA staff members who were recommended based on their long-term work experience at the facility or for their current site-specific knowledge:

- Mr. David “Mac” McBride: PTA DPW Environmental Compliance Office Program Manager
- Mr. Robert Misajon: Plans and Operations Officer, USAG-PTA
- Ms. Christine Phelps: PTA Environmental Program Evaluation, DPW
- Mr. Rodney Puniwai: PTA Range Operations Manager
- Mr. Glenn Quinories: PTA DPW
- Senior Staff Member (Request Anonymity): PTA Range Support Supervisor
- Ms. Mona Tatum: PTA Natural Resources Program
- Mr. John P. Wheatley: PTA Range Operations and Maintenance Manager
- Mr. Robert Yagi: PTA Natural Resources Program
- Ms. Michael Zoeller: PTA Integrated TA Management Geographic Information System.

Staff members answered questions about current and historical practices at the Subject Site, waste management, and provided general information regarding the Subject Site. Information obtained from these interviews has been incorporated throughout this ECOP Report.

4.4 OWNER, PROPERTY MANAGER, AND LESSEE INFORMATION

The State of Hawaii is the landowner and the United States of America (U.S. Army) is the lessee of the parcels.

5. REVIEW OF HISTORICAL LAND USE

The following summary of Subject Site history is based on a compilation of information collected from historical sources, interviews, database information, and the site reconnaissance.

5.1 SITE HISTORY

5.1.1 History of Ownership

Prior to, and during the Hawaiian Kingdom, the current PTA area was divided into the upper reaches of four ahupuaa (Hamakua, Hilo, Kona, and Kohala). Due to the elevation, climate, and a lack of water, the Subject Site was used for resource collection, and transit, but it did not have a permanent settlement. The area was divided during the Great Mahele, and included the ahupuaa of Kaohe and Humuula. After the Great Mahele, the crown lands were transferred to the Hawaiian government. In 1859, the land was leased for sheep and cattle ranching by Francis Spencer. In the 1870s, John Parker of Parker Ranch began acquiring leases at the site (HDOT 2012). After the 7 July 1898 joint resolution of annexation, the Subject Site parcels became part of the ceded lands and were transferred to the U.S. Government. The Subject Site was initially part of the Mauna Loa Forest and Game Reserve, managed by the Territory of Hawaii. When Hawaii was admitted as a state under the Admissions Act of 1959, the ceded lands were transferred to state of Hawaii (USACE 2016). Additional information is available in Section 4.

Table 1: Historical Land Ownership at PTA

(Hays 2002)

Parcels, B (A-105-2), C (A-105-3), and majority of Parcel A (A-105-1) TMK 3-4-4-016:005 TMK 3-4-4-015:008		Western Portion of Parcel A (A-105-1) TMK 3-7-1-004:007	
1806-1819	King Kamehameha I	1806-1819	King Kamehameha I
1819-1824	King Kamehameha II	1819-1824	King Kamehameha II
1824-1838	King Kamehameha III	1824-1848	King Kamehameha III
1838-1848	Victoria Kamamalu	1848-1893	Government of the Hawaiian Kingdom
1848-1893	Government of the Hawaiian Kingdom		
1893-1894	Provisional Government	1893-1894	Provisional Government
1894-1898	Republic of Hawaii	1894-1898	Republic of Hawaii
1898-1959	Territory of Hawaii	1898-1959	Territory of Hawaii
1959-Present	State of Hawaii	1959-Present	State of Hawaii
<p><i>Noted: TMK – Tax Map Key</i> <i>TMK 3-4-4-015:008 was not specifically identified in this land transfer by its unique TMK ID. The geographic area that this TMK occupies was identified as sharing the same land transfers as TMK 3-4-4-016:005 based on location.</i></p>			

5.1.2 Past Uses and Operations

Prior to European contact, the greater surrounding area was used as a basalt quarry, bird trapping area, and as a pathway across the island. During the sandalwood export boom of the early 1800s, the Saddle Road area was used as a route and campsite for sandalwood collectors.

Cattle were introduced to Hawaii Island in 1793/1794. By the 1820s, thousands of cattle were roaming the island, and devastating the native forests. The Subject Site was used for ranching from the 1850s to the 1940s, when the military began to use the site for training purposes (HDOT 2012).

PTA was first used during World War II as a Marine Corps artillery live-fire TA. The Marines from the 2nd Marine Division and the 5th Marine Division trained at PTA and on the western side of the Big Island in preparation for the Iwo Jima and Saipan campaigns.

During World War II, few permanent structures existed and soldiers slept in tents. The military expanded the access road (Saddle Road) in order to serve PTA during the war. After the war, the Hawaii Territorial Guard controlled the site, and in 1956 the U.S. Army took over PTA (U.S. Army 2016). The Bradshaw Army Airfield on the adjacent excluded parcel was constructed in 1956. The Keamuku Maneuver Area was purchased from Parker Ranch in 2006.

PTA supports full-scale combined arms live-fire and field training military exercises at all levels from squad to brigade for Army Active Component units stationed in Hawaii. PTA supports similar training up to company level for the Army Reserve and HIARNG units stationed in Hawaii. PTA is also used by Hawaii's Emergency First Responders and the Hawaii Police Department (USAEC 2013).

5.1.3 Sanborn Fire Insurance Maps

A search of the Sanborn Map database was performed by EDR. No Sanborn fire insurance maps were available for the Subject Site or the adjoining properties.

5.1.4 Local Street Directories

The Subject Site and adjacent properties were not identified in the city directories due to limited development and lack of street addresses.

5.1.5 Aerial Photographs

Aerial photographs from 1954, 1964, 1977, 2001, 2013, and 2014 were collected from UH-Manoa Library online aerial repository and georeferenced in ArcMap. Recent aerial photographs were obtained via GoogleEarth and ArcMap Online Imagery. Aerial photographs were not obtained from EDR. Observations made from the reviewed aerial photographs are presented in the following table. Copies of the historical aerial photographs are presented in Appendix D as Figures D1-D5.

Table 2: Aerial Photograph Review

Year	Source	Observations
1954	UH-Manoa Library	The large scale of this aerial makes it difficult to accurately identify all improvements and/or activities. The aerial photo predates the construction of the Bradshaw Army Airfield. Saddle Road runs east to west across the northern border of the Subject Site. Lava Road runs from the southeast corner across a more recent lava flow to the eastern edge of the central parcel. It connects to the north-south road, ultimately reaching the current Mauna Kea State Park. Unimproved roads are located north and south of Saddle Road in the center of the Subject Site. Small white dots (possibly buildings) are visible to the east of these roads. The former airstrip at the current MOUT site can also be seen. A small dark area is observed at the Puu Puahi cinder pit area. Overall, few roads are visible in the western section of the Subject Site. Appendix D: Figure D1.
1964	UH-Manoa Library	The large scale of this aerial makes it difficult to accurately identify all improvements and/or activities. The Bradshaw Army Airfield is visible in the cantonment area, and roads are visible at the Former Bazooka Range. The Former airstrip has additional piles or paved locations. A road/track is present at Puu Lehue, north of the current MOUT area. The cinder pit area at Puu Puahi is expanded into two sections. Also, the current quarry location appears to be active, and the area show signs of disturbance. Appendix D: Figure D2.
1977	UH-Manoa Library	The large scale of this aerial makes it difficult to accurately identify all improvements and/or activities. The landfill south of the airstrip is present. The former airstrip appears indistinct and unmaintained. A road runs south from the landfill to connect to the southeastern road. The firing range is visible on the southern border. The current quarry location contains an expanded disturbed area, and the disturbed cinder pit area is present at Puu Puahi. Roads are visible on the western portion of the Subject Site. Disturbed areas at the 400 series FPs are visible. Appendix D: Figure D3.
2001/2002	GoogleEarth	A portion of the site (2001) is not visible due to the scale of the photographs; however the 2002 image offers area wide coverage. The large scale of this aerial makes it difficult to accurately identify all improvements and/or activities, but the following are visible: FARPs, former landfill, quarry, the ASP, approximately six structures that were removed for construction of the current MOUT area. Road improvements are seen. A new staging area lies to the southeast of the former landfill, to the east of Menehune Road. Additional north-south roads and multiple small TAs are installed. The quarry is visible on the southern border. A dark cinder pit area is visible on former “burn pan” area at Puu Puahi. Roads are visible on Puu Puahi. Appendix D: Figure D4.
2013	World Imagery (ArcMap)	The aerial allows for a good overview of the site; however the scale of the site makes it difficult to accurately identify all improvements and/or activities. The BAX TA, former landfill, ASP, FARP sites, Forward Operating Base/Cooper Airstrip, former debris pile at TA 21, MOUT, storage areas, expanded quarry, former bazooka range rail track, parking area are visible. Appendix D: Figure D5.

5.1.6 Topographic Maps

Topographic maps from 1901, 1926/1927, 1951, and 1992/1993 were reviewed as part of this investigation. Observations made from the topographic maps are presented in the following table. Copies of the topographic maps are presented in Appendix D: Figures D6-D11.

Table 3: Topographic and Range Control Map Review

Year	Source	Observations
1901	UH-Manoa Library	The Subject Site appears as vacant land. The Humuula Sheep station is present to the east of the Subject Site. An unimproved road is shown crossing the parcel from east to west. Appendix D: Figure D6
1926-1927	UH-Manoa Library	The Subject Site has fence lines in the 1927 Puu Oo map. Telephone lines run roughly parallel to the north of the unimproved road. Appendix D: Figure D7.
1951	UH-Manoa Library	The Subject Site and adjacent sites do not appear to be developed on this topographic map. A two-lane road runs through the area. A portion of the Subject Site and areas to the south are labeled Mauna Loa Game and Forest Reserve. Areas of lava flow are shown in the area (Online viewer).
1959	PTA: Historical Range Map	The former airstrip near the current MOUT area and the tank gunnery range located near Puu Lehue are identified. The Former Bazooka Range is identified as “Rocket Launcher Range.” The Puu Puahi impact area (current Range 13/13A) is classified as an “impact area – infantry and armor tactical exercises only.” Appendix D: Figure D8.
1964	PTA: Historical Range Map	The former airstrip is visible, but the tank gunnery range is no longer identified. The Former Bazooka Range is identified as a 3.5 Practice Range. The area south of Puu Puahi is identified as 3.5 Rifle Grenade Range (offsite). Additional roads are present to the west and east. The eastern portion of the Subject Site also includes a large area north of the former Saddle Road area identified as “4.2 & ARTY Firing Points.” Appendix D: Figure D9.
1984	PTA: Historical Range Map	The FPs in use today are visible. The former Bazooka Range/Rocket Launcher Range/3.5 Practice Range is no longer visible. The former airstrip/Tank gunnery range is now identified as a “POW camp.” Appendix D: Figure D10.
1992/1993	UH-Manoa Library	Saddle Road runs through the Subject Site. An airfield and buildings are visible in the northwest portion of the Subject Site. The Subject Site is labeled as PTA (Military Reservation) and Pohakuloa Game Management Area. Four-wheel drive roads are visible throughout the site, and areas of lava flow are shown in the site boundary. Appendix D: Figure D11.

5.2 INTERVIEWS

Staff members at PTA were interviewed via phone prior to the site visit, and in person on the 7 to 9 June 2016 site visit. The following staff members were interviewed based on their knowledge of historical and current practices at the Subject Site. User questionnaires are available in Appendix E. During the site visit, EA staff members were escorted by the PTA Range Operations Supervisor and the Environmental Compliance Office Program Manager and were given tours of areas of interest.

- Mr. Robert Misajon: Plans and Operations Officer, U.S. Army Garrison-PTA
- Mr. John P. Wheatley: PTA Range Operations and Maintenance Manager
- Senior Staff Member (Request Anonymity): PTA Range Support Supervisor
- Mr. Rodney Puniwai: PTA Range Operations Manager
- Ms. Christine Phelps: PTA Environmental Program Evaluation
- Mr. David “Mac” McBride: PTA DPW Environmental Compliance Office Program Manager
- Mr. Mona Tatum: PTA Natural Resources Office
- Robert Yagi: PTA Natural Resources Office
- Glenn Quinories: PTA DPW
- Michael Zoeller: PTA Integrated TA Management Geographic Information System.

Staff members were asked about current and previous hazardous material storage and disposal practices, current and past range operations, and general practices on the Subject Site. Staff members were also asked to identify previous/historical waste storage areas, former target zones/firing ranges, and current and historical use of pesticides. Several staff members identified the same former debris/dump sites. No new areas of interest, with the exception of the former burn pan, were identified during the staff interviews. Mr. Glenn Quinories and the PTA Range Support Supervisor have been onsite since the mid-1990s.

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6. RECORDS REVIEW

A component of this ECOP Report is the review of the readily available federal, state and local government records for the Subject Site and surrounding properties, including those that provide information on where there has been a release or likely release of hazardous substances or petroleum product, and which is likely to cause or contribute to a release or threatened release of hazardous substances or petroleum products on the Subject Site. A regulatory database report was acquired from EDR on 3 March 2016. The regulatory database report consolidates standard federal, state, local and tribal environmental record sources based on ASTM recommended minimum search distances from the Subject Site. A copy of the EDR database report in its entirety is included in Appendix C. Acronyms utilized and not referenced in the text of this section are either referenced on the acronym list and/or directly within the EDR report.

The following standard federal, state, and tribal environmental record sources were reviewed as part of this ECOP Report:

- Federal National Priority List (NPL)
- Federal Delisted NPL site list
- Federal Comprehensive Environmental Response, Cleanup, and Liability Act of 1980 (CERCLA) Information System (CERCLIS) list
- Federal CERCLIS-No Further Remedial Action Planned site list
- Federal Resource Conservation and Conservation Act (RCRA) Corrective Action Sites (CORRACTS) facilities list
- Federal RCRA non-CORRACTS Treatment, Storage, and Disposal (TSD) facilities list
- Federal RCRA generators list
- Federal Institutional Control/Engineering Control registries
- Federal Emergency Response Notification System (ERNS)
- State and Tribal lists of hazardous waste sites identified for investigation and remediation
- State- and Tribal-equivalent NPL
- State- and Tribal-equivalent CERCLIS
- State and Tribal Landfill and/or Solid Waste Disposal sites lists
- State and Tribal Leaking Underground Storage Tanks (LUSTs) list
- State and Tribal Registered USTs list

- State and Tribal Institutional Control/Engineering Control registries
- State and Tribal Voluntary Cleanup sites
- State and Tribal Brownfield sites.

A complete listing of all databases associated with these standard environmental record sources is provided directly within the appended Data Map report.

6.1 FEDERAL ENVIRONMENTAL RECORDS

Preliminary regulatory information was obtained from the EDR report, which is included in Appendix C. Additional PTA environmental compliance documents were provided by Ms. Nelson of the USAG-HI Installation Restoration Program, and reviewed on 25 April 2016. Historical maps were supplied by PTA via HHF.

6.1.1 Review of USAG-HI Environmental Reports

Historical environmental reports for PTA were reviewed in-person by EA staff on 25 April 2016 at USAG-HI located at Wheeler Army Airfield. Documents were provided by Ms. Nelson, USAG-HI Installation Restoration Program. There were few documents relating specifically to the Subject Site due to limited development on the site.

PTA Landfills 1 and 2

Two former landfills are present at PTA, Landfill 1 (POTA-03) and Landfill 2 (POTA-6) (Appendix A: Figure 4). Landfill 1 is not located on the Subject Site (USAEC 2010) and is not included in Figure 4. Landfill 2 (POTA-6) is located within Parcel A (A-105-1) and is part of the Subject Site. Landfill 2 operated from 1979 to 1993, and received primarily municipal waste associated with base activities including food waste, paper, wood, metals, etc. The site was not covered during the 1990s and attracted pigs, which may have scattered debris (McBride 2016). Small quantities of oils, solvents, and small amounts of potential hazardous materials were present (Towill 1994). The U.S. Army and HDOH approved containment as the final remedy for POTA-03 and POTA-06. Both former landfills were classified as Type A, low risk, municipal landfills. The objectives that the selected remedy for these sites must achieve are:

- Mitigate production of landfill leachate
- Stop erosion and transport of landfill debris
- Prevent intermittent stream water or surface runoff waters from infiltrating into landfill subsurface
- Prevent contact of landfill soil with possible receptors
- Prevent contact of storm runoff water with landfill soil

- Establish a long-term monitoring (LTM) and maintenance program.

Containment was chosen as the selective remedy to provide for the protection of human health and the environment and includes the following components (USAEC 2010):

- Construction of an impermeable landfill cap. The cap was completed in 1995 and consisted of 12 to 24 in. of soil, an impermeable synthetic covering, 12 additional in. of native soil, 9 in. of aa lava, 4 in. of top soil, and vegetation (Towill 1995)
- Installation of exclusionary fencing
- Long-term methane monitoring program
- Institutional controls for maintenance of the landfill boundaries and surface
- Long-term management of the landfill exclusionary boundaries. Site construction was completed in 1996 (HDOH 1996)
- Long-term management of the landfill cap. The cap has a life expectancy of 30 years (Towill 1995)
- Five-Year Reviews of the site with HDOH.

First Five-Year Review, PTA, Landfills 1 and 2 (POTA-03 & POTA-06)

The first Five-Year Review inspection was completed in March 2014. The Five-Year Review found no issues or major deficiencies impacting the remedy as implemented at POTA-03 and POTA-06. LTM performed at POTA-03 and POTA-06 demonstrated that the remedy for both sites was protective, functioning, contained contamination to the footprint, and was protective of human health and the environment. Methane results from the five-year monitoring event had no exceedances (USAEC 2014).

6.1.2 Federal NPL Sites

The NPL record is an USEPA registry of the nation's worst uncontrolled or abandoned hazardous waste sites. NPL sites are targeted for long-term remedial action under CERCLA. According to the EDR report, the Subject Site is not listed as a NPL site and there are no such sites located within 1 mile of the Subject Site.

6.1.3 Federal CERCLIS Sites

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 CERCLA. CERCLIS contains sites that are either proposed to be or are on the NPL and sites that are in the screening and assessment phase for possible inclusion on the NPL. According to

the EDR report, the Subject Site is not a CERCLIS site and there are no such sites located within a ½-mile radius of the Subject Site.

6.1.4 RCRA Corrective Action Sites

RCRA CORRACTS represent facilities that have generated or managed hazardous wastes and require corrective action. According to the EDR report, the Subject Site is not a RCRA corrective action site. No CORRACTS were identified within the search radius of the Subject Site.

6.1.5 RCRA Transport, Treatment, and Disposal Sites

The Resource Conservation and Recovery Information System includes selective information on sites that generate, transport, store, treat and/or dispose of hazardous waste as defined by RCRA. According to the EDR Report, no TSD facilities were identified within the search radius of the Subject Site.

6.1.6 Federal RCRA Generators

RCRA conditionally exempts small quantity generators (CESQG) are defined as facilities generating less than 100 kilograms (kg) of hazardous waste, or less than 1 kg of acutely hazardous waste per month. RCRA small quantity generators are defined as facilities generating between 100 kg and 1,000 kg of hazardous waste per month, while a RCRA large quantity generator is defined as a facility generating more than 1,000 kg of hazardous waste, or over 1 kg of acutely hazardous waste per month.

The site is identified by the USEPA as a CESQG. This was confirmed by David “Mac” McBride during the 7 June 2016 interview where he stated that PTA maintains a CESQG identification number in case it is needed.

6.1.7 Federal Emergency Response Notification System List

The ERNS list provides information on reported releases of oil and hazardous substances. According to the EDR report, the Subject Site is not on the ERNS list.

6.2 STATE AND LOCAL ENVIRONMENTAL RECORDS

The regulatory information presented below was obtained from the EDR report. HDOH online records were reviewed and additional information was requested from the following departments:

- Solid and Hazardous Waste Branch (including UST section)
- Safe Drinking Water Branch
- Clean Water Branch
- Hazard Evaluation and Emergency Response (HEER) Office.

No applicable records were found by the HEER office. Reports from the Solid and Hazardous Waste Branch and/or HDOH were reviewed on 5 May 2016.

6.2.1 State Hazardous Waste Sites

The State Hazardous Waste Sites records are the states' equivalent to CERCLIS. These sites may or may not already be listed on the federal CERCLIS list. Priority sites planned for cleanup using state funds (state equivalent of Superfund) are identified along with sites where cleanup will be paid for by potentially responsible parties. According to the EDR report, there are no State Hazardous Waste Sites within 1 mile of the Subject Site. No applicable records were found by the HEER office.

6.2.2 State-Registered LUST Sites

There are no identified LUSTs within the Subject Site listed in the EDR LUST database. EDR identified one LUST within a ½-mile of the Subject Site at the U.S. Army Dining Facility, Building T-186. HDOH and USAG-HI provided information on the closed LUST located at Building T-186. This 250-gallon LUST at Building 186 in the Cantonment area was closed under a site cleanup completion/No Further Action in 1994. The LUST is not anticipated to have an adverse environmental impact on the Subject Site based on current regulatory status.

6.2.3 State-Registered UST Sites

No state-identified USTs are located within the Subject Site. HDOH and USAG-HI provided records on no fewer than eight USTs located at the adjacent cantonment area. These have since been closed and with no further action under HDOH guidelines. These USTs are not anticipated to have an adverse environmental impact on the Subject Site based on current regulatory status.

6.2.4 State Spill Incidents

The EDR report did not identify any State spill incidents on the Subject Site. According to PTA staff, the Kiewit laydown yard adjacent to the BAX construction site, had some small spills (less than 5 gallons). The material was collected, bagged, and disposed of properly in 2013 (Range Operations Supervisor 2016).

6.2.5 Records of Contaminated Public Wells

The EDR report indicates there are no public water supply wells within the search.

6.2.6 Voluntary Cleanup Program Sites

No Voluntary Cleanup Program sites were identified in the EDR report on or within a ½-mile radius of the Subject Site.

6.2.7 State Brownfields Program Sites

No State Brownfields Program sites were identified in the EDR report within a ½-mile radius of the Subject Site.

6.2.8 State-Registered Sites with Institutional Controls

The EDR report did not identify any state-registered sites with institutional or engineering controls on or within the search radius of the Subject Site.

6.3 TRIBAL ENVIRONMENTAL RECORDS

According to the EDR report, there are no tribal-related sites within the specified search radius of the Subject Site.

6.4 UNMAPPED SITES

The EDR report identified 224 unmapped sites. Unmapped sites are those with insufficient address information such that they could only be identified as within the zip code of the Subject Site. Based on location and building descriptions, all were located off of the Subject Site and are not anticipated to have negatively impacted the environmental integrity of the Subject Site.

6.5 RADON

There are no known radon issues. Hawaii is identified as a lower radon risk state due to geology (USEPA 1999).

6.6 OTHER ENVIRONMENTAL RECORDS

The EDR report did not identify any manufactured gas plants, historical dry cleaners, or automobile repair facilities within the Subject Site.

EDR identified PTA as being listed on the Army DoD database. The DoD dataset consists of federally-owned or administered lands, administered by the DoD, that have an area equal or greater than a square mile and are in the U.S., Puerto Rico, or the U.S. Virgin Islands.

The EDR identified nine facilities on the Enforcement and Compliance History Online (ECHO) database. The ECHO database provides integrated compliance and enforcement history information. No violations are listed for these facilities on the ECHO database.

6.7 REVIEW OF HAZARDS

Information related to the past use and storage of hazardous substances at the Subject Site was compiled through a review of available site records, interviews with PTA staff, the site visit, and a search of federal and state environmental databases.

The Subject Site has been used for maneuver training, firing ranges, firing points, quarry/cinder pit/asphalt production activities, burn pans, material and equipment storage, landing zones, and refueling areas. Therefore, UXO and MEC are expected on the Subject Site.

Hazardous materials are currently collected by the PTA DPW Environmental Compliance office and stored off of the Subject Site. There are a limited number of historical documents regarding the Subject Site, so it is unknown whether hazardous waste/materials may have been stored onsite or within secondary containment prior to the early 2000s.

Based on HDOH reports, there are no known past releases of hazardous substances at the Subject Site. The site visit, interviews, and records review conducted as part of this ECOP did not indicate non-compliance in past disposal and release of hazardous substances.

6.7.1 Underground and Aboveground Storage Tanks

According to the EDR and HDOH reports, no USTs are or were present within the Subject Site.

A single 500-gallon diesel AST was identified at the Subject Site at Building 601, the Emergency Generator Building, by EA staff and C. Phelps. There were no records of spills, although the AST lacks complete secondary containment. A low concrete wall surrounds the tank, but the “floor” consists of gravel.

The ASP contains a single outdoor 500-gallon diesel AST for the associated, but non-functioning, emergency generator building (Building 601). This tank was most likely constructed during the mid-1990s. There are no recorded spills associated with this AST. It has an open floor, which is gravel-filled, and a walled area below it; therefore, it would not be classified as secondary containment. The excluded cantonment area includes multiple closed USTs off of the Subject Site (Phelps 2016). These have been closed as “No Further Action” as confirmed by the HDOH Solid and Hazardous Waste Office during a 2016 records archive review.

There are no records of historical USTs/ASTs at the Subject Site. When fuel is needed, it is brought to the site with portable secondary containment. This was observed on the Subject Site during field observations on 7 to 9 June 2016.

6.7.2 Inventory of Chemicals and Hazardous Substances

There are limited records prior to the early 2000s regarding chemical and hazardous materials storage on the Subject Site. The primary hazardous substances would be related to the use of munitions on the TAs. PTA staff identified a former burn pan west of Puu Puahi, in TA 9. According to staff, this site was closed and cleaned in the 1990s; however, the closure documentation could not be located. Materials stored in other storage areas are largely unknown.

There are limited facilities for hazardous materials storage on the Subject Site, but it is possible that materials were stockpiled outside in maintenance or baseyards. During the 7 to 9 June 2016 site visit, there was no visual indication of hazardous materials stockpiling on the Subject Site.

However, previously used debris piles were identified near TA 21 and FARP 18, and these were recently cleared.

Today, PTA has an actively managed environmental compliance office. Staff identify, track, and document hazardous materials. Hazardous materials are stored in segregated containers in the cantonment area for offsite removal.

6.7.3 Herbicides and Pesticides

A portion of the former public highway (Route 200) Saddle Road alignment ran along and through the eastern portion of the Subject Site until the Daniel K. Inouye Highway realignment opened north of PTA in 2007 to 2009. It is possible that herbicides were applied along the former road alignment.

In the Pacific, the DoD has historically applied pesticides around the base of concrete pads to prevent insect infestation to structures. There are few, if any, older permanent structures on the Subject Site. The majority of the buildings were constructed in the last 20 years, so there is a lower chance that pesticides were used around these buildings.

Herbicides have been used to control invasive species at PTA within the endangered species critical habitat areas including TAs 18-22. TA 18 has had 10 years of Roundup® (2 percent glyphosate) application in order to successfully manage invasive grasses (Tatum, Yagi 2016).

Fuel breaks, fence lines, and ASR locations may also have herbicide application. An ASR is defined as a 100-meter buffer around all known individual plants at sites selected for management and may be fenced. Existing roads are used for fuel breaks and are established along the western border of TAs 20 and 22, along the eastern border and along Kipuka Road in TA 18.

The PTA Natural Resources staff are required to follow state and federal regulations and label directions. Restricted pesticides are used by a certified pesticide applicator. The Natural Resources Department also produces a monitoring and spraying program for each threat category and maintains copies of monitoring and spraying schedules, location of treatment, plant species treated, threat/pest treated, last time sprayed, and chemicals used for U.S. Army review (USAG-HI 2010).

Common herbicides include Roundup Power Max 524-549 for general application and DuPont® Oust XP 352-601 for fence lines and fuel breaks. Fusilade II is used for turf and ornamentals. Arlon 4 Ultra Low VOA is used for general application. Crossbow 24D and Trico is used for trees and brush. Garlon 4 Ultra is also used at 100 percent strength for applied cut and drip operation.

PTA previously used LI-700 for roads and fence lines, DuPont Escort for Himalayan blackberry (*Rubus armeniacus*), and Fusilade II for grasses (Tatum, Yagi 2016).

Pesticides include Ramik® minibars rodent poison blocks. This product is registered for conservation use and the active ingredient is 0.005 percent diphacinone, an anticoagulant. The bait blocks are placed inside Protecta® bait stations with PTA Natural Resources contact information in accordance with the Special Local Needs label. All control areas are marked with appropriate warning signs (USAG-HI 2010).

Dust Palliative: This product was widely used at PTA and consists of lignin sulfonate. This non-toxic material is derived tree sap and is a by-product from wood pulping operations (Phelps 2016).

6.7.4 Waste Disposal Sites

Landfill 2 (POTA-6) has been closed since 1993 and capped since 1996 (HDOH 1996) (Section 6.1.1). LTM for methane occurs quarterly and biannually. In addition, Landfill 2 is included in a five-year review program (Section 6.1.1).

No hazardous material is allowed to be disposed of at the Subject Site. All hazardous material is collected by PTA DPW Environmental staff and stored in approved, maintained, designated hazardous waste storage unit on the cantonment area before being containerized and removed from the facility for disposal off-island. The overall PTA area is a CESQG. They maintain an USEPA number in case too much material is generated during a given month.

6.7.5 Asbestos-Containing Material

No ACM surveys were conducted as part of this ECOP. No ACM reports for the Subject Site were located during the records review. There is a recently established Pollution Prevention Plan, and asbestos will be added to it if located (Phelps 2016).

6.7.6 Mold

No mold surveys were identified during a records review at the USAG-HI. There are also few permanent structures on the site. The majority of the Subject Site has a mean annual rainfall of less than 20 in. (Giambelluca et al. 2013), and has been experiencing below average rainfall to drought conditions during the 2015 to 2016 El Niño year. Mold may exist in some of the latrines, but was not visible on the current structures

6.7.7 Polychlorinated Biphenyl Containing Equipment

A PCB survey was conducted in the early 1990s, and during the survey, no transformers containing PCBs were located at the Subject Site (USACE 1991).

6.7.8 Lead-Based Paint

No lead-based paint (LBP) surveys were conducted as part of this ECOP. USAG-HI did not have records indicating that LBP has been used on the Subject Site. Only the former guard shack was known to be constructed prior to the 1978. It is unknown when the POW camp was

completed, or if it was ever painted. It is possible that LBP may have flaked off at these locations. Paint may have flaked off from the moving targets at the former bazooka site, materials stored at the FARP 18 maintenance baseyard, FARP vehicle storage, or the TA 21 debris pile. It is unknown what was disposed of at the potential site of the former burn pan at Puu Puahi. Due to the Subject Site's use as a TA, it may be challenging to determine whether the lead in the soil is from paint or munitions.

6.7.9 Munitions Constituents

Live-fire exercises at the Subject Site may have included, but are not limited to: small caliber, large caliber, pyrotechnics, obscurants, recoilless rifles, rifle grenades, and rocket launchers. These weapons were fired into the impact area (offsite), and it is anticipated the majority of the constituents would be found offsite. However, it is possible that not all munitions reached the targeted impact area and could result in the following munitions contaminants of potential concern (COPCs) including, but not limited to: lead, copper, antimony, zinc, pentaerythritoltetranitrate (PETN), perchlorate, white phosphorus (WP), cyclotrimethylenetrinitramine (RDX), cyclotetramethylenetetranitramine (HMX), trinitrotoluene (TNT), 2,4-dinitrotoluene (DNT), and 2,6-DNT. The mobilization of munitions COPCs typically occurs in the environment via a variety of release mechanisms including off-range flow of surface water, erosion and deposition (via surface water) of soil, and vertical infiltration into groundwater. PTA's surface water and groundwater pathways are limited due to the low rainfall, lack of perennial streams, and the depth to groundwater aquifer; therefore, the migration of COPCs is limited (EA 2009).

Powder Burns: Military units disposed of excess propellant bags/increments incidental to artillery firing training through onsite powder burns at the completion of the training. Powder burns may have been conducted on TA roadways on the Subject Site prior to the 1990s and current powder burn regulations. Based on TA use, it is more likely that they would have occurred along the 400 series FPs.

Small Caliber Munitions: Lead is the primary munitions COPC. Other metals, including antimony, copper, zinc, and tungsten, can also contribute to impacts to environmental media (soil, surface water, and groundwater) at small arms ranges. Small caliber blanks are considered to contain no munitions COPCs.

Medium and Large Caliber Munitions: High explosives used in these munitions may result in the release of TNT, RDX, and HMX. The propellants for these munitions may contain 2,4-DNT, 2,6-DNT, and nitroglycerin.

Pyrotechnics and Obscurants: Perchlorate compounds are a component of many pyrotechnics, and WP is often used in obscurants.

Other Weapons Systems: The explosive components used in some of these munitions may result in the release of TNT, RDX, and HMX. PETN is a component of detonation cord and could be a munitions COPC at ranges where demolition training is conducted.

6.7.10 Radioactive Materials

The Subject Site includes a portion of one of the three ranges where Davy Crockett Weapons Systems were used from 1962 to 1968 (Appendix A: Figure 4). The Davy Crockett Weapons System consisted of a 120-millimeter or 155-millimeter recoilless rifle with maximum ranges of 1.24 miles or 2.49 miles, respectively. Before firing the large projectile from the 120-millimeter recoilless rifle, a smaller 20-millimeter spotting M101 cartridge was fired mirroring the trajectory of the larger projectile to identify where the weapon system was aimed and to identify the need for adjustments to obtain correct positioning of the rifle. The cartridge consisted of several components which included a nosecone, a body, and a tailfin. The body of this spotting round (Exhibit 1) was made of a DU alloy. After the cartridge was fired and upon impact of the spotting round, a small cloud of smoke identified the impact point” (ATSDR 2008). These spotting cartridges did not aerosolize when the penetrator hit a hardened target such as steel or concrete, and typically broke into large fragments after use (Rubin 2008).

Exhibit 1: Spotting Round



It was estimated that approximately 30 to 100 spotting rounds could have been used at each Davy Crockett Weapons System range. Each round contained approximately one half pound D38 U Alloy (92 percent DU and 8 percent molybdenum) (Rubin 2008).

Surveys were conducted between 2008-2010 in order to assess the extent and risk of the DU. DU management is solely under the authority of the U.S. Nuclear Regulatory Authority. Soil sampling was conducted by the U.S. Army, and HDOH conducted offsite air sampling along the publicly accessible Saddle Road. During this time, a single spotting round was found at PTA in 2007 (ATSDR 2008).

Soil sampling results:

The U.S. Department of Health and Human services conducted a Health Assessment in 2008 and determined that based on the “condition of the spotting rounds, the site’s environment, the limited environmental sampling results, the distance to populated areas, and restricted access at Pohakuloa Training Area’s impact areas...no adverse human health effects would be expected as a result of potential exposure to depleted uranium at Pohakuloa Training Area if the depleted uranium rounds were left at their current locations.”

The reference to “limited environmental sampling result” refers to the fact that most soil types in Hawaii bind uranium to soil particles, generally limiting uranium mobility (Rubin 2008). Soil samples were collected, but found no indication of DU used in the spotting rounds, though naturally occurring uranium was identified. However, soil samples are challenging to collect in

the rough, rocky soil at the Davy Crockett Weapons System ranges and a limited number were collected.

A follow-up Final PTA Firing Range Baseline Human Health Risk Assessment (BHHRA) report was completed in 2010 by Cabrera Services. The BHHRA found that “all potential upper bound risks to hypothetically exposed people are well below USEPA acceptable risks.” The report assumed that the current land use access restrictions would remain, and that the potentially exposed people would be limited to current site users, i.e., maintenance/construction/remediation workers, soldiers, and short term visitors/trespassers.

The ranges have since reopened for use. PTA received a license from the Nuclear Regulatory Commission (NRC) for possession of DU in 2013, and the license was updated in 2015. The license does not authorize the Army to use the DU or decommission the sites without additional review and approval by the NRC.

Air sampling results

Airborne uranium monitoring occurred from February 2009 until March 2010 at three sites near Saddle Road/Route 200. Two sites were located within Subject Site. Based on the air monitoring, it appeared that DU used in the spotting cartridges did not appear to become airborne under either normal conditions or during range burns, and would not pose any adverse health impact to persons offsite (Morrow 2010). Additional air samples were taken near the BAX construction area, but only naturally occurring uranium was identified with no indications of DU.

In 2013, the U.S. Nuclear Regulatory Agency suggested that air sampling at the PTA range is not necessary for the following reasons: (i) substantially less DU has been found at the PTA than at Schofield Barracks after extensive survey activities, (ii) the few DU metal fragments identified at the PTA were not oxidized, (iii) no DU yellow oxidized particles were observed on soil or rock surface areas within the PTA, and (iv) air sampling and analysis during 2010 BAX construction at the PTA Range did not confirm even trace amounts of DU (ML12046A506, ML113140533) (U.S. NRC 2013). FARP 17, and Ranges 13 and 13A were previously closed during the investigation and have since reopened as the air and soil sampling results indicated no adverse human health risks for current users under current uses.

In February 2017, the U.S. Nuclear Regulatory Commission approved a sediment sampling radiation monitoring plan for PTA. Samples will be collected from an intermittent stream west of the Subject Site (Callis 2017).

7. RESULTS

7.1 DEVIATIONS

None.

7.2 DATA GAPS

A data gap is defined by the ASTM E1527-13 Standard as a lack of or inability to obtain information required by this practice despite good faith efforts by the environmental professional to gather such information. Data gaps may result from the incompleteness in the activities required, including, but not limited to the site reconnaissance, interviews and historical research. Failure to achieve the historical research objectives identified in the standard is termed a *data failure* and is a type of *data gap*.

Table 4: Data Gaps

Figure 4 Site ID	Data Gap	Reason for Occurrence	Significance and Rationale
1	Former Bazooka Range COPCs	MEC/UXO removed. Soil sampling has not yet been conducted.	High: Unknown presence or absence of munitions constituents COPCs.
2	Former Tank Gunnery Range (Current MOUT area) clean up/POW Camp	No known reports.	Medium: Unknown if munitions constituents remain onsite
3	Current burn pan: potential drift of COPC	Current burn pan is offsite. Unknown if material drifts during burn.	Low: Potential for airborne COPCs.
4	Original Burn Pan Closure Report (Puu Puahi). Estimated closure: mid-1990s.	Not available.	High: Unknown what methods/results were used to close the site. No additional information on site-potential for different location than the site currently identified.
5	Former Davy Crockett Weapons System	NA	Current users/current use present no known risk. Long-term or alternate users/usage not assessed.
6	Former Target Vehicle Storage Site at FARP 18	No soil sampling.	Low: Vehicles were drained of fluids prior to use as targets.
6	Hazardous Material Storage prior to early 2000s at FARP 18 Maintenance Baseyard	Limited record-keeping.	Low/Medium: Unknown presence or absence of potential hazardous materials. Storage may not have occurred at the Subject Site.
7	Landfill 2. "POTA-6"	No known data gaps. Extensive records.	
8	Ammunition Supply Point Building 602	No access.	Low: Ammunition is stored temporarily onsite and removed. Construction materials appear to be stored onsite temporarily.
9	Former debris pile at "Dead Man's Curve" (TA 21).	No known sampling: recent site cleanup.	Medium: Unknown if COPCs are present at the site.

Figure 4 Site ID	Data Gap	Reason for Occurrence	Significance and Rationale
10	TA/FP/Ranges. Unknown if soil constituent levels exceed HDOH Environmental Action Levels due to UXO/munitions constituents COPCs.	Limited soil sampling.	Medium: REC for TAs/FPs.
NA	BAX – Range Control/Tower	No access.	Low: Recently constructed. Currently used as office space.

7.3 FINDINGS

The Subject Site includes site-specific RECs, and may include overall TA/FP RECs (Table 5 and Appendix A: Figure 4). The general conditions of the Subject Site are unknown due to limited confirmation sampling.

7.3.1 De minimis Conditions

De minimis conditions generally do not present a material risk of harm to the public or environment, and generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies. Conditions assessed to be *de minimis* would include minor spills of petroleum products as a result of equipment usage or storage, temporary staging of non-hazardous waste or materials, etc. A *de minimis* release relating to release of petroleum products resulting from vehicle accidents is not considered in this document. No *de minimis* conditions were identified at the Subject Site.

7.3.2 Historical Recognized Environmental Conditions

A Historical Recognized Environmental Condition (HREC) refers to a past release that has been remediated to below “residential” standards and given regulatory closure with no use restrictions. HREC is defined by ASTM in the E1527-13 standard as “a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).” No HRECs were identified at the Subject Site.

7.3.3 Controlled Recognized Environmental Conditions

Controlled Recognized Environmental Condition (CREC) is a new term introduced in the ASTM E1527-13 standard. The CREC concept was introduced to address contaminated sites that have received risk-based regulatory closure, where no further remediation is required but residual contamination still exists at a site and the property is subject to some sort of control or use restriction. These sites, where contamination is controlled but could still pose ongoing or future obligations on the owner (such as special precautions during construction or grading activities),

have been a source of some confusion to the environmental due diligence industry with regards to how they should be classified.

The ASTM definition of CREC in the E1527-13 standard is as follows: “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).”

- **Landfills:** The previous Landfill 2 (POTA-6) is identified as a CREC. It was closed and is currently undergoing LTM.
- **Radiological Materials:** DU spotting rounds were used on the Subject Site. They have been investigated, and the affected ranges have been reopened. These sites have been undergoing air monitoring and soil testing. Air monitoring did not return any exceedances (HDOH 2014). A BHHRA did not identify significantly increased risks for the site workers, construction workers, or soldiers at PTA and no adverse human health impacts were identified as result of exposure to spotter round body uranium present in the soil at PTA based on information about the condition of the spotting rounds, the site’s environment, the limited environmental sampling results, the distance to populated areas, and restricted access at PTA’s impact areas (ATSDR 2008; Cabrera Services 2010). Under current land use, the Davy Crockett Weapons System ranges are not classified as a REC. However, it may be appropriate to further evaluate the potential for contamination associated with the Davy Crockett Weapons System munitions in the future if land use at these locations changes (Cabrera Services 2010).

7.3.4 Recognized Environmental Conditions

REC is one of the terms used to identify environmental liability within the context of a Phase I Environmental Site Assessment. ASTM defines the recognized environmental condition in the E1527-13 standard as “the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to 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.”

Findings of this ECOP are based on existing environmental information, including visual observations made during the 7 to 9 June 2016 site visit, readily available site records, staff interviews, and federal, state, and local database and file information related to the storage, release, treatment, or disposal of hazardous substances or petroleum products or derivatives of the Subject Site.

The following RECs were found in connection with the site (Table 5 and Appendix A: Figure 4).

- **UXO/MEC:** UXO and MEC were used at TAs and FPs onsite, and were also discovered during the construction of the Daniel K. Inouye Highway during subsurface investigations; therefore there is a potential for UXO/MEC to be found onsite.
 - The Former Bazooka Range is a UXO/MEC REC and is recommended for confirmatory sampling.
 - Additional TAs, ranges (former and current), and FPs are classified as RECS.
- **Historical Hazardous Materials Disposal:** Unknown quantities and types of materials were disposed of at the Subject Site.
 - Former Debris piles at TA 21 and the former target vehicle storage site at FARP 18: These were noted prior to the site visit (they have since been cleared). These sites are identified as a REC and soil sampling is recommended.
 - Current Burn Pan: The facility is maintained and offsite. It is unknown if aerial drift occurs. The area of the Subject Site downwind of the current burn pan is a REC. Soil sampling is recommended to assess if COPCs are higher than background levels near the Current Burn Pan.
 - Puu Puahi Potential Former Burn Pan: The location was identified by staff as closed and cleaned in the mid-1990s. Its status cannot be confirmed; therefore it is classified as a REC, and sampling is advised.
- **Pesticides and Herbicides:** Commercially available pesticides and herbicides are used onsite and under recommended guidelines. Pesticides are stored offsite. They are used within restricted-access sensitive ecological habitat areas, endangered species critical habitat locations, along fuel breaks, and along fence lines. Pesticide use is currently tracked and applied following best management practices. There were no identified pesticides mixing or storage facilities at the Subject Site; therefore, pesticide testing is not recommended.
- **Lead:** Lead is likely present in soil due to the historical and current use as firing ranges. Lead would likely be associated with the impact berms at the small arms ranges.
- **AST:** One diesel AST is onsite at Building 601. It is not in use, and does not have complete secondary containment. It is unknown when the AST was last used or if there have been any releases from the AST.

7.3.5 Vapor Migration

No vapor migration risks were identified at the Subject Site. No petroleum spills were known or identified and few structures are located on the site.

7.3.6 Recommendations

Multi-increment confirmation soil sampling is recommended to assess the RECs. Site-specific decisions units are recommended for multi-increment soil sampling to confirm the presence or absence of RECs. In the event that the multi-increment sample aliquot location is within solid aa or pahoehoe lava, the aliquot location will be moved to the closest location where fine-grained material of the sufficient aliquot volume may be collected. Site-specific decision unit dimensions will be identified and clarified in the Sampling and Analysis Plan for PTA. If suspected UXO are identified, prior to immediately leaving the area, the field crew will record the location with a global positioning system unit and/or flagging and notify the PTA Explosive Ordinance Disposal unit for the appropriate safe removal of the UXO item. If munitions constituents are found in soil above HDOH Environmental Action Levels or USEPA Regional Screening Levels, recommendations will be made for the appropriate management in accordance with applicable State of Hawaii and federal guidelines.

7.3.7 Conclusion

EA has performed an ECOP assessment in conformance with the scope and limitations under the DoD requirement for preparation of an ECOP Report under provisions of the Base Redevelopment and Realignment Manual (DoD 4165.66-M, March 1, 2006), Section C8.3; and was also performed in substantive compliance with the ASTM Standard Practice ASTM E1527-13 (Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process) and the USEPA All Appropriate Inquiry (AAI) Rule (40 CFR Part 312). The ECOP Report was prepared in accordance with applicable federal, state, and local laws and regulations, including:

- AR 200-1, “Environmental Protection and Enhancement”
- AR 405-10, “Acquisition of Real Property and Interests Therein”
- ASTM E1527-13, “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process”
- ASTM E2247-08, “Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property”
- ASTM D6008-96 (Reapproved 2014), “Standard Practice for Conducting Environmental Baseline Surveys”
- ASTM D5746-98 (Reapproved 2010), “Standard Classification of Environmental Condition of Property Area Types for Defense Base Closure and Realignment Facilities.”

The parcels at PTA may include several ECOP Area types (Table 5, Appendix A: Figure 1).

- Parcel A (A-105-1) is the largest at 15,420 acres. It includes TMK 3-4-4-015:008, TMK 3-7-1-004:007 and portions of TMK 3-4-4-016:005. An estimated 3.5 acres of the

parcel includes the closed and capped former Landfill 2 (POTA-6). This landfill was closed in 1993 and covered in 1996. LTM at the landfill recorded zero findings for four consecutive quarters between 2009 and 2012 (U.S. Army Defense Environmental Restoration Program 2013). This former landfill portion is classified as ECOP Area **Type 4**.

An additional estimated 40 acres of the Parcel includes a portion of Range 13/13A and an area south of the cinder pit at Puu Puahi, which would also be classified as ECOP Area **Type 4**. From 1962 to 1968, the Davy Crockett Weapons System was intermittently used at this range. The body of the Davy Crockett Weapons System spotting round was made of a depleted uranium alloy. A site investigation and Human Health Risk Assessment was completed and found no adverse human health impacts likely to occur as a result of exposure to the uranium present in the soil at PTA under current land uses (Cabrera Services 2010). Should land uses change, this area within the Subject Site should be reassessed.

The remainder of Parcel A (A-105-1) is classified as ECOP Area **Type 7**. This site is recommended for additional evaluation based on the historical land uses.

- Parcel B (A-105-2) is approximately 1,944 acres and is north of the cantonment area. It includes a portion of TMK 3-4-4-016:005 and is classified as ECOP Area **Type 1** due to limited training usage.
- Parcel C (A-105-3) is approximately 5,607 acres and is located in the eastern portion of the Subject Site. It includes a portion of TMK 3-4-4-016:005. It is classified as ECOP Area **Type 7**. This site is also recommended for additional evaluation based on the historical land uses.

This classification was selected based on the existing use limitations on the Subject Site and RECs listed in Section 7.3.4. Table 5 (following page) summarizes the Subject Site CRECs, RECs, and Potential RECS.

**Table 5: Subject Site HRECs, CRECs, and Potential RECs
(Appendix A: Figure 4)**

Figure 4 Site ID	Site Name	ECOP Area Type	PTA Lease Parcel	TMK	HREC, CREC, and Potential REC	Location Description	Recommendations
1	Former Bazooka Range	7	Parcel A A-105-1	3-7-1-004:007	UXO, MEC, and metals.	Former firing range. Material clean up completed. Soil testing not yet conducted.	Sample to determine presence or absence of potential contamination.
2	Former Tank Gunnery Range	7	Parcel A A-105-1	3-4-4-015:008	UXO, MEC, and metals.	Site identified north of the MOUT Area in the 1959 Range Control Map. Area is visible on current aerial photos. No information on UXO/MEC cleanup located.	Sample to determine presence or absence of potential contamination.
3	Current Burn Pan Area	7	Parcel A A-105-1	3-4-4-016:005	Potential MEC, metals, and dioxins.	Burn Pan is located off of Subject Site. Investigate area near current burn pan.	Sample to confirm if aerial drift is occurring.
4	Potential Former Burn Pan	7	Parcel A A-105-1	3-4-4-016:005	Potential MEC, metals, and dioxins.	Former potential burn pan/cinder pit area at Puu Puahi. No documentation located. Unknown if contamination is present.	Sample to determine presence or absence of potential contamination.
5	Former Davy Crockett Weapons System Range	4	Parcel A A-105-1	3-4-4-016:005	CREC - Potential radiological materials.	Range 13/13A and south of the cinder pit of Puu Puahi. Human Health Risk Assessment Completed and found no adverse human health impacts are likely to occur as a result of exposure to the uranium present in the soil at PTA.	CREC: No sampling or further evaluation required. HDOH concurs that current land use does not present a risk to current users.
6	Former Target Vehicle Storage Site at FARP 18	7	Parcel C A-105-3	3-4-4-016:005	Potential petroleum, oil and lubricants (POL) constituents and metals.	Former Target Vehicle Storage Site: FARP 18. Vehicles have been removed. Unknown if any contamination is present.	Sample to determine presence or absence of potential contamination.

Figure 4 Site ID	Site Name	ECOP Area Type	PTA Lease Parcel	TMK	HREC, CREC, and Potential REC	Location Description	Recommendations
7	Landfill 2. Also identified as POTA-6	4	Parcel A A-105-1	3-4-4-016:005	Controlled REC	Closed, capped landfill.	No sampling or further evaluation required LTM ongoing. The landfill was closed in 1993 and capped in 1996 and approved by HDOH.
8	Ammunition Supply Point AST: Building 601	7	Parcel A A-105-1	3-4-4-016:005	Potential POL constituents. The AST lacks complete secondary containment but no evidence of staining or leaks were observed. The AST is approximately 20 years old.	Outdoor AST adjacent to Building 601 (Emergency Generator Building).	Install secondary containment and update Spill Prevention, Control, and Countermeasure Plan.
9	Former Debris Pile TA 21	7	Parcel C A-105-3	3-4-4-016:005	Potential POL constituents and metals.	Former metal debris pile TA21. Material has been removed from site. Unknown if any contamination present.	Sample to determine presence or absence of potential contamination.
10	All TAs/FPs	7	Parcel A Parcel C A-105-1 A-105-3	Emphasis on 400 series FP located within TA 9, 12, and 13.	UXO, MEC, and metals.	Heaviest use anticipated at the 400 series FP based on past use.	Sample to determine presence or absence of potential contamination.

8. REFERENCES

The following sources of information were consulted as a part of this ECOP assessment:

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POHAKULOA TRAINING AREA, HI**

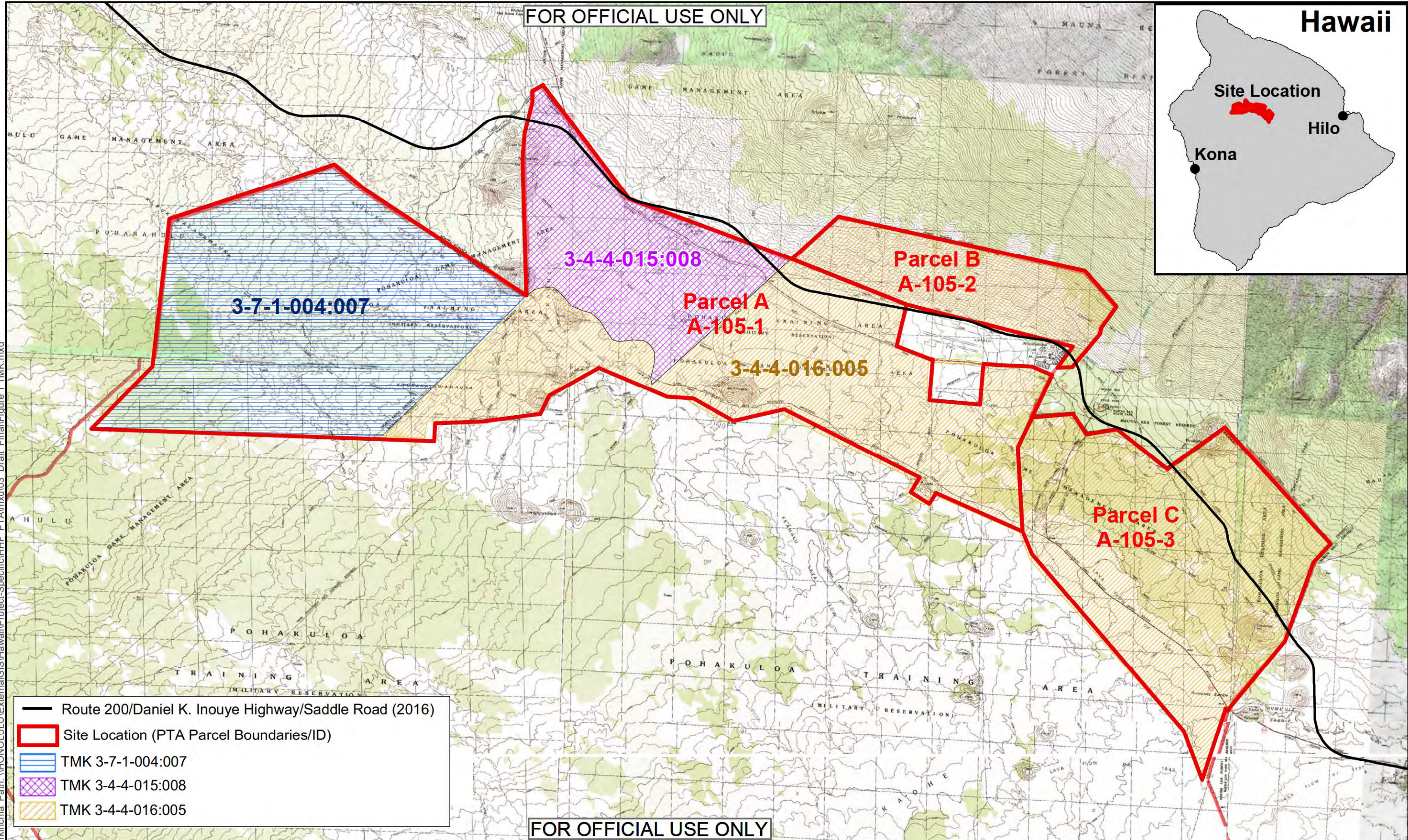
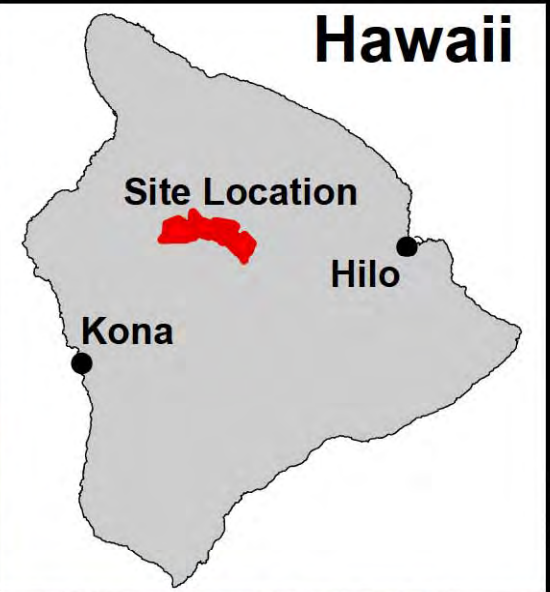
APPENDIX A: FIGURES

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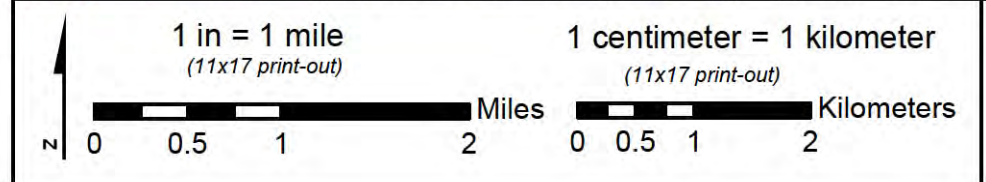
Hawaii



kinchla Path: \\HONOLULU\\External\\GIS\\Hawaii\\Project-Specific\\HHF_PTA\\mxd\\03 Draft Final\\Figure 1 TMK.mxd

- Route 200/Daniel K. Inouye Highway/Saddle Road (2016)
- Site Location (PTA Parcel Boundaries/ID)
- TMK 3-7-1-004:007
- TMK 3-4-4-015:008
- TMK 3-4-4-016:005

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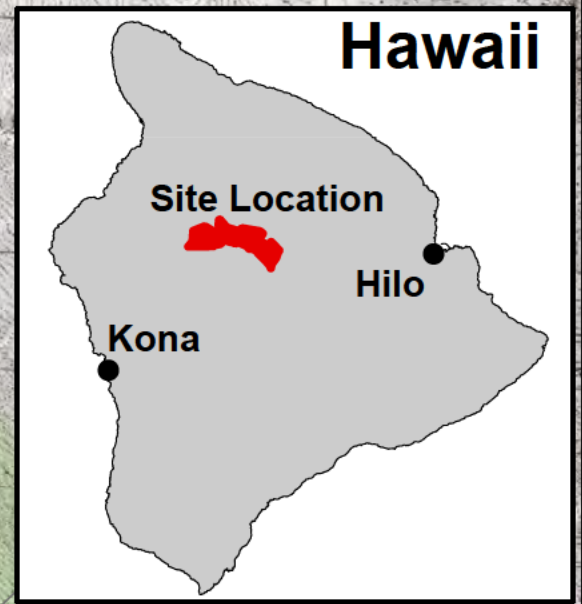


Final Environmental Condition of Property Report Phase I
Pohakuloa Training Area, HI

Appendix A
Figure 1
PTA Parcel IDs and State Tax Parcels
Pohakuloa Training Area, HI
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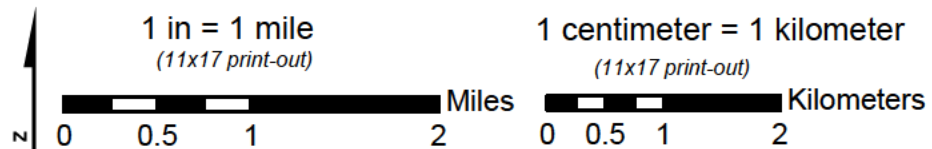


k:\hawaii\external\GIS\Hawaii\Project-Specific\HFE_PTA\mxd\04_FinalECOP\Figure 2 PTA_Soils.mxd

- Site Location (PTA Parcel Boundaries/ID)
- Route 200/Daniel K. Inouye Highway/Saddle Road (2016)
- KTB (Keekee loamy sand)
- KZD (Kilohana loamy fine sand)
- rCL (cinder land)
- rHLD (Huikau extremely stony loamy sand)
- rKHD (Kekake extremely rocky muck)
- rLV (Lava flows, aa)
- rLW (Lava flows, pahoehoe)
- rRO (rock outcrop)
- rVS (very stony land)

Source:
Topo: ArcMap Topo Streaming: http://goto.arcgisonline.com/maps/USA_Topo_Map
Soils: USDA 1972 NRCS. Hawaii County, HI

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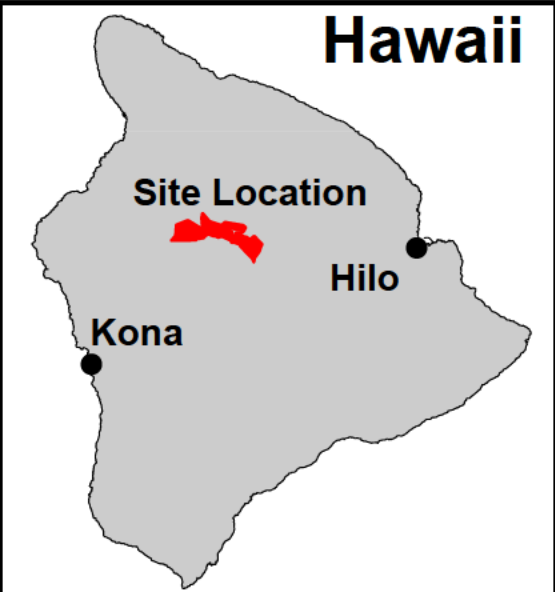


Final Environmental Conditions of Property (ECOP) Report Phase I
Pohakuloa Training Area, HI

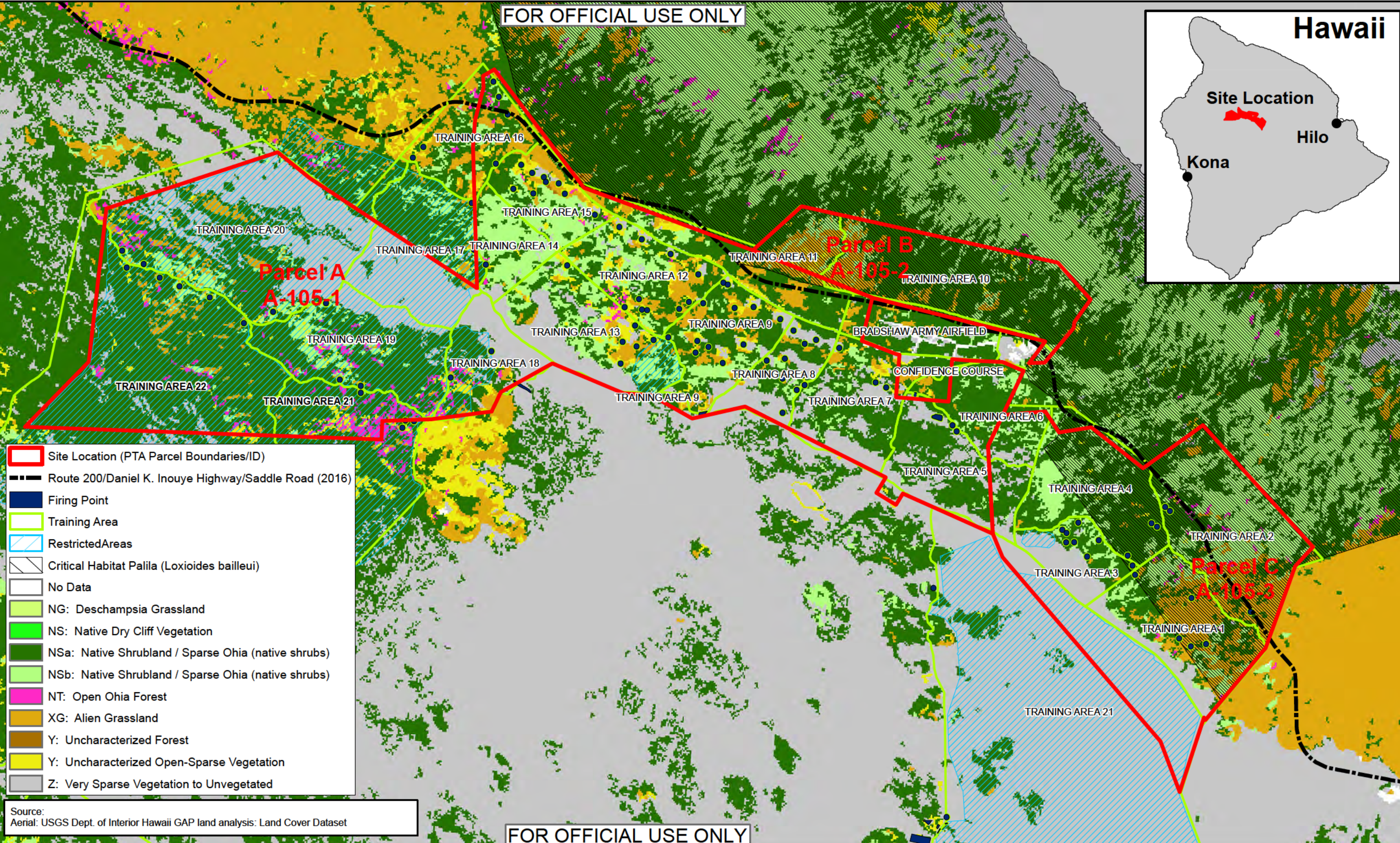
Appendix A
Figure 2
Soils
Pohakuloa Training Area, HI
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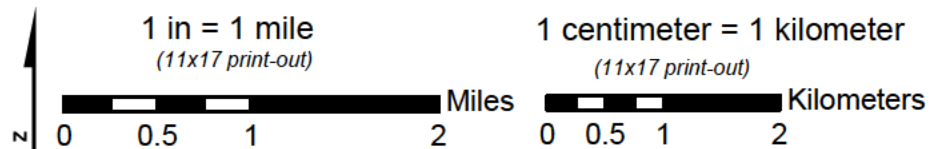
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k:\hawaii\lul\external\GIS\Hawaii\Project-Specific\HIF PTA\mxd\04_FinalECOP\Figure 3 PTA Natural Resources.mxd



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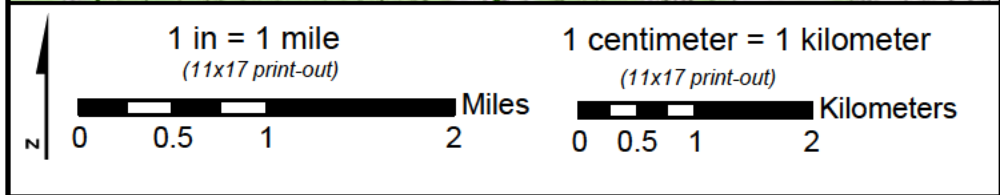
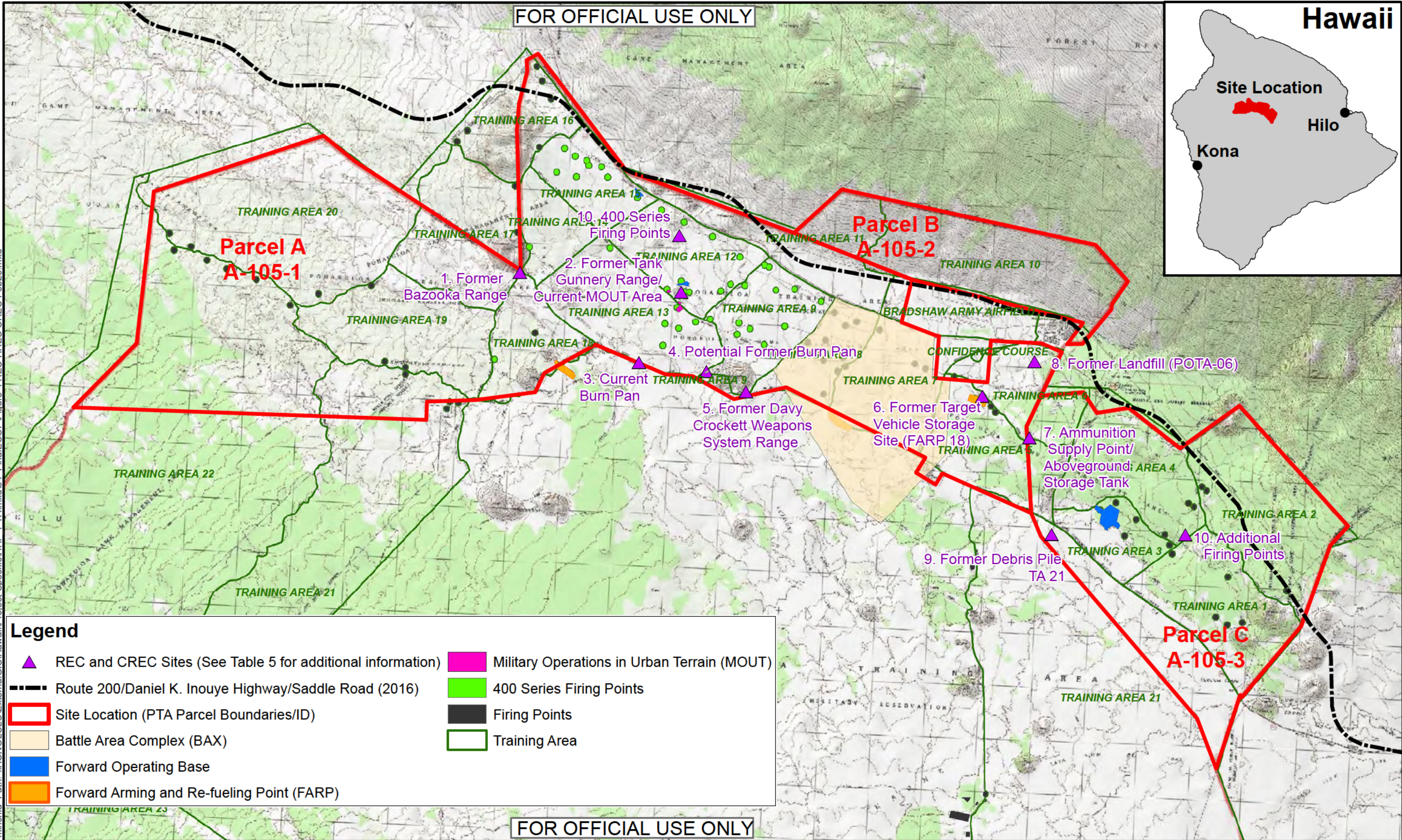


Final Environmental Conditions of Property (ECOP) Report Phase I
Pohakuloa Training Area, HI

Appendix A
Figure 3
Vegetation/Critical Habitat/Restricted Areas
Pohakuloa Training Area, HI
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Final Environmental Condition of Property Report Phase I
Pohakuloa Training Area, HI

Appendix A
Figure 4
Recognized Environmental Conditions (RECs) and
Controlled RECs (CRECs)
Pohakuloa Training Area, HI
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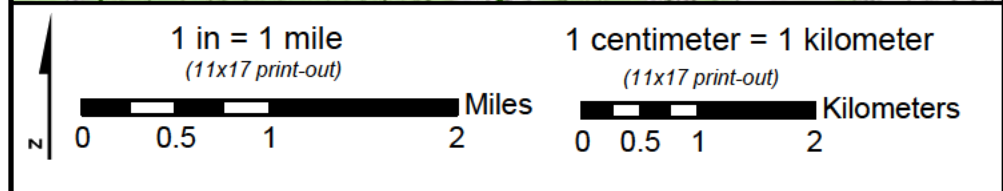
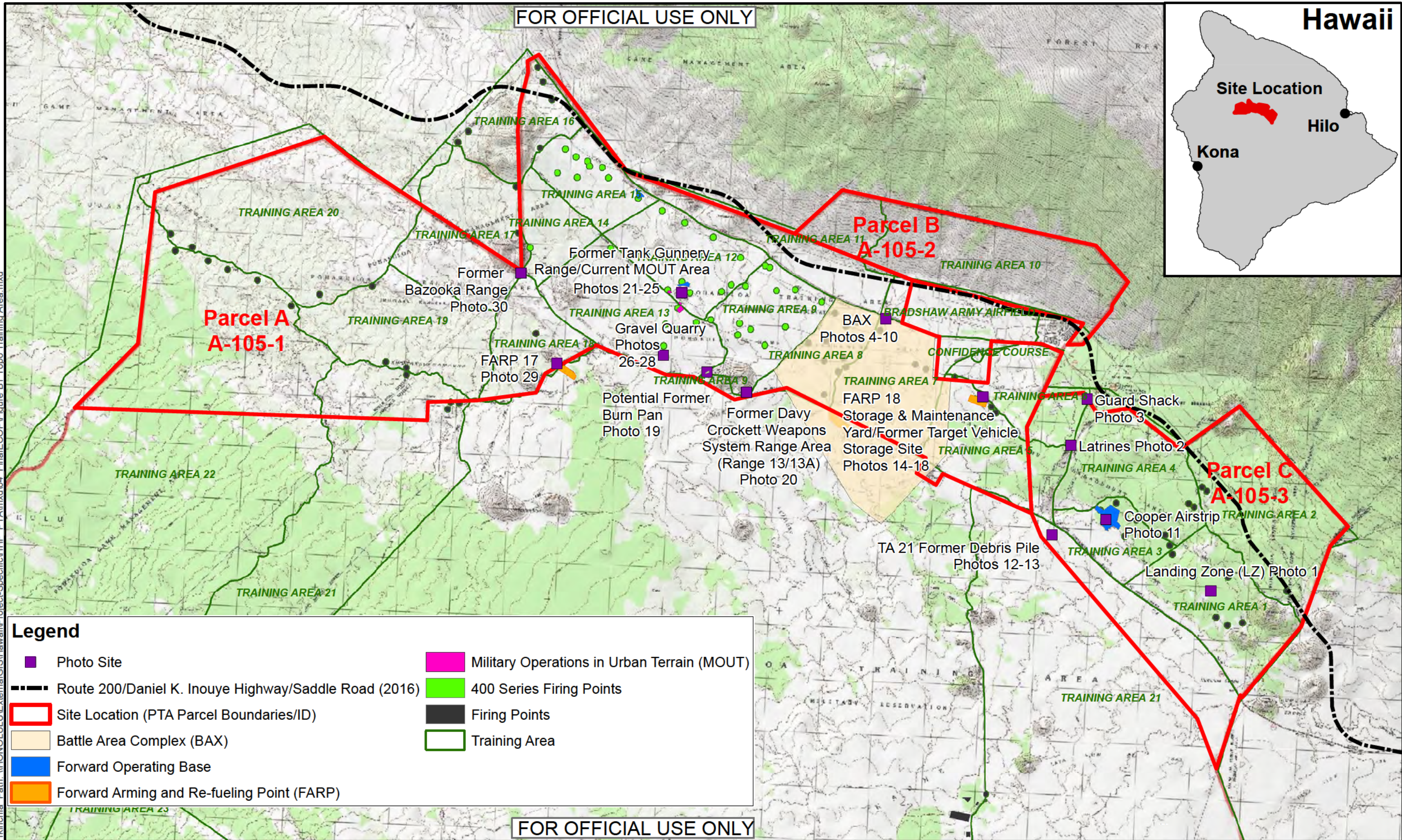
**FINAL ECOP REPORT PHASE I
POHAKULOA TRAINING AREA, HI**

APPENDIX B: PHOTO LOG

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Final Environmental Condition of Property Report Phase I
Pohakuloa Training Area, HI

Appendix B
Figure B1
Photo Sites
Pohakuloa Training Area, HI
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Appendix B: Photo Log
Final Environmental Condition of Property Report – Phase I
Pohakuloa Training Area, HI

		
Description:	Training Area 1: Landing Zone (LZ) ROB facing northwest	Photo 1
Site Name:	Pohakuloa Training Area, HI	Photo Date 8 June 2016
Client:	USACE/USAG-HI	
		
Description:	Training Area 5: Portable latrine storage near Armor and Old Saddle Road facing north.	Photo 2
Site Name:	Pohakuloa Training Area, HI	Photo Date 7 June 2016
Client:	USACE/USAG-HI	

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Appendix B: Photo Log
Final Environmental Condition of Property Report – Phase I
Pohakuloa Training Area, HI



Description:	Training Area 6: Former Guard Shack facing south	Photo 3
Site Name:	Pohakuloa Training Area, HI	Photo Date 7 June 2016
Client:	USACE/USAG-HI	



Description:	Training Area 7: Battle Area Complex (BAX) facing east	Photo 4
Site Name:	Pohakuloa Training Area, HI	Photo Date 7 June 2016
Client:	USACE/USAG-HI	

Appendix B: Photo Log
Final Environmental Condition of Property Report – Phase I
Pohakuloa Training Area, HI



Description:	Training Area 7: Battery Shed at BAX facing west	Photo 5
Site Name:	Pohakuloa Training Area, HI	Photo Date
Client:	USACE/USAG-HI	7 June 2016



Description:	Training Area 7: Maintenance Shed at BAX facing northwest	Photo 6
Site Name:	Pohakuloa Training Area, HI	Photo Date
Client:	USACE/USAG-HI	7 June 2016

Appendix B: Photo Log
Final Environmental Condition of Property Report – Phase I
Pohakuloa Training Area, HI



Description:	Training Area 7: Battery Storage Room at BAX	Photo 7
Site Name:	Pohakuloa Training Area, HI	Photo Date
Client:	USACE/USAG-HI	7 June 2016



Description:	Training Area 7: Maintenance Shed Material Yard at BAX facing north/northwest	Photo 8
Site Name:	Pohakuloa Training Area, HI	Photo Date
Client:	USACE/USAG-HI	7 June 2016

Appendix B: Photo Log
Final Environmental Condition of Property Report – Phase I
Pohakuloa Training Area, HI



Description:	Training Area 7: Transformer at BAX	Photo 9
Site Name:	Pohakuloa Training Area, HI	Photo Date 7 June 2016
Client:	USACE/USAG-HI	



Description:	Training Area 7: Generator at BAX	Photo 10
Site Name:	Pohakuloa Training Area, HI	Photo Date 7 June 2016
Client:	USACE/USAG-HI	

Appendix B: Photo Log
Final Environmental Condition of Property Report – Phase I
Pohakuloa Training Area, HI



Description:	Training Area 3: Metal Stockpile at the entrance Cooper Airstrip facing north	Photo 11
Site Name:	Pohakuloa Training Area, HI	Photo Date 7 June 2016
Client:	USACE/USAG-HI	



Description:	Training Area 21: Former Debris Pile at Dead Man's Curve	Photo 12
Site Name:	Pohakuloa Training Area, HI	Photo Date 8 June 2016
Client:	USACE/USAG-HI	

Appendix B: Photo Log
Final Environmental Condition of Property Report – Phase I
Pohakuloa Training Area, HI





Description:	Training Area 21: Former Debris Pile at Dead Man's Curve facing north	Photo 13
Site Name:	Pohakuloa Training Area, HI	Photo Date 7 June 2016,
Client:	USACE/USAG-HI	



Description:	Training Area 5: FARP 18 Pad facing south	Photo 14
Site Name:	Pohakuloa Training Area, HI	Photo Date 7 June 2016
Client:	USACE/USAG-HI	

Appendix B: Photo Log
Final Environmental Condition of Property Report – Phase I
Pohakuloa Training Area, HI

		
Description:	Training Area 5: Former Target Vehicle Storage Area at FARP 18 facing north	Photo 15
Site Name:	Pohakuloa Training Area, HI	Photo Date 7 June 2016
Client:	USACE/USAG-HI	
		
Description:	Training Area 5: Maintenance Storage Area northwest of FARP 18 facing south/southeast	Photo 16
Site Name:	Pohakuloa Training Area, HI	Photo Date 7 June 2016
Client:	USACE/USAG-HI	

Appendix B: Photo Log
Final Environmental Condition of Property Report – Phase I
Pohakuloa Training Area, HI



Description:	Training Area 5: Maintenance Storage Area northwest of FARP 18, facing north/northeast	Photo 17
Site Name:	Pohakuloa Training Area, HI	Photo Date 7 June 2016
Client:	USACE/USAG-HI	



Description:	Training Area 5: Maintenance Storage Area northwest of FARP 18, facing north	Photo 18
Site Name:	Pohakuloa Training Area, HI	Photo Date 7 June 2016
Client:	USACE/USAG-HI	

Appendix B: Photo Log
Final Environmental Condition of Property Report – Phase I
Pohakuloa Training Area, HI



Description:	Training Area 9: Former Potential Burn Pan/Cinder Pit, facing south/southeast	Photo 19
Site Name:	Pohakuloa Training Area, HI	Photo Date 8 June 2016
Client:	USACE/USAG-HI	



Description:	Training Area 9: Range 13/13A Former Davy Crockett Weapons System Range area facing south	Photo 20
Site Name:	Pohakuloa Training Area, HI	Photo Date 8 June 2016
Client:	USACE/USAG-HI	

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Appendix B: Photo Log
Final Environmental Condition of Property Report – Phase I
Pohakuloa Training Area, HI



Description:	Training Area 12: Former Tank Gunnery Range Area/Current MOUT area facing west/northwest	Photo 21
Site Name:	Pohakuloa Training Area, HI	Photo Date June 2016
Client:	USACE/USAG-HI	



Description:	Training Area 12: MOUT area facing south	Photo 22
Site Name:	Pohakuloa Training Area, HI	Photo Date 8 June 2016
Client:	USACE/USAG-HI	

Appendix B: Photo Log
Final Environmental Condition of Property Report – Phase I
Pohakuloa Training Area, HI



Description:	Training Area 12: MOUT facing west/southwest	Photo 23
Site Name:	Pohakuloa Training Area, HI	Photo Date 8 June 2016
Client:	USACE/USAG-HI	



Description:	Training Area 12: MOUT facing Southwest	Photo 24
Site Name:	Pohakuloa Training Area, HI	Photo Date 8 June 2016
Client:	USACE/USAG-HI	

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Appendix B: Photo Log
Final Environmental Condition of Property Report – Phase I
Pohakuloa Training Area, HI



Description:	Training Area 12: Former Tank Gunnery Range Area facing northwest	Photo 25
Site Name:	Pohakuloa Training Area, HI	Photo Date 8 June 2016
Client:	USACE/USAG-HI	



Description:	Training Area 13: Quarry facing east/southeast	Photo 26
Site Name:	Pohakuloa Training Area, HI	Photo Date 8 June 2016
Client:	USACE/USAG-HI	

Appendix B: Photo Log
Final Environmental Condition of Property Report – Phase I
Pohakuloa Training Area, HI



Description:	Training Area 13: Quarry facing west	Photo 27
Site Name:	Pohakuloa Training Area, HI	Photo Date 8 June 2016
Client:	USACE/USAG-HI	



Description:	Training Area 13: 50 caliber ammunition at Quarry - removed by Range Control	Photo 28
Site Name:	Pohakuloa Training Area, HI	Photo Date 8 June 2016
Client:	USACE/USAG-HI	

Appendix B: Photo Log
Final Environmental Condition of Property Report – Phase I
Pohakuloa Training Area, HI





Description:	Training Area 18: Range 17 facing west	Photo 29
Site Name:	Pohakuloa Training Area, HI	Photo Date 8 June 2016
Client:	USACE/USAG-HI	



Description:	Training Area 17: Former Bazooka Range/Puu Kapele facing northwest	Photo 30
Site Name:	Pohakuloa Training Area, HI	Photo Date 8 June 2016
Client:	USACE/USAG-HI	

Appendix B: Photo Log
 Final Environmental Condition of Property Report – Phase I
 Pohakuloa Training Area, HI

		
Description:	<i>HISTORICAL PHOTO: 2014</i> Training Area 21: Former Debris Pile	Photo 1a (Historical) Photo Date 2014
Site Name:	Pohakuloa Training Area, HI	
Client:	USACE/USAG-HI	
		
Description:	<i>HISTORICAL PHOTO: 2014</i> FARP 18 Former Target Vehicle Storage Site Prior to clean-up	Photo 1b (Historical) Photo Date 2014
Site Name:	Pohakuloa Training Area, HI	
Client:	USACE/USAG-HI	

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**FINAL ECOP REPORT PHASE I
POHAKULOA TRAINING AREA, HI**

APPENDIX C: EDR RADIUS REPORT

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Pohakuloa Training Area ECOP Phase I ESA

Paauilo, HI 96776

Inquiry Number: 4551181.5s

March 03, 2016

EDR DataMap™ Area Study



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EXECUTIVE SUMMARY

TARGET PROPERTY INFORMATION

ADDRESS

PAAUILO, HI 96776
PAAUILO, HI 96776

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

NPL.....	National Priority List
Proposed NPL.....	Proposed National Priority List Sites
Delisted NPL.....	National Priority List Deletions
NPL LIENS.....	Federal Superfund Liens
CERCLIS.....	Comprehensive Environmental Response, Compensation, and Liability Information System
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
US ENG CONTROLS.....	Engineering Controls Sites List
US INST CONTROL.....	Sites with Institutional Controls
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
FUDS.....	Formerly Used Defense Sites
LUCIS.....	Land Use Control Information System
CONSENT.....	Superfund (CERCLA) Consent Decrees
ROD.....	Records Of Decision
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
ICIS.....	Integrated Compliance Information System

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TC4551181.5s EXECUTIVE SUMMARY CES-1

EXECUTIVE SUMMARY

PADS.....	PCB Activity Database System
MLTS.....	Material Licensing Tracking System
RADINFO.....	Radiation Information Database
RAATS.....	RCRA Administrative Action Tracking System
RMP.....	Risk Management Plans
FUELS PROGRAM.....	EPA Fuels Program Registered Listing
FUSRAP.....	Formerly Utilized Sites Remedial Action Program
COAL ASH DOE.....	Steam-Electric Plant Operation Data
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.

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TC4551181.5s EXECUTIVE SUMMARY CES-2

EXECUTIVE SUMMARY

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.

FEDERAL RECORDS

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 is 1 DOD site within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
POHAKULOA TRAINING A		0	3

FINDS: The Facility Index System contains both facility information and "pointers" to other sources of information that contain more detail. These include: RCRIS; Permit Compliance System (PCS); Aerometric Information Retrieval System (AIRS); FATES (FIFRA [Federal Insecticide Fungicide Rodenticide Act] and TSCA Enforcement System, FTTS [FIFRA/TSCA Tracking System]; CERCLIS; DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes); Federal Underground Injection Control (FURS); Federal Reporting Data System (FRDS); Surface Impoundments (SIA); TSCA Chemicals in Commerce Information System (CICS); PADS; RCRA-J (medical waste transporters/disposers); TRIS; and TSCA. The source of this database is the U.S. EPA/NTIS.

A review of the FINDS list, as provided by EDR, and dated 07/20/2015 has revealed that there are 8 FINDS sites within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
<i>AMMUNITION HOLDING A</i>		<i>1</i>	<i>3</i>
<i>SANDWICH ISLES COMMU</i>		<i>2</i>	<i>8</i>
<i>MQ000052J, REPAIR AL</i>	<i>ALPHA AND BRAVO PADS</i>	<i>3</i>	<i>10</i>
<i>BRADSHAW ARMY AIRFIE</i>	<i>CAMP POHAKULO A</i>	<i>3</i>	<i>13</i>
<i>POHAKULO A TRAINING A</i>	<i>MM 35 SADDLE ROAD</i>	<i>4</i>	<i>15</i>
<i>FY06 MCA PN 57414 TA</i>		<i>6</i>	<i>18</i>
<i>USAG-POHAKULO A TRAIN</i>		<i>7</i>	<i>21</i>
<i>SADDLE ROAD - MITIGA</i>		<i>8</i>	<i>23</i>

ECHO: ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

A review of the ECHO list, as provided by EDR, and dated 09/20/2015 has revealed that there are 9 ECHO sites within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
<i>AMMUNITION HOLDING A</i>		<i>1</i>	<i>3</i>
<i>REHABILITATION OF ST</i>		<i>2</i>	<i>5</i>
<i>SANDWICH ISLES COMMU</i>		<i>2</i>	<i>8</i>
<i>MQ000052J, REPAIR AL</i>	<i>ALPHA AND BRAVO PADS</i>	<i>3</i>	<i>10</i>
<i>BRADSHAW ARMY AIRFIE</i>	<i>CAMP POHAKULO A</i>	<i>3</i>	<i>13</i>

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EXECUTIVE SUMMARY

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
<i>POHAKULOA TRAINING A</i>	<i>MM 35 SADDLE ROAD</i>	<i>4</i>	<i>15</i>
<i>FY06 MCA PN 57414 TA</i>		<i>6</i>	<i>18</i>
<i>USAG-POHAKULOA TRAIN</i>		<i>7</i>	<i>21</i>
<i>SADDLE ROAD - MITIGA</i>		<i>8</i>	<i>23</i>

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 01/13/2016 has revealed that there is 1 LUST site within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
<i>U.S. ARMY DINING FAC</i>	<i>BLDG T-186</i>	<i>5</i>	<i>18</i>
Release ID: 970101			
Facility Id: 9-603074			
Facility Status: Site Cleanup Completed (NFA)			

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 01/13/2016 has revealed that there is 1 UST site within the searched area.

<u>Site</u>	<u>Address</u>	<u>Map ID</u>	<u>Page</u>
<i>U.S. ARMY DINING FAC</i>	<i>BLDG T-186</i>	<i>5</i>	<i>18</i>
Tank Status: Permanently Out of Use			
Facility Id: 9-603074			
Date Closed: 05/17/1994			

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TC4551181.5s EXECUTIVE SUMMARY CES-4

EXECUTIVE SUMMARY

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

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MAP FINDINGS SUMMARY

<u>Database</u>	<u>Total Plotted</u>
<u>FEDERAL RECORDS</u>	
NPL	0
Proposed NPL	0
Delisted NPL	0
NPL LIENS	0
CERCLIS	0
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	0
US INST CONTROL	0
ERNS	0
HMIRS	0
DOT OPS	0
US CDL	0
US BROWNFIELDS	0
DOD	1
FUDS	0
LUCIS	0
CONSENT	0
ROD	0
UMTRA	0
ODI	0
DEBRIS REGION 9	0
US MINES	0
TRIS	0
TSCA	0
FTTS	0
HIST FTTS	0
SSTS	0
ICIS	0
PADS	0
MLTS	0
RADINFO	0
FINDS	8
RAATS	0
RMP	0
FUELS PROGRAM	0
FUSRAP	0
COAL ASH DOE	0
COAL ASH EPA	0
ECHO	0
PRP	0
EPA WATCH LIST	0

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MAP FINDINGS SUMMARY

<u>Database</u>	<u>Total Plotted</u>
US FIN ASSUR	0
PCB TRANSFORMER	0
US HIST CDL	0
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	1
UST	1
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

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MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number
Database(s)
EPA ID Number

DOD POHAKULOA TRAINING AREA DOD CUSA147766
Region N/A

POHAKULOA TRAINING AREA (County), HI

DOD:

Feature 1: Army DOD
Feature 2: Not reported
Feature 3: Not reported
URL: Not reported
Name 1: Pohakuloa Training Area
Name 2: Not reported
Name 3: Not reported
State: HI
DOD Site: Yes
Tile name: HIHAWAII

1 AMMUNITION HOLDING AREA #1 FINDS 1016368894
ECHO N/A

HAWAII (County), HI

FINDS:

Registry ID: 110046201757

Environmental Interest/Information System
STATE MASTER

ECHO:

Envid: 1016368894
Registry ID: 110046201757
FIPS Code: 15001
EPA Region: 09
Indian Country Flag: N
Federal Flag: Not reported
US Mexico Border Flag: Not reported
Chesapeake Bay Flag: Not reported
NAA Flag: Not reported
Latitude: 19.771388
Longitude: -155.64861
Map Icon: NONE-UNK-MN-N.png
Collection Method: Not reported
Reference Point: Not reported
Accuracy Meters: 17896
Derived Tribes: Not reported
Derived Huc: 20010000
Derived WBD: 200100001301
Derived STCT FPS: 15001
Derived Zip: 96740
Derived CD113: 02
Derived CB2010: 150010217023180
Percent Minority: 0
Pop Den: 0
Major Flag: Not reported
Active Flag: Not reported
MYRTK Universe: NNN
Inspection Count: 0
Date Last Inspection: Not reported
Days Last Inspection: Not reported

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MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

AMMUNITION HOLDING AREA #1 (Continued)

1016368894

Informal Count:	0
Date Last Informal Action:	Not reported
Formal Action Count:	0
Date Last Formal Action:	Not reported
Total Penalties:	0
Penalty Count:	Not reported
Date Last Penalty:	Not reported
Last Penalty Amount:	Not reported
QTRS in NC:	Not reported
Programs in SNC:	0
Curr Compliance Status:	Not reported
Curr SNC Flag:	N
3yr Compliance Status:	Not reported
AFS Flag:	N
NPDES Flag:	N
SDWIS Flag:	N
RCRA Flag:	N
TRI Flag:	N
GHG Flag:	N
AFS IDS:	Not reported
CAA Permit Types:	Not reported
CAA NAICS:	Not reported
CAA SICS:	Not reported
CAA Evaluation Count:	Not reported
CAA Days Last Evaluation:	Not reported
CAA Informal Count:	Not reported
CAA Formal Action Count:	Not reported
CAA Date Last Formal Action:	Not reported
CAA Penalties:	Not reported
CAA Last Penalty Date:	Not reported
CAA Last Penalty Amount:	Not reported
CAA Qtrs in NC:	Not reported
CAA Curr Compliance Status:	Not reported
CAA Curr HPV Flag:	N
CAA 3yr Compl Qtrs Status:	Not reported
NPDES IDS:	Not reported
CWA Permit Types:	Not reported
CWA Compliance Tracking:	Not reported
CWA NAICS:	Not reported
CWA SICS:	Not reported
CWA Inspection Count:	Not reported
CWA Days Last Inspection:	Not reported
CWA Informal Count:	Not reported
CWA Formal Action Count:	Not reported
CWA Date Last Formal Action:	Not reported
CWA Penalties:	Not reported
CWA Last Penalty Date:	Not reported
CWA Last Penalty Amount:	Not reported
CWA Qtrs in NC:	Not reported
CWA Curr Compliance Status:	Not reported
CWA Curr SNC Flag:	N
CWA 13QTRS Compl Status:	Not reported
CWA 13QTRS EFFLNT Exceedances:	Not reported
CWA 3tr QNCR Codes:	Not reported
RCRA IDS:	Not reported
RCRA Permit Types:	Not reported
RCRA NAICS:	Not reported

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Map ID
Direction
Distance
Distance (ft.)Site

MAP FINDINGS

EDR ID Number

Database(s) EPA ID Number

AMMUNITION HOLDING AREA #1 (Continued)

1016368894

RCRA Inspection Count:	Not reported
RCRA Days Last Evaluation:	Not reported
RCRA Informal Count:	Not reported
RCRA Formal Action Count:	Not reported
RCRA Date Last Formal Action:	Not reported
RCRA Penalties:	Not reported
RCRA Last Penalty Date:	Not reported
RCRA Last Penalty Amount:	Not reported
RCRA QTRS in NC:	Not reported
RCRA Curr Compliance Status:	Not reported
RCRA Curr SNC Flag:	N
RCRA 3yr Compl Qtrs Status:	Not reported
SDWA IDS:	Not reported
SDWA System Types:	Not reported
SDWA Informal Count:	Not reported
SDWA Formal Action Count:	Not reported
SDWA Curr Compliance Status:	Not reported
SDWA Curr SNC Flag:	N
TRI IDS:	Not reported
TRI Releases Transfers:	Not reported
TRI on Site Releases:	Not reported
Tri off Site Transfers:	Not reported
TRI Reporter in Past:	Not reported
FEC Case IDS:	Not reported
FEC Number of Cases:	Not reported
FEC Last Case Date:	Not reported
FEC Total Penalties:	Not reported
GHG IDS:	Not reported
GHG CO2 Release:	Not reported
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110046201757
Facility SIC Codes:	Not reported
Facility NAICS Codes:	Not reported
Facility Date Last Inspection EPA:	Not reported
Facility Date Last Inspection State:	Not reported
Facility Date Last Formal ACT EPA:	Not reported
Facility Date Last Formal ACT ST:	Not reported
Facility Date Last Informal ACT EPA:	Not reported
Facility Date Last Informal ACT ST:	Not reported
Facility Federal Agency:	Not reported
TRI Reporter:	Not reported
Facility IMP Water Flag:	Not reported

2

REHABILITATION OF STREETS UNIT 7A; KEAALAHOU ST. FROM NEAR K

ECHO 1016404032
N/A

, HI

ECHO:

Envid:	1016404032
Registry ID:	110055383721
FIPS Code:	15001
EPA Region:	09
Indian Country Flag:	Not reported
Federal Flag:	Not reported
US Mexico Border Flag:	Not reported
Chesapeake Bay Flag:	Not reported
NAA Flag:	Not reported
Latitude:	19.767778
Longitude:	-155.584166

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MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

REHABILITATION OF STREETS UNIT 7A; KEAALAHOU ST. FROM NEAR K (Continued)

1016404032

Map Icon: NONE-UNK-MN-N.png
Collection Method: UNKNOWN
Reference Point: Not reported
Accuracy Meters: 118994
Derived Tribes: Not reported
Derived Huc: 20010000
Derived WBD: 200100001301
Derived STCT FPS: 15001
Derived Zip: 96743
Derived CD113: 02
Derived CB2010: 150010220001387
Percent Minority: 0
Pop Den: 0
Major Flag: Not reported
Active Flag: Not reported
MYRTK Universe: NNN
Inspection Count: 0
Date Last Inspection: Not reported
Days Last Inspection: Not reported
Informal Count: 0
Date Last Informal Action: Not reported
Formal Action Count: 0
Date Last Formal Action: Not reported
Total Penalties: 0
Penalty Count: Not reported
Date Last Penalty: Not reported
Last Penalty Amount: Not reported
QTRS in NC: Not reported
Programs in SNC: 0
Curr Compliance Status: Not reported
Curr SNC Flag: N
3yr Compliance Status: Not reported
AFS Flag: N
NPDES Flag: N
SDWIS Flag: N
RCRA Flag: N
TRI Flag: N
GHG Flag: N
AFS IDS: Not reported
CAA Permit Types: Not reported
CAA NAICS: Not reported
CAA SICs: Not reported
CAA Evaluation Count: Not reported
CAA Days Last Evaluation: Not reported
CAA Informal Count: Not reported
CAA Formal Action Count: Not reported
CAA Date Last Formal Action: Not reported
CAA Penalties: Not reported
CAA Last Penalty Date: Not reported
CAA Last Penalty Amount: Not reported
CAA Qtrs in NC: Not reported
CAA Curr Compliance Status: Not reported
CAA Curr HPV Flag: N
CAA 3yr Compl Qtrs Status: Not reported
NPDES IDS: Not reported
CWA Permit Types: Not reported
CWA Compliance Tracking: Not reported

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MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

REHABILITATION OF STREETS UNIT 7A; KEAALAHOU ST. FROM NEAR K (Continued)

1016404032

CWA NAICS:	Not reported
CWA SICS:	Not reported
CWA Inspection Count:	Not reported
CWA Days Last Inspection:	Not reported
CWA Informal Count:	Not reported
CWA Formal Action Count:	Not reported
CWA Date Last Formal Action:	Not reported
CWA Penalties:	Not reported
CWA Last Penalty Date:	Not reported
CWA Last Penalty Amount:	Not reported
CWA Qtrs in NC:	Not reported
CWA Curr Compliance Status:	Not reported
CWA Curr SNC Flag:	N
CWA 13QTRS Compl Status:	Not reported
CWA 13QTRS EFFLNT Exceedances:	Not reported
CWA 3tr QNCR Codes:	Not reported
RCRA IDS:	Not reported
RCRA Permit Types:	Not reported
RCRA NAICS:	Not reported
RCRA Inspection Count:	Not reported
RCRA Days Last Evaluation:	Not reported
RCRA Informal Count:	Not reported
RCRA Formal Action Count:	Not reported
RCRA Date Last Formal Action:	Not reported
RCRA Penalties:	Not reported
RCRA Last Penalty Date:	Not reported
RCRA Last Penalty Amount:	Not reported
RCRA QTRS in NC:	Not reported
RCRA Curr Compliance Status:	Not reported
RCRA Curr SNC Flag:	N
RCRA 3yr Compl Qtrs Status:	Not reported
SDWA IDS:	Not reported
SDWA System Types:	Not reported
SDWA Informal Count:	Not reported
SDWA Formal Action Count:	Not reported
SDWA Curr Compliance Status:	Not reported
SDWA Curr SNC Flag:	N
TRI IDS:	Not reported
TRI Releases Transfers:	Not reported
TRI on Site Releases:	Not reported
Tri off Site Transfers:	Not reported
TRI Reporter in Past:	Not reported
FEC Case IDS:	Not reported
FEC Number of Cases:	Not reported
FEC Last Case Date:	Not reported
FEC Total Penalties:	Not reported
GHG IDS:	Not reported
GHG CO2 Release:	Not reported
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110055383721
Facility SIC Codes:	Not reported
Facility NAICS Codes:	Not reported
Facility Date Last Inspection EPA:	Not reported
Facility Date Last Inspection State:	Not reported
Facility Date Last Formal ACT EPA:	Not reported
Facility Date Last Formal ACT ST:	Not reported
Facility Date Last Informal ACT EPA:	Not reported
Facility Date Last Informal ACT ST:	Not reported

FOR OFFICIAL USE ONLY

MAP FINDINGS

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

REHABILITATION OF STREETS UNIT 7A; KEAALAHOU ST. FROM NEAR K (Continued)

1016404032

Facility Federal Agency: Not reported
TRI Reporter: Not reported
Facility IMP Water Flag: Not reported

2 SANDWICH ISLES COMMUNICATION FIBER OPTIC DUCTLINE SADDLE ROA

FINDS 1016404169
ECHO N/A

HAWAII (County), HI

FINDS:

Registry ID: 110055385514

Environmental Interest/Information System
STATE MASTER

ECHO:

Envid: 1016404169
Registry ID: 110055385514
FIPS Code: 15001
EPA Region: 09
Indian Country Flag: Not reported
Federal Flag: Not reported
US Mexico Border Flag: Not reported
Chesapeake Bay Flag: Not reported
NAA Flag: Not reported
Latitude: 19.767778
Longitude: -155.584166
Map Icon: NONE-UNK-MN-N.png
Collection Method: Not reported
Reference Point: Not reported
Accuracy Meters: 17896
Derived Tribes: Not reported
Derived Huc: 20010000
Derived WBD: 200100001301
Derived STCT FPS: 15001
Derived Zip: 96743
Derived CD113: 02
Derived CB2010: 150010220001387
Percent Minority: 0
Pop Den: 0
Major Flag: Not reported
Active Flag: Not reported
MYRTK Universe: NNN
Inspection Count: 0
Date Last Inspection: Not reported
Days Last Inspection: Not reported
Informal Count: 0
Date Last Informal Action: Not reported
Formal Action Count: 0
Date Last Formal Action: Not reported
Total Penalties: 0
Penalty Count: Not reported
Date Last Penalty: Not reported
Last Penalty Amount: Not reported
QTRS in NC: Not reported
Programs in SNC: 0

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MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

SANDWICH ISLES COMMUNICATION FIBER OPTIC DUCTLINE SADDLE ROA (Continued)

1016404169

Curr Compliance Status:	Not reported
Curr SNC Flag:	N
3yr Compliance Status:	Not reported
AFS Flag:	N
NPDES Flag:	N
SDWIS Flag:	N
RCRA Flag:	N
TRI Flag:	N
GHG Flag:	N
AFS IDS:	Not reported
CAA Permit Types:	Not reported
CAA NAICS:	Not reported
CAA SICS:	Not reported
CAA Evaluation Count:	Not reported
CAA Days Last Evaluation:	Not reported
CAA Informal Count:	Not reported
CAA Formal Action Count:	Not reported
CAA Date Last Formal Action:	Not reported
CAA Penalties:	Not reported
CAA Last Penalty Date:	Not reported
CAA Last Penalty Amount:	Not reported
CAA Qtrs in NC:	Not reported
CAA Curr Compliance Status:	Not reported
CAA Curr HPV Flag:	N
CAA 3yr Compl Qtrs Status:	Not reported
NPDES IDS:	Not reported
CWA Permit Types:	Not reported
CWA Compliance Tracking:	Not reported
CWA NAICS:	Not reported
CWA SICS:	Not reported
CWA Inspection Count:	Not reported
CWA Days Last Inspection:	Not reported
CWA Informal Count:	Not reported
CWA Formal Action Count:	Not reported
CWA Date Last Formal Action:	Not reported
CWA Penalties:	Not reported
CWA Last Penalty Date:	Not reported
CWA Last Penalty Amount:	Not reported
CWA Qtrs in NC:	Not reported
CWA Curr Compliance Status:	Not reported
CWA Curr SNC Flag:	N
CWA 13QTRS Compl Status:	Not reported
CWA 13QTRS EFFLNT Exceedances:	Not reported
CWA 3tr QNCR Codes:	Not reported
RCRA IDS:	Not reported
RCRA Permit Types:	Not reported
RCRA NAICS:	Not reported
RCRA Inspection Count:	Not reported
RCRA Days Last Evaluation:	Not reported
RCRA Informal Count:	Not reported
RCRA Formal Action Count:	Not reported
RCRA Date Last Formal Action:	Not reported
RCRA Penalties:	Not reported
RCRA Last Penalty Date:	Not reported
RCRA Last Penalty Amount:	Not reported
RCRA QTRS in NC:	Not reported
RCRA Curr Compliance Status:	Not reported

FOR OFFICIAL USE ONLY

Map ID
Direction
Distance
Distance (ft.)Site

MAP FINDINGS

EDR ID Number

Database(s) EPA ID Number

SANDWICH ISLES COMMUNICATION FIBER OPTIC DUCTLINE SADDLE ROA (Continued)

1016404169

RCRA Curr SNC Flag:	N
RCRA 3yr Compl Qtrs Status:	Not reported
SDWA IDS:	Not reported
SDWA System Types:	Not reported
SDWA Informal Count:	Not reported
SDWA Formal Action Count:	Not reported
SDWA Curr Compliance Status:	Not reported
SDWA Curr SNC Flag:	N
TRI IDS:	Not reported
TRI Releases Transfers:	Not reported
TRI on Site Releases:	Not reported
Tri off Site Transfers:	Not reported
TRI Reporter in Past:	Not reported
FEC Case IDS:	Not reported
FEC Number of Cases:	Not reported
FEC Last Case Date:	Not reported
FEC Total Penalties:	Not reported
GHG IDS:	Not reported
GHG CO2 Release:	Not reported
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110055385514
Facility SIC Codes:	Not reported
Facility NAICS Codes:	Not reported
Facility Date Last Inspection EPA:	Not reported
Facility Date Last Inspection State:	Not reported
Facility Date Last Formal ACT EPA:	Not reported
Facility Date Last Formal ACT ST:	Not reported
Facility Date Last Informal ACT EPA:	Not reported
Facility Date Last Informal ACT ST:	Not reported
Facility Federal Agency:	Not reported
TRI Reporter:	Not reported
Facility IMP Water Flag:	Not reported

3

MQ000052J, REPAIR ALPHA AND BRAVO PADS, BRADSHAW ARMY AIRFIE
ALPHA AND BRAVO PADS, BRADSHAW ARMY AIRFIELD, POHA
HILO, HI 96720

FINDS 1016786402
ECHO N/A

FINDS:

Registry ID: 110058281345

Environmental Interest/Information System

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

ECHO:

Envid:	1016786402
Registry ID:	110058281345
FIPS Code:	15001
EPA Region:	09
Indian Country Flag:	N

FOR OFFICIAL USE ONLY

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

MQ000052J, REPAIR ALPHA AND BRAVO PADS, BRADSHAW ARMY AIRFIE (Continued)

1016786402

Federal Flag:	N
US Mexico Border Flag:	Not reported
Chesapeake Bay Flag:	Not reported
NAA Flag:	Not reported
Latitude:	19.7586
Longitude:	-155.5569
Map Icon:	CWA-IC-MN-N.png
Collection Method:	Not reported
Reference Point:	Not reported
Accuracy Meters:	35930
Derived Tribes:	Not reported
Derived Huc:	20010000
Derived WBD:	Not reported
Derived STCT FPS:	15001
Derived Zip:	96743
Derived CD113:	02
Derived CB2010:	150010220001342
Percent Minority:	100
Pop Den:	.03
Major Flag:	Not reported
Active Flag:	Y
MYRTK Universe:	NNN
Inspection Count:	0
Date Last Inspection:	Not reported
Days Last Inspection:	Not reported
Informal Count:	0
Date Last Informal Action:	Not reported
Formal Action Count:	0
Date Last Formal Action:	Not reported
Total Penalties:	0
Penalty Count:	0
Date Last Penalty:	Not reported
Last Penalty Amount:	Not reported
QTRS in NC:	0
Programs in SNC:	0
Curr Compliance Status:	No Violation
Curr SNC Flag:	N
3yr Compliance Status:	
AFS Flag:	N
NPDES Flag:	Y
SDWIS Flag:	N
RCRA Flag:	N
TRI Flag:	N
GHG Flag:	N
AFS IDS:	Not reported
CAA Permit Types:	Not reported
CAA NAICS:	Not reported
CAA SICs:	Not reported
CAA Evaluation Count:	Not reported
CAA Days Last Evaluation:	Not reported
CAA Informal Count:	Not reported
CAA Formal Action Count:	Not reported
CAA Date Last Formal Action:	Not reported
CAA Penalties:	Not reported
CAA Last Penalty Date:	Not reported
CAA Last Penalty Amount:	Not reported
CAA Qtrs in NC:	Not reported

FOR OFFICIAL USE ONLY

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

MQ000052J, REPAIR ALPHA AND BRAVO PADS, BRADSHAW ARMY AIRFIE (Continued)

1016786402

CAA Curr Compliance Status:	Not reported
CAA Curr HPV Flag:	N
CAA 3yr Compl Qtrs Status:	Not reported
NPDES IDS:	HIF010331
CWA Permit Types:	Minor
CWA Compliance Tracking:	On
CWA NAICS:	Not reported
CWA SICS:	Not reported
CWA Inspection Count:	Not reported
CWA Days Last Inspection:	Not reported
CWA Informal Count:	Not reported
CWA Formal Action Count:	Not reported
CWA Date Last Formal Action:	Not reported
CWA Penalties:	Not reported
CWA Last Penalty Date:	Not reported
CWA Last Penalty Amount:	Not reported
CWA Qtrs in NC:	0
CWA Curr Compliance Status:	No Violation
CWA Curr SNC Flag:	N
CWA 13QTRS Compl Status:	
CWA 13QTRS EFFLNT Exceedances:	Not reported
CWA 3tr QNCR Codes:	Not reported
RCRA IDS:	Not reported
RCRA Permit Types:	Not reported
RCRA NAICS:	Not reported
RCRA Inspection Count:	Not reported
RCRA Days Last Evaluation:	Not reported
RCRA Informal Count:	Not reported
RCRA Formal Action Count:	Not reported
RCRA Date Last Formal Action:	Not reported
RCRA Penalties:	Not reported
RCRA Last Penalty Date:	Not reported
RCRA Last Penalty Amount:	Not reported
RCRA QTRS in NC:	Not reported
RCRA Curr Compliance Status:	Not reported
RCRA Curr SNC Flag:	N
RCRA 3yr Compl Qtrs Status:	Not reported
SDWA IDS:	Not reported
SDWA System Types:	Not reported
SDWA Informal Count:	Not reported
SDWA Formal Action Count:	Not reported
SDWA Curr Compliance Status:	Not reported
SDWA Curr SNC Flag:	N
TRI IDS:	Not reported
TRI Releases Transfers:	Not reported
TRI on Site Releases:	Not reported
Tri off Site Transfers:	Not reported
TRI Reporter in Past:	Not reported
FEC Case IDS:	Not reported
FEC Number of Cases:	Not reported
FEC Last Case Date:	Not reported
FEC Total Penalties:	Not reported
GHG IDS:	Not reported
GHG CO2 Release:	Not reported
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110058281345
Facility SIC Codes:	Not reported
Facility NAICS Codes:	Not reported

FOR OFFICIAL USE ONLY

MAP FINDINGS

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

MQ000052J, REPAIR ALPHA AND BRAVO PADS, BRADSHAW ARMY AIRFIE (Continued)

1016786402

Facility Date Last Inspection EPA:	Not reported
Facility Date Last Inspection State:	Not reported
Facility Date Last Formal ACT EPA:	Not reported
Facility Date Last Formal ACT ST:	Not reported
Facility Date Last Informal ACT EPA:	Not reported
Facility Date Last Informal ACT ST:	Not reported
Facility Federal Agency:	Not reported
TRI Reporter:	Not reported
Facility IMP Water Flag:	Not reported

3

BRADSHAW ARMY AIRFIELD CAMP POHAKULOA HILO, HI 96720

FINDS	1014696991
ECHO	N/A

FINDS:

Registry ID: 110041576899

Environmental Interest/Information System
AIR MINOR

ECHO:

Envid:	1014696991
Registry ID:	110041576899
FIPS Code:	15001
EPA Region:	09
Indian Country Flag:	N
Federal Flag:	Not reported
US Mexico Border Flag:	Not reported
Chesapeake Bay Flag:	Not reported
NAA Flag:	Not reported
Latitude:	19.76
Longitude:	-155.5538
Map Icon:	NONE-UNK-MN-N.png
Collection Method:	Not reported
Reference Point:	FACILITY CENTROID
Accuracy Meters:	17866
Derived Tribes:	Not reported
Derived Huc:	20010000
Derived WBD:	200100001301
Derived STCT FPS:	15001
Derived Zip:	96743
Derived CD113:	02
Derived CB2010:	150010220001342
Percent Minority:	100
Pop Den:	.03
Major Flag:	Not reported
Active Flag:	Not reported
MYRTK Universe:	NNN
Inspection Count:	0
Date Last Inspection:	Not reported
Days Last Inspection:	Not reported
Informal Count:	0
Date Last Informal Action:	Not reported
Formal Action Count:	0
Date Last Formal Action:	Not reported

FOR OFFICIAL USE ONLY

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

BRADSHAW ARMY AIRFIELD (Continued)

1014696991

Total Penalties:	0
Penalty Count:	Not reported
Date Last Penalty:	Not reported
Last Penalty Amount:	Not reported
QTRS in NC:	Not reported
Programs in SNC:	0
Curr Compliance Status:	Not reported
Curr SNC Flag:	N
3yr Compliance Status:	Not reported
AFS Flag:	N
NPDES Flag:	N
SDWIS Flag:	N
RCRA Flag:	N
TRI Flag:	N
GHG Flag:	N
AFS IDS:	Not reported
CAA Permit Types:	Not reported
CAA NAICS:	Not reported
CAA SICS:	Not reported
CAA Evaluation Count:	Not reported
CAA Days Last Evaluation:	Not reported
CAA Informal Count:	Not reported
CAA Formal Action Count:	Not reported
CAA Date Last Formal Action:	Not reported
CAA Penalties:	Not reported
CAA Last Penalty Date:	Not reported
CAA Last Penalty Amount:	Not reported
CAA Qtrs in NC:	Not reported
CAA Curr Compliance Status:	Not reported
CAA Curr HPV Flag:	N
CAA 3yr Compl Qtrs Status:	Not reported
NPDES IDS:	Not reported
CWA Permit Types:	Not reported
CWA Compliance Tracking:	Not reported
CWA NAICS:	Not reported
CWA SICS:	Not reported
CWA Inspection Count:	Not reported
CWA Days Last Inspection:	Not reported
CWA Informal Count:	Not reported
CWA Formal Action Count:	Not reported
CWA Date Last Formal Action:	Not reported
CWA Penalties:	Not reported
CWA Last Penalty Date:	Not reported
CWA Last Penalty Amount:	Not reported
CWA Qtrs in NC:	Not reported
CWA Curr Compliance Status:	Not reported
CWA Curr SNC Flag:	N
CWA 13QTRS Compl Status:	Not reported
CWA 13QTRS EFFLNT Exceedances:	Not reported
CWA 3tr QNCR Codes:	Not reported
RCRA IDS:	Not reported
RCRA Permit Types:	Not reported
RCRA NAICS:	Not reported
RCRA Inspection Count:	Not reported
RCRA Days Last Evaluation:	Not reported
RCRA Informal Count:	Not reported
RCRA Formal Action Count:	Not reported

FOR OFFICIAL USE ONLY

Map ID
Direction
Distance
Distance (ft.)Site

MAP FINDINGS

EDR ID Number

Database(s) EPA ID Number

BRADSHAW ARMY AIRFIELD (Continued)

1014696991

RCRA Date Last Formal Action:	Not reported
RCRA Penalties:	Not reported
RCRA Last Penalty Date:	Not reported
RCRA Last Penalty Amount:	Not reported
RCRA QTRS in NC:	Not reported
RCRA Curr Compliance Status:	Not reported
RCRA Curr SNC Flag:	N
RCRA 3yr Compl Qtrs Status:	Not reported
SDWA IDS:	Not reported
SDWA System Types:	Not reported
SDWA Informal Count:	Not reported
SDWA Formal Action Count:	Not reported
SDWA Curr Compliance Status:	Not reported
SDWA Curr SNC Flag:	N
TRI IDS:	Not reported
TRI Releases Transfers:	Not reported
TRI on Site Releases:	Not reported
Tri off Site Transfers:	Not reported
TRI Reporter in Past:	Not reported
FEC Case IDS:	Not reported
FEC Number of Cases:	Not reported
FEC Last Case Date:	Not reported
FEC Total Penalties:	Not reported
GHG IDS:	Not reported
GHG CO2 Release:	Not reported
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110041576899
Facility SIC Codes:	Not reported
Facility NAICS Codes:	48811
Facility Date Last Inspection EPA:	Not reported
Facility Date Last Inspection State:	Not reported
Facility Date Last Formal ACT EPA:	Not reported
Facility Date Last Formal ACT ST:	Not reported
Facility Date Last Informal ACT EPA:	Not reported
Facility Date Last Informal ACT ST:	Not reported
Facility Federal Agency:	Not reported
TRI Reporter:	Not reported
Facility IMP Water Flag:	Not reported

4

POHAKULOA TRAINING AREA
MM 35 SADDLE ROAD
HILO, HI 96720

FINDS 1017742393
ECHO N/A

FINDS:

Registry ID: 110063704950

Environmental Interest/Information System

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

FOR OFFICIAL USE ONLY

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

POHAKULOA TRAINING AREA (Continued)

1017742393

ECHO:

Envid:	1017742393
Registry ID:	110063704950
FIPS Code:	15001
EPA Region:	09
Indian Country Flag:	N
Federal Flag:	N
US Mexico Border Flag:	Not reported
Chesapeake Bay Flag:	Not reported
NAA Flag:	Not reported
Latitude:	19.759055
Longitude:	-155.597467
Map Icon:	CWA-IC-MN-N.png
Collection Method:	Not reported
Reference Point:	Not reported
Accuracy Meters:	99999999
Derived Tribes:	Not reported
Derived Huc:	20010000
Derived WBD:	Not reported
Derived STCT FPS:	15001
Derived Zip:	96743
Derived CD113:	02
Derived CB2010:	150010220001424
Percent Minority:	Not reported
Pop Den:	Not reported
Major Flag:	Not reported
Active Flag:	Y
MYRTK Universe:	NNN
Inspection Count:	0
Date Last Inspection:	Not reported
Days Last Inspection:	Not reported
Informal Count:	0
Date Last Informal Action:	Not reported
Formal Action Count:	0
Date Last Formal Action:	Not reported
Total Penalties:	0
Penalty Count:	0
Date Last Penalty:	Not reported
Last Penalty Amount:	Not reported
QTRS in NC:	0
Programs in SNC:	0
Curr Compliance Status:	No Violation
Curr SNC Flag:	N
3yr Compliance Status:	
AFS Flag:	N
NPDES Flag:	Y
SDWIS Flag:	N
RCRA Flag:	N
TRI Flag:	N
GHG Flag:	N
AFS IDS:	Not reported
CAA Permit Types:	Not reported
CAA NAICS:	Not reported
CAA SICs:	Not reported
CAA Evaluation Count:	Not reported
CAA Days Last Evaluation:	Not reported
CAA Informal Count:	Not reported

FOR OFFICIAL USE ONLY

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

POHAKULOA TRAINING AREA (Continued)

1017742393

CAA Formal Action Count:	Not reported
CAA Date Last Formal Action:	Not reported
CAA Penalties:	Not reported
CAA Last Penalty Date:	Not reported
CAA Last Penalty Amount:	Not reported
CAA Qtrs in NC:	Not reported
CAA Curr Compliance Status:	Not reported
CAA Curr HPV Flag:	N
CAA 3yr Compl Qtrs Status:	Not reported
NPDES IDS:	HIF010655
CWA Permit Types:	Minor
CWA Compliance Tracking:	On
CWA NAICS:	Not reported
CWA SICS:	Not reported
CWA Inspection Count:	Not reported
CWA Days Last Inspection:	Not reported
CWA Informal Count:	Not reported
CWA Formal Action Count:	Not reported
CWA Date Last Formal Action:	Not reported
CWA Penalties:	Not reported
CWA Last Penalty Date:	Not reported
CWA Last Penalty Amount:	Not reported
CWA Qtrs in NC:	0
CWA Curr Compliance Status:	No Violation
CWA Curr SNC Flag:	N
CWA 13QTRS Compl Status:	
CWA 13QTRS EFLNT Exceedances:	Not reported
CWA 3tr QNCR Codes:	Not reported
RCRA IDS:	Not reported
RCRA Permit Types:	Not reported
RCRA NAICS:	Not reported
RCRA Inspection Count:	Not reported
RCRA Days Last Evaluation:	Not reported
RCRA Informal Count:	Not reported
RCRA Formal Action Count:	Not reported
RCRA Date Last Formal Action:	Not reported
RCRA Penalties:	Not reported
RCRA Last Penalty Date:	Not reported
RCRA Last Penalty Amount:	Not reported
RCRA QTRS in NC:	Not reported
RCRA Curr Compliance Status:	Not reported
RCRA Curr SNC Flag:	N
RCRA 3yr Compl Qtrs Status:	Not reported
SDWA IDS:	Not reported
SDWA System Types:	Not reported
SDWA Informal Count:	Not reported
SDWA Formal Action Count:	Not reported
SDWA Curr Compliance Status:	Not reported
SDWA Curr SNC Flag:	N
TRI IDS:	Not reported
TRI Releases Transfers:	Not reported
TRI on Site Releases:	Not reported
Tri off Site Transfers:	Not reported
TRI Reporter in Past:	Not reported
FEC Case IDS:	Not reported
FEC Number of Cases:	Not reported
FEC Last Case Date:	Not reported

FOR OFFICIAL USE ONLY

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

POHAKULOA TRAINING AREA (Continued)

1017742393

FEC Total Penalties:	Not reported
GHG IDS:	Not reported
GHG CO2 Release:	Not reported
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110063704950
Facility SIC Codes:	Not reported
Facility NAICS Codes:	Not reported
Facility Date Last Inspection EPA:	Not reported
Facility Date Last Inspection State:	Not reported
Facility Date Last Formal ACT EPA:	Not reported
Facility Date Last Formal ACT ST:	Not reported
Facility Date Last Informal ACT EPA:	Not reported
Facility Date Last Informal ACT ST:	Not reported
Facility Federal Agency:	Not reported
TRI Reporter:	Not reported
Facility IMP Water Flag:	Not reported

5

U.S. ARMY DINING FACILITY - POHAKULOA TRAINING AREA
BLDG T-186
PAAUILO, HI 96776

LUST U003402982
UST N/A

LUST:

Facility ID:	9-603074
Facility Status:	Site Cleanup Completed (NFA)
Facility Status Date:	12/31/2001
Release ID:	970101
Project Officer:	Jose Ruiz

UST:

Facility ID:	9-603074
Owner:	U.S. ARMY SUPPORT COMMAND, HAWAII DPW
Owner Address:	BLDG 105, WHEELER ARMY AIRFIELD
Owner City, St, Zip:	Paauilo, 96776 96776
Latitude:	19.755905
Longitude:	-155.538350
Horizontal Reference Datum Name:	NAD83
Horizontal Collection Method Name:	On Base

Tank ID:	R-T-186
Date Installed:	Not reported
Tank Status:	Permanently Out of Use
Date Closed:	05/17/1994
Tank Capacity:	250
Substance:	Diesel

6

FY06 MCA PN 57414 TACTICAL VEHICLE WASH FACILITY, PTA (1)

FINDS 1016404422
ECHO N/A

HAWAII (County), HI

FINDS:

Registry ID:	110055388502
--------------	--------------

Environmental Interest/Information System
STATE MASTER

FOR OFFICIAL USE ONLY

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

FY06 MCA PN 57414 TACTICAL VEHICLE WASH FACILITY, PTA (1) (Continued)

1016404422

ECHO:

Envid:	1016404422
Registry ID:	110055388502
FIPS Code:	15001
EPA Region:	09
Indian Country Flag:	Not reported
Federal Flag:	Not reported
US Mexico Border Flag:	Not reported
Chesapeake Bay Flag:	Not reported
NAA Flag:	Not reported
Latitude:	19.754166
Longitude:	-155.553055
Map Icon:	NONE-UNK-MN-N.png
Collection Method:	Not reported
Reference Point:	Not reported
Accuracy Meters:	17896
Derived Tribes:	Not reported
Derived Huc:	20010000
Derived WBD:	200100001301
Derived STCT FPS:	15001
Derived Zip:	96740
Derived CD113:	02
Derived CB2010:	150010220001360
Percent Minority:	100
Pop Den:	.03
Major Flag:	Not reported
Active Flag:	Not reported
MYRTK Universe:	NNN
Inspection Count:	0
Date Last Inspection:	Not reported
Days Last Inspection:	Not reported
Informal Count:	0
Date Last Informal Action:	Not reported
Formal Action Count:	0
Date Last Formal Action:	Not reported
Total Penalties:	0
Penalty Count:	Not reported
Date Last Penalty:	Not reported
Last Penalty Amount:	Not reported
QTRS in NC:	Not reported
Programs in SNC:	0
Curr Compliance Status:	Not reported
Curr SNC Flag:	N
3yr Compliance Status:	Not reported
AFS Flag:	N
NPDES Flag:	N
SDWIS Flag:	N
RCRA Flag:	N
TRI Flag:	N
GHG Flag:	N
AFS IDS:	Not reported
CAA Permit Types:	Not reported
CAA NAICS:	Not reported
CAA SICs:	Not reported
CAA Evaluation Count:	Not reported
CAA Days Last Evaluation:	Not reported
CAA Informal Count:	Not reported

FOR OFFICIAL USE ONLY

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

FY06 MCA PN 57414 TACTICAL VEHICLE WASH FACILITY, PTA (1) (Continued)

1016404422

CAA Formal Action Count:	Not reported
CAA Date Last Formal Action:	Not reported
CAA Penalties:	Not reported
CAA Last Penalty Date:	Not reported
CAA Last Penalty Amount:	Not reported
CAA Qtrs in NC:	Not reported
CAA Curr Compliance Status:	Not reported
CAA Curr HPV Flag:	N
CAA 3yr Compl Qtrs Status:	Not reported
NPDES IDS:	Not reported
CWA Permit Types:	Not reported
CWA Compliance Tracking:	Not reported
CWA NAICS:	Not reported
CWA SICS:	Not reported
CWA Inspection Count:	Not reported
CWA Days Last Inspection:	Not reported
CWA Informal Count:	Not reported
CWA Formal Action Count:	Not reported
CWA Date Last Formal Action:	Not reported
CWA Penalties:	Not reported
CWA Last Penalty Date:	Not reported
CWA Last Penalty Amount:	Not reported
CWA Qtrs in NC:	Not reported
CWA Curr Compliance Status:	Not reported
CWA Curr SNC Flag:	N
CWA 13QTRS Compl Status:	Not reported
CWA 13QTRS EFLNT Exceedances:	Not reported
CWA 3tr QNCR Codes:	Not reported
RCRA IDS:	Not reported
RCRA Permit Types:	Not reported
RCRA NAICS:	Not reported
RCRA Inspection Count:	Not reported
RCRA Days Last Evaluation:	Not reported
RCRA Informal Count:	Not reported
RCRA Formal Action Count:	Not reported
RCRA Date Last Formal Action:	Not reported
RCRA Penalties:	Not reported
RCRA Last Penalty Date:	Not reported
RCRA Last Penalty Amount:	Not reported
RCRA QTRS in NC:	Not reported
RCRA Curr Compliance Status:	Not reported
RCRA Curr SNC Flag:	N
RCRA 3yr Compl Qtrs Status:	Not reported
SDWA IDS:	Not reported
SDWA System Types:	Not reported
SDWA Informal Count:	Not reported
SDWA Formal Action Count:	Not reported
SDWA Curr Compliance Status:	Not reported
SDWA Curr SNC Flag:	N
TRI IDS:	Not reported
TRI Releases Transfers:	Not reported
TRI on Site Releases:	Not reported
Tri off Site Transfers:	Not reported
TRI Reporter in Past:	Not reported
FEC Case IDS:	Not reported
FEC Number of Cases:	Not reported
FEC Last Case Date:	Not reported

FOR OFFICIAL USE ONLY

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

FY06 MCA PN 57414 TACTICAL VEHICLE WASH FACILITY, PTA (1) (Continued)

1016404422

FEC Total Penalties:	Not reported
GHG IDS:	Not reported
GHG CO2 Release:	Not reported
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110055388502
Facility SIC Codes:	Not reported
Facility NAICS Codes:	Not reported
Facility Date Last Inspection EPA:	Not reported
Facility Date Last Inspection State:	Not reported
Facility Date Last Formal ACT EPA:	Not reported
Facility Date Last Formal ACT ST:	Not reported
Facility Date Last Informal ACT EPA:	Not reported
Facility Date Last Informal ACT ST:	Not reported
Facility Federal Agency:	Not reported
TRI Reporter:	Not reported
Facility IMP Water Flag:	Not reported

7

USAG-POHAKULOA TRAINING AREA

FINDS 1016404194
ECHO N/A

HAWAII (County), HI

FINDS:

Registry ID: 110055385809

Environmental Interest/Information System
STATE MASTER

ECHO:

Envid:	1016404194
Registry ID:	110055385809
FIPS Code:	15001
EPA Region:	09
Indian Country Flag:	Not reported
Federal Flag:	Not reported
US Mexico Border Flag:	Not reported
Chesapeake Bay Flag:	Not reported
NAA Flag:	Not reported
Latitude:	19.726666
Longitude:	-155.524999
Map Icon:	NONE-UNK-MN-N.png
Collection Method:	Not reported
Reference Point:	Not reported
Accuracy Meters:	17896
Derived Tribes:	Not reported
Derived Huc:	20010000
Derived WBD:	200100001301
Derived STCT FPS:	15001
Derived Zip:	96743
Derived CD113:	02
Derived CB2010:	150010220001503
Percent Minority:	100
Pop Den:	.03
Major Flag:	Not reported
Active Flag:	Not reported
MYRTK Universe:	NNN
Inspection Count:	0

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MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

USAG-POHAKULOA TRAINING AREA (Continued)

1016404194

Date Last Inspection:	Not reported
Days Last Inspection:	Not reported
Informal Count:	0
Date Last Informal Action:	Not reported
Formal Action Count:	0
Date Last Formal Action:	Not reported
Total Penalties:	0
Penalty Count:	Not reported
Date Last Penalty:	Not reported
Last Penalty Amount:	Not reported
QTRS in NC:	Not reported
Programs in SNC:	0
Curr Compliance Status:	Not reported
Curr SNC Flag:	N
3yr Compliance Status:	Not reported
AFS Flag:	N
NPDES Flag:	N
SDWIS Flag:	N
RCRA Flag:	N
TRI Flag:	N
GHG Flag:	N
AFS IDS:	Not reported
CAA Permit Types:	Not reported
CAA NAICS:	Not reported
CAA SICS:	Not reported
CAA Evaluation Count:	Not reported
CAA Days Last Evaluation:	Not reported
CAA Informal Count:	Not reported
CAA Formal Action Count:	Not reported
CAA Date Last Formal Action:	Not reported
CAA Penalties:	Not reported
CAA Last Penalty Date:	Not reported
CAA Last Penalty Amount:	Not reported
CAA Qtrs in NC:	Not reported
CAA Curr Compliance Status:	Not reported
CAA Curr HPV Flag:	N
CAA 3yr Compl Qtrs Status:	Not reported
NPDES IDS:	Not reported
CWA Permit Types:	Not reported
CWA Compliance Tracking:	Not reported
CWA NAICS:	Not reported
CWA SICS:	Not reported
CWA Inspection Count:	Not reported
CWA Days Last Inspection:	Not reported
CWA Informal Count:	Not reported
CWA Formal Action Count:	Not reported
CWA Date Last Formal Action:	Not reported
CWA Penalties:	Not reported
CWA Last Penalty Date:	Not reported
CWA Last Penalty Amount:	Not reported
CWA Qtrs in NC:	Not reported
CWA Curr Compliance Status:	Not reported
CWA Curr SNC Flag:	N
CWA 13QTRS Compl Status:	Not reported
CWA 13QTRS EFFLNT Exceedances:	Not reported
CWA 3tr QNCR Codes:	Not reported
RCRA IDS:	Not reported

FOR OFFICIAL USE ONLY

MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

USAG-POHAKULOA TRAINING AREA (Continued)

1016404194

RCRA Permit Types:	Not reported
RCRA NAICS:	Not reported
RCRA Inspection Count:	Not reported
RCRA Days Last Evaluation:	Not reported
RCRA Informal Count:	Not reported
RCRA Formal Action Count:	Not reported
RCRA Date Last Formal Action:	Not reported
RCRA Penalties:	Not reported
RCRA Last Penalty Date:	Not reported
RCRA Last Penalty Amount:	Not reported
RCRA QTRS in NC:	Not reported
RCRA Curr Compliance Status:	Not reported
RCRA Curr SNC Flag:	N
RCRA 3yr Compl Qtrs Status:	Not reported
SDWA IDS:	Not reported
SDWA System Types:	Not reported
SDWA Informal Count:	Not reported
SDWA Formal Action Count:	Not reported
SDWA Curr Compliance Status:	Not reported
SDWA Curr SNC Flag:	N
TRI IDS:	Not reported
TRI Releases Transfers:	Not reported
TRI on Site Releases:	Not reported
Tri off Site Transfers:	Not reported
TRI Reporter in Past:	Not reported
FEC Case IDS:	Not reported
FEC Number of Cases:	Not reported
FEC Last Case Date:	Not reported
FEC Total Penalties:	Not reported
GHG IDS:	Not reported
GHG CO2 Release:	Not reported
DFR URL:	http://echo.epa.gov/detailed_facility_report?fid=110055385809
Facility SIC Codes:	Not reported
Facility NAICS Codes:	Not reported
Facility Date Last Inspection EPA:	Not reported
Facility Date Last Inspection State:	Not reported
Facility Date Last Formal ACT EPA:	Not reported
Facility Date Last Formal ACT ST:	Not reported
Facility Date Last Informal ACT EPA:	Not reported
Facility Date Last Informal ACT ST:	Not reported
Facility Federal Agency:	Not reported
TRI Reporter:	Not reported
Facility IMP Water Flag:	Not reported

8 SADDLE ROAD - MITIGATION HI SR 200(4) MP 29 TO MP

FINDS 1016404112
ECHO N/A

HAWAII (County), HI

FINDS:

Registry ID: 110055384837

Environmental Interest/Information System
STATE MASTER

ECHO:

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MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

SADDLE ROAD - MITIGATION HI SR 200(4) MP 29 TO MP (Continued)

1016404112

Envid:	1016404112
Registry ID:	110055384837
FIPS Code:	15001
EPA Region:	09
Indian Country Flag:	Not reported
Federal Flag:	Not reported
US Mexico Border Flag:	Not reported
Chesapeake Bay Flag:	Not reported
NAA Flag:	Not reported
Latitude:	19.707222
Longitude:	-155.485556
Map Icon:	NONE-UNK-MN-N.png
Collection Method:	Not reported
Reference Point:	Not reported
Accuracy Meters:	17896
Derived Tribes:	Not reported
Derived Huc:	20010000
Derived WBD:	200100001301
Derived STCT FPS:	15001
Derived Zip:	96743
Derived CD113:	02
Derived CB2010:	150010221021341
Percent Minority:	0
Pop Den:	0
Major Flag:	Not reported
Active Flag:	Not reported
MYRTK Universe:	NNN
Inspection Count:	0
Date Last Inspection:	Not reported
Days Last Inspection:	Not reported
Informal Count:	0
Date Last Informal Action:	Not reported
Formal Action Count:	0
Date Last Formal Action:	Not reported
Total Penalties:	0
Penalty Count:	Not reported
Date Last Penalty:	Not reported
Last Penalty Amount:	Not reported
QTRS in NC:	Not reported
Programs in SNC:	0
Curr Compliance Status:	Not reported
Curr SNC Flag:	N
3yr Compliance Status:	Not reported
AFS Flag:	N
NPDES Flag:	N
SDWIS Flag:	N
RCRA Flag:	N
TRI Flag:	N
GHG Flag:	N
AFS IDS:	Not reported
CAA Permit Types:	Not reported
CAA NAICS:	Not reported
CAA SICS:	Not reported
CAA Evaluation Count:	Not reported
CAA Days Last Evaluation:	Not reported
CAA Informal Count:	Not reported
CAA Formal Action Count:	Not reported

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MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number

Database(s) EPA ID Number

SADDLE ROAD - MITIGATION HI SR 200(4) MP 29 TO MP (Continued)

1016404112

CAA Date Last Formal Action:	Not reported
CAA Penalties:	Not reported
CAA Last Penalty Date:	Not reported
CAA Last Penalty Amount:	Not reported
CAA Qtrs in NC:	Not reported
CAA Curr Compliance Status:	Not reported
CAA Curr HPV Flag:	N
CAA 3yr Compl Qtrs Status:	Not reported
NPDES IDS:	Not reported
CWA Permit Types:	Not reported
CWA Compliance Tracking:	Not reported
CWA NAICS:	Not reported
CWA SICS:	Not reported
CWA Inspection Count:	Not reported
CWA Days Last Inspection:	Not reported
CWA Informal Count:	Not reported
CWA Formal Action Count:	Not reported
CWA Date Last Formal Action:	Not reported
CWA Penalties:	Not reported
CWA Last Penalty Date:	Not reported
CWA Last Penalty Amount:	Not reported
CWA Qtrs in NC:	Not reported
CWA Curr Compliance Status:	Not reported
CWA Curr SNC Flag:	N
CWA 13QTRS Compl Status:	Not reported
CWA 13QTRS EFFLNT Exceedances:	Not reported
CWA 3tr QNCR Codes:	Not reported
RCRA IDS:	Not reported
RCRA Permit Types:	Not reported
RCRA NAICS:	Not reported
RCRA Inspection Count:	Not reported
RCRA Days Last Evaluation:	Not reported
RCRA Informal Count:	Not reported
RCRA Formal Action Count:	Not reported
RCRA Date Last Formal Action:	Not reported
RCRA Penalties:	Not reported
RCRA Last Penalty Date:	Not reported
RCRA Last Penalty Amount:	Not reported
RCRA QTRS in NC:	Not reported
RCRA Curr Compliance Status:	Not reported
RCRA Curr SNC Flag:	N
RCRA 3yr Compl Qtrs Status:	Not reported
SDWA IDS:	Not reported
SDWA System Types:	Not reported
SDWA Informal Count:	Not reported
SDWA Formal Action Count:	Not reported
SDWA Curr Compliance Status:	Not reported
SDWA Curr SNC Flag:	N
TRI IDS:	Not reported
TRI Releases Transfers:	Not reported
TRI on Site Releases:	Not reported
Tri off Site Transfers:	Not reported
TRI Reporter in Past:	Not reported
FEC Case IDS:	Not reported
FEC Number of Cases:	Not reported
FEC Last Case Date:	Not reported
FEC Total Penalties:	Not reported

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MAP FINDINGS

Map ID
Direction
Distance
Distance (ft.)Site

EDR ID Number
EPA ID Number

Database(s)

SADDLE ROAD - MITIGATION HI SR 200(4) MP 29 TO MP (Continued)

1016404112

GHG IDS: Not reported
GHG CO2 Release: Not reported
DFR URL: http://echo.epa.gov/detailed_facility_report?fid=110055384837
Facility SIC Codes: Not reported
Facility NAICS Codes: Not reported
Facility Date Last Inspection EPA: Not reported
Facility Date Last Inspection State: Not reported
Facility Date Last Formal ACT EPA: Not reported
Facility Date Last Formal ACT ST: Not reported
Facility Date Last Informal ACT EPA: Not reported
Facility Date Last Informal ACT ST: Not reported
Facility Federal Agency: Not reported
TRI Reporter: Not reported
Facility IMP Water Flag: Not reported

Count: 168 records

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HAWAII COUNTY	1009403877	ORCHARDS AT PEPEEKEO - PHASE	UNKNOWN	00000	FINDS, ECHO
HILO	1015828082	HAWAII PSD KULANI CORRECT STATE OF	HC 01 STAINBACK HWY	96720	FINDS, ECHO
HILO	S111704740	HIGHWAY 19, MILE MARKER 28.5	HWY 19	96720	SHWS
HILO	1016405570	MENTO'S SERVICE STATION	HIGHWAY 19	96720	FINDS, ECHO
HILO	1016353104	DOTA EMERGENCY GENERATOR BLDG TERMINAL (PMID OGG620111A)	ROUTE 19 MILEPOST (MP) 12.9, 21.6, 21.9, 26.1, 26.	96720	FINDS, ECHO
HILO	S117391427	HIANG HILO	AIRPORT RD	96720	SHWS
HILO	S113230477	MAUNA KEA SUGAR - HILO SUGAR PESTICIDE MIXING AREA	AMAUULU RD	96720	SHWS
HILO	1012210102	MAUNA KEA SUGAR CO. - HILO PESTICIDE MIXING AREA	AMAUULU ROAD, TMK 26008032	96720	CERCLIS
HILO	S109952894	INSTITUTE FOR ASTRONOMY, PHASE 1	NORTH AO HOKU ST.	96720	UIC
HILO	1018092367	HILO BAYFRONT TRAIL PHASE 1	BETWEEN KAMEHAMEHA AVE AND MAMALAHOA/BAYFRONT HIGH	96720	ECHO
HILO	1017795735	HILO BAYFRONT TRAIL PHASE 1	BETWEEN KAMEHAMEHA AVE AND MAMALAHOA/BAYFRONT HIGH	96720	FINDS
HILO	1012240157	MAUNA LOA MACADAMIA NUT CORP	H C 01 BOX 3 VOLCANO HWY	96720	FINDS, ECHO
HILO	1012178158	MAUNA LOA MACADAMIA NUT CORP	H C 01 BOX 3 VOLCANO HWY	96720	RCRA NonGen / NLR
HILO	1016701245	LA'ALOA AVENUE EXTENSION PROJECT PHASE 2	EXISTING LA'ALOA AVENUE AND ALI'I DRIVE	96720	FINDS, ECHO
HILO	1015730963	ARMY AVIATION SUPPORT FACILITY #2	GENERAL LYMAN FIELD BLDG 619	96720	CERCLIS, RCRA-CESQG
HILO	S118422859	UMAUMA STREAM BRIDGE	HAWAII BELT RD	96720	SHWS
HILO	S110061563	HILO AIRPORT ALOHA AIRLINES JET FUEL SPILL	HILO AIRPORT	96720	SHWS
HILO	S108008478	ARMY AVIATION SUPPORT FACILITY #2	HILO INTERNATIONAL AIRPORT BUILDING 619	96720	SHWS
HILO	1007283144	KE ANA LA'AHANA PCS	1500 KALANIANA'O HWY.	96720	FTTS, HIST FTTS
HILO	S108859939	PACIFIC AQUACULTURE AND COASTAL RESOURCE CENTER	KALANIANAOLE ST	96720	SHWS, BROWNFIELDS
HILO	S118422838	KUAWA STREET SOCCER FIELDS DEVELOPMENT SITE	KAMEHAMEHA HWY AND MANONO ST	96720	SHWS
HILO	1008173823	CHINA-US CENTER	RTE50 KAUMUALII HWY	96720	FINDS, ECHO
HILO	S107022566	HILO JUDICIARY CENTER PROJECT	KILAUEA AVE	96720	SHWS, ENG CONTROLS, INST CON
HILO	S110061564	HILO SAFEWAY/TARGET	MAKAALA ST X RAILROAD AVE	96720	SHWS, ENG CONTROLS, INST CON
HILO	S110061654	MAUNA KEA SUGAR - ONOMEA SEED DIPPING AREA	27-250 MALUNA RD	96720	SHWS
HILO	U004185901	NATIONAL ASTRONOMICAL OBSERVATORY OF JAP	MAUNA KEA SUMMIT	96720	UST
HILO	1012143129	CANADA FRANCE HAWAII TELESCOPE	MAUNA KEA OBSERVATORY	96720	FINDS, ECHO
HILO	1016709321	NAALEHU WASTEWATER COLLECTION SYSTEM	OHAI ROAD, KUKUI ROAD, MAMALAHOA HIGHWAY	96720	FINDS, ECHO
HILO	1016368381	NORTH HILO BASEYARD	OLD MAMALAHOA HWY	96720	FINDS, ECHO
HILO	1012303168	BATTLE AREA COMPLEX, PN 57197, FY06	POHAKULOA TRAINING AREA	96720	FINDS, ECHO
HILO	1012090386	US ARMY, 25TH INF. DIV. LIGHT	POHAKULOA TRAINING CENTER	96720	FINDS, ECHO
HILO	1009403988	FY06 MCA PN 57414 TACTICAL	POHAKULOA TRAINING AREA	96720	FINDS, ECHO
HILO	1012140423	FY06 MCA PN 57414 TACTICAL VEHICLE WASH FACILITY, PTA	POHAKULOA TRAINING AREA, SADDLE ROAD, ROUTE 200, M	96720	FINDS, ECHO
HILO	S106820075	POHAKULOA TRAINING AREA	SADDLE RD	96720	SPILLS
HILO	1017401484	POHAKULOA TRAINING : BLDGS. T-102 & T-103 - PIZZA SHOP & PX	SADDLE ROAD	96720	FINDS, ECHO
HILO	1017401588	POHAKULOA TRAINING AREA UIC CLASS V WELL : BLDGS. T36 & T37-	SADDLE RD	96720	FINDS

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Count: 168 records

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HILO	1017401483	POHAKULOA TRAINING : : BLDG. T-302 & TRAILER - FLIGHT OPERAT	SADDLE RD.	96720	FINDS, ECHO
HILO	1017401485	POHAKULOA TRAINING : BLDG. T-390 - FIRE STATION	SADDLE RD.	96720	FINDS, ECHO
HILO	1017401519	POHAKULOA TRAINING : BLDGS. T-108 - MEDICAL	SADDLE ROAD	96720	FINDS, ECHO
HILO	1017401491	POHAKULOA TRAINING : BLDG. T-110 - OPERATIONS	SADDLE RD.	96720	FINDS, ECHO
HILO	1017401489	POHAKULOA TRAINING : BLDG. T-131 - MESS HALL	SADDLE RD.	96720	FINDS, ECHO
HILO	1017401495	POHAKULOA TRAINIG AREA UIC CLASS V WELL BLDG. T-282 - LAUND	SADDLE RD	96720	FINDS
HILO	1017401494	POHAKULOA TRAINIG AREA UIC CLASS V WELL BLDG. T286 MILITARY	SADDLE RD	96720	FINDS
HILO	1017401493	POHAKULOA TRAINIG AREA UIC CLASS V WELL: BLDGS. T-275 & T-2	SADDLE RD	96720	FINDS
HILO	S110169381	POHAKULOA TRAINING AREA RANGE FACILITY	SADDLE RD	96720	SPILLS
HILO	1017401518	POHAKULOA TRAINING : BLDGS. T-109 - MEDICAL	SADDLE ROAD	96720	FINDS, ECHO
HILO	1017401585	POHAKULOA TRAINING :BLDGS. T104,T107,T185/T-186 VIP SLEEPING	SADDLE RD	96720	FINDS, ECHO
HILO	1017401512	POHAKULOA TRAINIG AREA UIC CLASS V WELL :BLDG. T181/T182/T18	SADDLE RD	96720	FINDS, ECHO
HILO	1017401505	POHAKULOA TRAINIG AREA UIC CLASS V WELL BLDGS. T290/T293-TR	SADDLE RD	96720	FINDS
HILO	1017401507	POHAKULOA TRAINIG AREA UIC CLASS V WELL : BLDG. T133-TROOP	SADDLE RD	96720	FINDS
HILO	1017401598	POHAKULOA TRAINING : : BLDGS. T-177 & T-180 - TROOP HEADQUAR	SADDLE RD.	96720	FINDS, ECHO
HILO	1017401597	POHAKULOA TRAINING : : BLDGS. T-231& T-241 - MESS HALLS	SADDLE RD.	96720	FINDS, ECHO
HILO	1017401479	POHAKULOA TRAINING : BLDG. T-93 - NATURAL RESOURCES PROGRAM	SADDLE RD.	96720	FINDS, ECHO
HILO	1017401506	POHAKULOA TRAINIG AREA UIC CLASS V WELL : BLDG. T95 TROOP O	SADDLE RD	96720	FINDS
HILO	1017401490	POHAKULOA TRAINING : BLDG. T-122 - TROOP SLEEPING QUARTERS	SADDLE RD.	96720	FINDS, ECHO
HILO	1017401487	POHAKULOA TRAINING : BLDG. T-181, T- 182, & T-188 - TROOP SL	SADDLE RD.	96720	FINDS, ECHO
HILO	1017401596	POHAKULOA TRAINING : : BLDG. T- 179 - ADMINISTRATIVE BUILDIN	SADDLE RD.	96720	FINDS, ECHO
HILO	1017401492	POHAKULOA TRAINIG AREA UIC CLASS V :BLDG. T25-TRANSPORTATIO	SADDLE RD	96720	FINDS
HILO	1017401482	POHAKULOA TRAINING : : BLDG. T-303 - MEDEVAC	SADDLE RD.	96720	FINDS, ECHO
HILO	1017401476	POHAKULOA TRAINING :BLDGS. T104,T107,T185/T-186 VIP SLEEPING	SADDLE RD	96720	FINDS

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Count: 168 records

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
HILO	1017401587	POHAKULOA TRAINIG AREA UIC CLASS V WELL BLDGS. T-32 & T-33	SADDLE RD	96720	FINDS
HILO	1017401586	POHAKULOA TRAINIG AREA UIC CLASS V WELL BLDGS. T195 & T197-	SADDLE RD	96720	FINDS
HILO	1017401504	POHAKULOA TRAINIG AREA UIC CLASS V WELL BLDGS. T251, T270,	SADDLE RD	96720	FINDS
HILO	1017401513	POHAKULOA TRAINING BLDG. T-190 - DINING FACILITY	SADDLE RD	96720	FINDS, ECHO
HILO	1017401511	POHAKULOA TRAINIG AREA UIC CLASS V WELL : BLDG. 238 - PTA H	SADDLE RD	96720	FINDS
HILO	1017401480	BLDG. T-92 - LAUNDROMAT	SADDLE RD.	96720	FINDS, ECHO
HILO	1017401474	BLDG. T-78 - TROOP SHOWER POINT & RESTROOMS	SADDLE RD.	96720	FINDS, ECHO
HILO	1017401488	BLDG. T-142 - MESS HALL	SADDLE RD.	96720	FINDS, ECHO
HILO	1017401599	: BLDGS. T-112 & T-112A - NATURAL RESOURCES WAREHOUSE	SADDLE RD.	96720	FINDS, ECHO
HILO	1014884263	SADDLE ROAD - MITIGATION HI SR 200(4) MP 29 TO MP	SADDLE ROAD - MITIGATION HI SR 200(4) MP 29 TO MP	96720	FINDS, ECHO
HILO	1017888223	HILO HILLSIDE ESTATES SUBDIVISION, PHASE I	SOUTH SIDE OF PUAINAKO STREET, 6,850 FEET WEST FRO	96720	ECHO
HILO	1016357747	HILO HILLSIDE ESTATES SUBDIVISION, PHASE I	SOUTH SIDE OF PUAINAKO STREET, 6,850 FEET WEST FRO	96720	FINDS
HILO	1010316411	WAIAKEA EXPERIMENTAL STATION	STAINBACK HWY 1 MI W OF	96720	RCRA NonGen / NLR
HILO	1016217565	USDA ARS	STAINBACK HWY	96720	FINDS, ECHO
HILO	1000141640	USDA ARS	STAINBACK HWY	96720	RCRA-SQG, HAZNET
HILO	1009795585	KULANI CORRECTIONAL FACILITY	STAINBACK HWY	96720	FINDS, ECHO
HILO	1010450731	WAIAKEA EXPERIMENTAL STATION	STAINBACK HWY 1 MI W OF	96720	FINDS, ECHO
HILO	1009403956	HONOLII RIDGE, INCREMENT I	UP TO 800 FT. NORTH OF PAUKAA	96720	FINDS, ECHO
HONOKOWAI	1008173041	HONOKOWAI BATCH PLANT	HONOAPIILANI HWY	96720	FINDS, ECHO
KAILUA	S118422836	KEALAKEHE TRANSFER STATION	OLD DUMP ACCESS RD	96740	SHWS
KAILUA	1012216133	OLD KONA LANDFILL	QUEEN KAAHUMANU HIGHWAY	96740	FINDS, ECHO
KAILUA KONA	1008038678	DWS NORTH KONA	DWS NORTH KONA	96740	FINDS, ECHO
KAILUA KONA	1004688890	STATE OF HI KEAHOE AIRPORT	KEAHOE KONA AIRPORT	96740	RCRA-CESQG
KAILUA KONA	1016224367	STATE OF HI KEAHOE AIRPORT	KEAHOE KONA AIRPORT	96740	FINDS, ECHO
KAILUA KONA	1014952460	BIG ISLAND SCRAP METAL LLC	OLD KONA LANDFILL - KEALAKEHE	96740	RCRA-CESQG
KAILUA KONA	1015930592	BIG ISLAND SCRAP METAL LLC	OLD KONA LANDFILL - KEALAKEHE	96740	FINDS, ECHO
KAILUA-KONA	1008173562	LOKAHI MAUKA SUBDIVISION	ROUTE 541, WAIALO RD	96740	FINDS, ECHO
KAILUA-KONA	1009403757	KUAKINI HIGHWAY 16-INCH WATERL	ALONG KUAKINI HIGHWAY	96740	FINDS, ECHO
KAILUA-KONA	1017742428	KEKAHA KAI STATE PARK ACCESS ROAD IMPROVEMENTS	BETWEEN MP 90 AND MP 91 QUEEN KAAHUMANU HIGHWAY	96740	FINDS, ECHO
KAILUA-KONA	S113230448	HELCO POLE-MOUNT TRANSFORMER 32014	78-1136 BISHOP RD (KEAUHOU)	96740	SHWS, SPILLS
KAILUA-KONA	1011909083	KONA VIEW ESTATES, PHASE I	SOUTHWEST CORNER OF MAMALAHOA HIGHWAY AND HINA LAN	96740	FINDS, ECHO
KAILUA-KONA	1010166523	KALOKO HEIGHTS SUBDIVISION	HINA-LANI STREET, KALOKO, NORTH KONA DISTRICT (SEE	96740	FINDS, ECHO
KAILUA-KONA	1015796378	KALOKO HEIGHTS SUBDIVISION	KALOKO, NORTH KONA DISTRICT	96740	FINDS, ECHO
KAILUA-KONA	1006820944	HAWAIIAN AIRLINES - KONA FUEL FARM	KEAHOE AIRPORT RD	96740	SHWS, SPILLS
KAILUA-KONA	S108008145	NATIONAL CAR RENTAL	KEAHOE-KONA AIRPORT P.O. BOX 602KEAHOE U-DRIVE BASEYARD LO	96740	LUST
KAILUA-KONA	S111418151	HENRY STREET IMPRV DWS	SOUTH KONA	96740	UIC
KAILUA-KONA	S110819468	KONA-KOHALA CHAMBER OF COMMERCE CENTER(I KUAKINI COMMERCE)	75-3737 KUAKINI HIGHWAY	96740	UIC

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Count: 168 records

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
KAILUA-KONA	1016827389	MAMALAHOA HIGHWAY IMPROVEMENTS (KAMAMAL STREET TO WAIKELEHU	MAMALAHOA HIGHWAY, BETWEEN KAMAMALU STREET TO WAIK	96740	FINDS, ECHO
KAILUA-KONA	S109952978	KUKIO LAGOON	87 MILE MARKER QUEEN KAAHUMANU HWY	96740	UIC
KAILUA-KONA	1016341376	PILI MAI AT POIPU (1)	OFF QUEEN KAAHUMANU HIGHWAY IN THE VICINITY OF OLD	96740	FINDS, ECHO
KAILUA-KONA	1006818847	PAWAI ST OIL/DIESEL MINOR LEAK	74-5603 PAWAI ST	96776	SHWS, SPILLS
KAILUA-KONA	1015916220	ALLIED AGGREGATES CORPORATION	QUEEN KAAHUMANU HWY	96740	FINDS, ECHO
KAILUA-KONA	1011989986	QUEEN KAAHUMANU HIGHWAY RESURFACING, HEN STREET TO LAKO RO	QUEEN KAAHUMANU HIGHWAY RESURFACING, HENRY STREET	96740	FINDS, ECHO
KAILUA-KONA	U003541926	ALLIED AGGREGATES CORPORATION	QUEEN KAAHUMANU HWY	96740	UST
KAILUA-KONA	1006820633	HONOKOHU INDUSTRIAL PARK-LOWER BOAT PARI SOIL CONTAMINATION	QUEEN KAAHUMANU HWY	96740	SHWS, SPILLS
KAILUA-KONA	1008173284	THE UPLANDS AT MAUNA KEA	WEST SIDE OF HONOAPIILANI HWY	96740	FINDS, ECHO
KAILUA-KONA	1018099573	KIILAE FARMS (1)	SITE IS LOCATED OFF MAMALAHOA HIGHWAY IN SOUTH KON	96740	ECHO
KAILUA-KONA	1009403733	THE VILLAGES OF LA I OPUA	SOUTHWEST CORNER OF KEALAKEHE	96740	FINDS, ECHO
KAILUA-KONA	S118422786	CELLANA KONA DEMONSTRATION FACILITY	73-4185 UNUALOHA POINT DR	96740	SHWS
KALAOA	1008153467	KUKUINUI SUBDIVISION	95-025 KAMEHAMEHA HWY	96740	FINDS, ECHO
KAMUELA	S111704726	HELCO SUBSTATION: OULI SUBSTATION	AMAUI DR	96743	SHWS
KAMUELA	1016405246	L.B.B. PARTNERS	P.O. BOX 1535 / MAMALAHOA HWY	96743	FINDS, ECHO
KAMUELA	1016368245	LUCY HENRIQUES MEDICAL CENTER	P.O. BOX 1108 / MAMALAHOA HWY	96743	FINDS, ECHO
KAMUELA	U001237168	LUCY HENRIQUES MEDICAL CENTER	P.O. BOX 1108 / MAMALAHOA HWY	96743	UST
KAMUELA	U001237015	L.B.B. PARTNERS	P.O. BOX 1535 / MAMALAHOA HWY	96743	UST
KAMUELA	S118422828	KAMUELA BASEYARD	66-1595 KAWAIHAE RD	96743	SHWS
KAMUELA	S111677710	MID PAC PETROLEUM	61-3651 KAWAIHAE RD	96743	SHWS, SPILLS
KAMUELA	1016404792	DON'S PAKE KITCHEN	MAMALAHOA HWY	96743	FINDS, ECHO
KAMUELA	U003541952	DON'S PAKE KITCHEN	MAMALAHOA HWY	96743	UST
KAMUELA	U004159313	MINIT STOP KAMUELA	64-964 MAMALAHOA HWY.	96743	UST
KAMUELA	1018094049	DEPT OF HAWAIIAN HOME LANDS - WE	MAMALAHOA HWY / P.O. BOX 125	96743	ECHO
KAMUELA	S110061852	WAIMEA QUARRY	67-2399 MAMALAHOA HWY	96743	SHWS
KAMUELA	1015915585	HANALO SHELL	79-7257 MAMALAHOA HWY	96743	FINDS, ECHO
KAMUELA	1016224373	DEPT OF HAWAIIAN HOME LANDS	MAMALOHOA HWY 55 MI MARKER WAIMEA	96743	FINDS, ECHO
KAMUELA	S109952346	MAUNA KEA BEACH HOTEL MAINT. FAC STP	MAUNA KEA BEACH	96743	UIC
KAMUELA	S113230449	HELCO POLE-MOUNTED TRANSFORMER #33807	POLE 18, ALA KAHUA ST	96743	SHWS
KAMUELA	1008170095	THE GOLF VILLAS	WEST SIDE OF HONOAPIILANI HWY	96743	FINDS, ECHO
KAMUELU	S109952584	WAIMEA ELEM & INTERM SCH	MAMALAHOA HWY	96743	UIC
KAWAIHAE	1003879445	PIONEER LUMBER	KAWAIHAE HIGHWAY	96743	CERCLIS-NFRAP
KAWAIHAE	S111704667	AKANA PETROLEUM, INC-KAWAIHAE HARBOR	61-3641 KAWAIHAE RD	96743	SHWS
KAWAIHAE	1008173021	PUUKOHOLA HEIAU NATIONAL HIST	SOUTH KONA, HAWAII	96743	FINDS, ECHO
KAWAIHAE	S106820069	PIONEER LUMBER	MALUOKALANI ST	96743	SHWS, SPILLS
KAWAIHAE	S109952500	HAWAII MAUNA LANI HOUSE	MAUNA LANI RESORT INC.	96743	UIC
KAWAIHAE	1005425575	BREWER ENVIRONMENTAL INDUSTRIES INC	QUEEN KAAHUMANU HIGHWAY	96743	SSTS
KEAHOE	1007467102	HAWAII ELECTRIC LIGHT CO., INC.	PAHOEHOE LAVA FIELD IN THE HOST PARK	96743	FINDS, ECHO
KEAUHOU	U001237038	KENT NAKAMARU	800 FT OFF MAMALAHOA HWY	96740	UST
KOHALA	1011850063	DOT HIGHWAYS HONOKAA GULCH PROJECT	NEAR THE MILE 4 MARKER ON AKONI PULE HIGHWAY	96743	FINDS, ECHO
KOHALA COAST	1010691600	PARKER WELL NOS. 3 & 4 AND RELATED WATER SYSTEM IMPROVEMENTS	PRIVATE ROAD; MAUKA FROM QUEEN KA'AHUMANU HWY, 1.6	96743	FINDS, ECHO
KONA	1012139786	FIRESTONE STORE 6930	75 5629 KUAKINI HWY UNIT A	96740	FINDS, ECHO
N. KONA	S109952881	HUALALAI ELDERLY HOUSING	HUALALAI RD. KAILUA-KONA	96740	UIC

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Count: 168 records

ORPHAN SUMMARY

City	EDR ID	Site Name	Site Address	Zip	Database(s)
NORTH KONA	1011445273	SOPOGY	VICINITY OF QUEEN KAAHUMANU HIGHWAY, AND OTEC ACCE	96740	FINDS, ECHO
NORTH KONA DISTRICT	1017381963	MAMALAHOA HIGHWAY DRAINAGE IMPROVEMENTS VICINITY OF PUUWAAW	MAMALAHOA HIGHWAY, VICINITY OF PUUWAAWAA RANCH ROA	96740	FINDS, ECHO
PAAUILO	U001237146	POHAKULOA TRAINING AREA	BLDG 343	96776	UST
PAAUILO	S116404127	U.S. ARMY DINING FACILITY - POHAKULOA TRAINING AREA	BLDG T-186		RGA LUST
PAAUILO	U003402978	U.S. ARMY BRANCH EXCHANGE- POHAKULOA TRAINING AREA	BLDG T-102	96776	UST
PAAUILO	U003222312	MIYASAKI STORE	P.O. BOX 217 PAAUILO VILLAGE (MAMALAHOA HWY)	96776	UST
PAAUILO	S116402920	MIYASAKI STORE	P.O. BOX 217 PAAUILO VILLAGE (MAMALAHOA HWY)		RGA LUST
PAAUILO	S116402919	MIYASAKI STORE	P.O. BOX 217 PAAUILO VILLAGE (MAMALAHOA HWY)		RGA LUST
PAAUILO	S116402921	MIYASAKI STORE	P.O. BOX 217 PAAUILO VILLAGE (MAMALAHOA HWY)		RGA LUST
PAAUILO	S108008514	HAMAKUA SUGAR COMPANY, INC - PAAUILO PESTICIDE MIXING NEAR S	CANE HAUL RD	96776	SHWS, INST CONTROL
PAAUILO	S110061471	HAMAKUA SUGAR COMPANY, INC - PAAUILO SEED DIPPING PLANT	HAWAII BELT RD	96776	SHWS, ENG CONTROLS, INST CON1
PAAUILO	S110061480	HAWAIIAN SUGAR PLANTERS' ASSOCIATION (HSPA) RESEARCH STATION	HAWAII BELT RD	96776	SHWS, INST CONTROL
PAAUILO	S110061472	HAMAKUA SUGAR COMPANY, INC - PAAUILO SUGAR MILL PESTICIDE ST	LOWER CANE HAUL RD & MAKAI MILL RD	96776	SHWS
PAAUILO	1000335071	AUTOMOTIVE REPAIR CO	MALAMAHOA HIGHWAY	96776	RCRA-SQG
PAAUILO	1016224348	AUTOMOTIVE REPAIR CO	MALAMAHOA HIGHWAY	96776	FINDS, ECHO
PAAUILO	U003222353	PAAUILO GARAGE	OFF STATE ROUTE 19	96776	UST
PAAUILO	1016405766	PAAUILO GARAGE	OFF STATE ROUTE 19	96776	FINDS, ECHO
PAAUILO	S116399809	HAMAKUA SUGAR COMPANY - OOKALA MILL PESTICIDE STORAGE AREA	OLD MAMALAHOA HIGHWAY		RGA HWS
PAAUILO	S116403528	POHAKULOA TRAINING AREA	TANK T-186		RGA LUST
PAAUILO	1014696732	USAG-POHAKULOA TRAINING AREA	WITHIN THE POHAKULOA TRAINING AREA, APPROXIMATELY	96776	FINDS, ECHO
PAUUILO	1011850199	HAMAKUA HIGHWAY MAINTENANCE BASEYARD	MAMALAHOA HIGHWAY BETWEEN MAUNA KEA RANCH ROAD AND	96776	FINDS, ECHO
POHAKULUA	1008171895	POHAKULOA TRAINING AREA	ADJACENT TO KAMEHAMEHA HWY	96720	FINDS, ECHO
S.KOHALA	S111418174	SUNSET RIDGE,PHASE II,UNIT 2,INCREMENT 2	WAIKOLOA VILLAGE	96743	UIC
SOUTH KOHALA	1013980667	SCD MLB LLC	NOHANA KAI AT MAUNA LANI PROJ.	96743	FINDS, ECHO
WAIMEA	1018128776	WAIKOLOA HOMESITES INCREMENT 1	NORTHWEST CORNER OF QUEEN KAAHUMANU HWY AND WAIKOL	96743	ECHO
WAIMEA	S118422863	WAIMEA LANDFILL	66-1597 KAWAIHAE RD	96743	SHWS
WAIMEA	1001112114	DEPT OF HAWAIIAN HOME LANDS	MAMALAHOA HWY 55 MI MARKER	96743	RCRA-SQG
WAIMEA	1016379892	SHELL SERVICE STATION	1192 MAMALAHOA HIGHWAY	96743	FINDS, ECHO

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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: 01/26/2016
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: 202-564-7333

EPA Region 1
Telephone 617-918-1143

EPA Region 6
Telephone: 214-655-6659

EPA Region 3
Telephone 215-814-5418

EPA Region 7
Telephone: 913-551-7247

EPA Region 4
Telephone 404-562-8033

EPA Region 8
Telephone: 303-312-6774

EPA Region 5
Telephone 312-886-6686

EPA Region 9
Telephone: 415-947-4246

EPA Region 10
Telephone 206-553-8665

Proposed NPL: Proposed National Priority List Sites

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

Date of Government Version: 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: 01/26/2016
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: 01/26/2016
Number of Days to Update: 58	Next Scheduled EDR Contact: 04/18/2016
	Data Release Frequency: Quarterly

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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	Source: EPA
Date Data Arrived at EDR: 02/02/1994	Telephone: 202-564-4267
Date Made Active in Reports: 03/30/1994	Last EDR Contact: 08/15/2011
Number of Days to Update: 56	Next Scheduled EDR Contact: 11/28/2011
	Data Release Frequency: No Update Planned

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	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014	Last EDR Contact: 02/19/2016
Number of Days to Update: 94	Next Scheduled EDR Contact: 06/06/2016
	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	Source: EPA
Date Data Arrived at EDR: 11/11/2013	Telephone: 703-412-9810
Date Made Active in Reports: 02/13/2014	Last EDR Contact: 02/19/2016
Number of Days to Update: 94	Next Scheduled EDR Contact: 06/06/2016
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 03/18/2014	Telephone: 202-564-6023
Date Made Active in Reports: 04/24/2014	Last EDR Contact: 01/25/2016
Number of Days to Update: 37	Next Scheduled EDR Contact: 05/09/2016
	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	Source: EPA
Date Data Arrived at EDR: 06/26/2015	Telephone: 800-424-9346
Date Made Active in Reports: 09/16/2015	Last EDR Contact: 12/18/2015
Number of Days to Update: 82	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.

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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) 495-8895
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) 495-8895
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) 495-8895
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) 495-8895
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) 495-8895
Last EDR Contact: 12/18/2015
Next Scheduled EDR Contact: 04/11/2016
Data Release Frequency: Varies

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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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/11/2015	Telephone: 703-603-0695
Date Made Active in Reports: 11/03/2015	Last EDR Contact: 02/29/2016
Number of Days to Update: 53	Next Scheduled EDR Contact: 06/13/2016
	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	Source: Environmental Protection Agency
Date Data Arrived at EDR: 09/11/2015	Telephone: 703-603-0695
Date Made Active in Reports: 11/03/2015	Last EDR Contact: 02/29/2016
Number of Days to Update: 53	Next Scheduled EDR Contact: 06/13/2016
	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	Source: National Response Center, United States Coast Guard
Date Data Arrived at EDR: 06/26/2015	Telephone: 202-267-2180
Date Made Active in Reports: 09/16/2015	Last EDR Contact: 12/29/2015
Number of Days to Update: 82	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	Source: U.S. Department of Transportation
Date Data Arrived at EDR: 06/26/2015	Telephone: 202-366-4555
Date Made Active in Reports: 09/02/2015	Last EDR Contact: 12/30/2015
Number of Days to Update: 68	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	Source: Department of Transportation, Office of Pipeline Safety
Date Data Arrived at EDR: 08/07/2012	Telephone: 202-366-4595
Date Made Active in Reports: 09/18/2012	Last EDR Contact: 02/03/2016
Number of Days to Update: 42	Next Scheduled EDR Contact: 05/16/2016
	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.

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Date of Government Version: 09/17/2015
Date Data Arrived at EDR: 12/04/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 76

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/01/2016
Next Scheduled EDR Contact: 06/13/2016
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: 12/22/2015
Date Data Arrived at EDR: 12/23/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 57

Source: Environmental Protection Agency
Telephone: 202-566-2777
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: 888-275-8747
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: 202-528-4285
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: 843-820-7326
Last EDR Contact: 02/16/2016
Next Scheduled EDR Contact: 05/30/2016
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

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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: 703-416-0223
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: 505-845-0011
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
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: 800-424-9346
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: 415-947-4219
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: No Update Planned

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
Date Data Arrived at EDR: 02/29/2008
Date Made Active in Reports: 04/18/2008
Number of Days to Update: 49

Source: USGS
Telephone: 703-648-7709
Last EDR Contact: 12/04/2015
Next Scheduled EDR Contact: 03/14/2016
Data Release Frequency: Varies

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: 703-648-7709
Last EDR Contact: 12/04/2015
Next Scheduled EDR Contact: 03/14/2016
Data Release Frequency: Varies

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GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 303-231-5959
Last EDR Contact: 03/02/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Semi-Annually

TRIS: Toxic Chemical Release Inventory System

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

Date of Government Version: 12/31/2013
Date Data Arrived at EDR: 02/12/2015
Date Made Active in Reports: 06/02/2015
Number of Days to Update: 110

Source: EPA
Telephone: 202-566-0250
Last EDR Contact: 02/24/2016
Next Scheduled EDR Contact: 06/06/2016
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
Date Data Arrived at EDR: 01/15/2015
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 14

Source: EPA
Telephone: 202-260-5521
Last EDR Contact: 12/23/2015
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
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA/Office of Prevention, Pesticides and Toxic Substances
Telephone: 202-566-1667
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
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
Date Data Arrived at EDR: 04/16/2009
Date Made Active in Reports: 05/11/2009
Number of Days to Update: 25

Source: EPA
Telephone: 202-566-1667
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 06/06/2016
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: 202-564-2501
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: 202-564-2501
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: 202-564-4203
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
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: 202-564-5088
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: 202-566-0500
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: 301-415-7169
Last EDR Contact: 02/08/2016
Next Scheduled EDR Contact: 05/23/2016
Data Release Frequency: Quarterly

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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: 202-343-9775
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) 947-8000
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: 202-564-4104
Date Made Active in Reports: 08/07/1995	Last EDR Contact: 06/02/2008
Number of Days to Update: 35	Next Scheduled EDR Contact: 09/01/2008
	Data Release Frequency: No Update Planned

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: 202-564-8600
Date Made Active in Reports: 11/03/2015	Last EDR Contact: 01/25/2016
Number of Days to Update: 69	Next Scheduled EDR Contact: 05/09/2016
	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.

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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: 800-424-9346
Last EDR Contact: 02/26/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Biennially

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
Date Data Arrived at EDR: 09/10/2014
Date Made Active in Reports: 10/20/2014
Number of Days to Update: 40

Source: Environmental Protection Agency
Telephone: N/A
Last EDR Contact: 12/11/2015
Next Scheduled EDR Contact: 03/21/2016
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
Date Data Arrived at EDR: 04/08/2015
Date Made Active in Reports: 06/11/2015
Number of Days to Update: 64

Source: Environmental Protection Agency
Telephone: 703-603-8704
Last EDR Contact: 01/06/2016
Next Scheduled EDR Contact: 04/18/2016
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
Date Data Arrived at EDR: 10/19/2011
Date Made Active in Reports: 01/10/2012
Number of Days to Update: 83

Source: Environmental Protection Agency
Telephone: 202-566-0517
Last EDR Contact: 01/29/2016
Next Scheduled EDR Contact: 05/09/2016
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
Date Data Arrived at EDR: 02/16/2010
Date Made Active in Reports: 04/12/2010
Number of Days to Update: 55

Source: FEMA
Telephone: 202-646-5797
Last EDR Contact: 01/08/2016
Next Scheduled EDR Contact: 04/25/2016
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: 09/17/2015
Date Data Arrived at EDR: 12/04/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 76

Source: Drug Enforcement Administration
Telephone: 202-307-1000
Last EDR Contact: 03/01/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: No Update Planned

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.

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GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 09/01/2015
Date Data Arrived at EDR: 09/03/2015
Date Made Active in Reports: 11/03/2015
Number of Days to Update: 61

Source: Environmental Protection Agency
Telephone: 202-566-1917
Last EDR Contact: 02/16/2016
Next Scheduled EDR Contact: 05/30/2016
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
Date Data Arrived at EDR: 03/09/2011
Date Made Active in Reports: 05/02/2011
Number of Days to Update: 54

Source: Environmental Protection Agency
Telephone: 615-532-8599
Last EDR Contact: 02/19/2016
Next Scheduled EDR Contact: 05/30/2016
Data Release Frequency: Varies

US AIRS MINOR: Air Facility System Data

A listing of minor source facilities.

Date of Government Version: 10/20/2015
Date Data Arrived at EDR: 10/27/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 69

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 12/22/2015
Next Scheduled EDR Contact: 04/11/2016
Data Release Frequency: Annually

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
Date Data Arrived at EDR: 10/27/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 69

Source: EPA
Telephone: 202-564-2496
Last EDR Contact: 12/22/2015
Next Scheduled EDR Contact: 04/11/2016
Data Release Frequency: Annually

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
Date Data Arrived at EDR: 08/07/2009
Date Made Active in Reports: 10/22/2009
Number of Days to Update: 76

Source: Department of Energy
Telephone: 202-586-8719
Last EDR Contact: 01/13/2016
Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: Varies

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: 703-305-6451
Last EDR Contact: 12/02/2009
Next Scheduled EDR Contact: N/A
Data Release Frequency: No Update Planned

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GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 703-603-8787

Last EDR Contact: 01/26/2016

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: 703-308-4044

Last EDR Contact: 02/12/2016

Next Scheduled EDR Contact: 05/23/2016

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: 202-564-6023

Last EDR Contact: 02/12/2016

Next Scheduled EDR Contact: 05/23/2016

Data Release Frequency: Quarterly

FUSRAP: Formerly Utilized Sites Remedial Action Program

DOE established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations.

Date of Government Version: 11/23/2015

Date Data Arrived at EDR: 11/24/2015

Date Made Active in Reports: 02/18/2016

Number of Days to Update: 86

Source: Department of Energy

Telephone: 202-586-3559

Last EDR Contact: 02/08/2016

Next Scheduled EDR Contact: 05/23/2016

Data Release Frequency: Varies

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: 617-520-3000

Last EDR Contact: 02/09/2016

Next Scheduled EDR Contact: 05/23/2016

Data Release Frequency: Quarterly

FUELS PROGRAM: EPA Fuels Program Registered Listing

This listing includes facilities that are registered under the Part 80 (Code of Federal Regulations) EPA Fuels Programs. All companies now are required to submit new and updated registrations.

GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/23/2015
Date Data Arrived at EDR: 11/24/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 86

Source: EPA
Telephone: 800-385-6164
Last EDR Contact: 02/24/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Quarterly

ECHO: Enforcement & Compliance History Information

ECHO provides integrated compliance and enforcement information for about 800,000 regulated facilities nationwide.

Date of Government Version: 09/20/2015
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: 202-564-2280
Last EDR Contact: 12/21/2015
Next Scheduled EDR Contact: 04/04/2016
Data Release Frequency: Quarterly

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: 01/22/2016
Date Data Arrived at EDR: 01/26/2016
Date Made Active in Reports: 03/02/2016
Number of Days to Update: 36

Source: Department of Health
Telephone: 808-586-4249
Last EDR Contact: 02/26/2016
Next Scheduled EDR Contact: 06/06/2016
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.

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: 808-586-4245
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: 808-586-4258
Last EDR Contact: 02/29/2016
Next Scheduled EDR Contact: 06/13/2016
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: 01/13/2016
Date Data Arrived at EDR: 01/15/2016
Date Made Active in Reports: 03/02/2016
Number of Days to Update: 47

Source: Department of Health
Telephone: 808-586-4228
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.

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GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/13/2016
Date Data Arrived at EDR: 01/15/2016
Date Made Active in Reports: 03/02/2016
Number of Days to Update: 47

Source: Department of Health
Telephone: 808-586-4228
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: 05/31/2015
Date Data Arrived at EDR: 01/26/2016
Date Made Active in Reports: 03/02/2016
Number of Days to Update: 36

Source: Department of Health
Telephone: 808-586-4249
Last EDR Contact: 02/24/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

ENG CONTROLS: Engineering Control Sites

A listing of sites with engineering controls in place.

Date of Government Version: 01/22/2016
Date Data Arrived at EDR: 01/26/2016
Date Made Active in Reports: 03/02/2016
Number of Days to Update: 36

Source: Department of Health
Telephone: 404-586-4249
Last EDR Contact: 02/26/2016
Next Scheduled EDR Contact: 06/06/2016
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: 01/22/2016
Date Data Arrived at EDR: 01/26/2016
Date Made Active in Reports: 03/02/2016
Number of Days to Update: 36

Source: Department of Health
Telephone: 808-586-4249
Last EDR Contact: 02/26/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

VCP: Voluntary Response Program Sites

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

Date of Government Version: 01/22/2016
Date Data Arrived at EDR: 01/26/2016
Date Made Active in Reports: 03/02/2016
Number of Days to Update: 36

Source: Department of Health
Telephone: 808-586-4249
Last EDR Contact: 02/26/2016
Next Scheduled EDR Contact: 06/06/2016
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: 808-586-4200
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: 01/22/2016
Date Data Arrived at EDR: 01/26/2016
Date Made Active in Reports: 03/02/2016
Number of Days to Update: 36

Source: Department of Health
Telephone: 808-586-4249
Last EDR Contact: 02/26/2016
Next Scheduled EDR Contact: 06/06/2016
Data Release Frequency: Varies

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GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

CDL: Clandestine Drug Lab Listing

A listing of clandestine drug lab site locations.

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

Source: Department of Health
Telephone: 808-586-4249
Last EDR Contact: 02/29/2016
Next Scheduled EDR Contact: 06/13/2016
Data Release Frequency: Varies

AIRS: List of Permitted Facilities

A listing of permitted facilities in the state.

Date of Government Version: 12/29/2015
Date Data Arrived at EDR: 01/05/2016
Date Made Active in Reports: 03/02/2016
Number of Days to Update: 57

Source: Department of Health
Telephone: 808-586-4200
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: 202-208-3710
Last EDR Contact: 01/15/2016
Next Scheduled EDR Contact: 04/25/2016
Data Release Frequency: Semi-Annually

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: 703-308-8245
Last EDR Contact: 02/01/2016
Next Scheduled EDR Contact: 05/16/2016
Data Release Frequency: Varies

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: 10/13/2015
Date Data Arrived at EDR: 10/23/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 118

Source: EPA Region 8
Telephone: 303-312-6271
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: Quarterly

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: 617-918-1313
Last EDR Contact: 02/22/2016
Next Scheduled EDR Contact: 05/09/2016
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: 08/20/2015
Date Data Arrived at EDR: 10/30/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 111

Source: EPA Region 6
Telephone: 214-665-6597
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: Varies

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GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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: 404-562-8677
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 01/25/2016
Number of Days to Update: 34	Next Scheduled EDR Contact: 05/09/2016
	Data Release Frequency: Semi-Annually

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	Source: EPA, Region 5
Date Data Arrived at EDR: 11/13/2015	Telephone: 312-886-7439
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 01/25/2016
Number of Days to Update: 52	Next Scheduled EDR Contact: 05/09/2016
	Data Release Frequency: Varies

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

Date of Government Version: 01/08/2015	Source: Environmental Protection Agency
Date Data Arrived at EDR: 01/08/2015	Telephone: 415-972-3372
Date Made Active in Reports: 02/09/2015	Last EDR Contact: 01/27/2016
Number of Days to Update: 32	Next Scheduled EDR Contact: 05/09/2016
	Data Release Frequency: Quarterly

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

Date of Government Version: 01/07/2016	Source: EPA Region 10
Date Data Arrived at EDR: 01/08/2016	Telephone: 206-553-2857
Date Made Active in Reports: 02/18/2016	Last EDR Contact: 01/25/2016
Number of Days to Update: 41	Next Scheduled EDR Contact: 05/09/2016
	Data Release Frequency: Quarterly

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

Date of Government Version: 03/30/2015	Source: EPA Region 7
Date Data Arrived at EDR: 04/28/2015	Telephone: 913-551-7003
Date Made Active in Reports: 06/22/2015	Last EDR Contact: 01/25/2016
Number of Days to Update: 55	Next Scheduled EDR Contact: 05/09/2016
	Data Release Frequency: Varies

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: 617-918-1313
Date Made Active in Reports: 01/04/2016	Last EDR Contact: 02/22/2016
Number of Days to Update: 67	Next Scheduled EDR Contact: 05/09/2016
	Data Release Frequency: Varies

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)

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GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 11/24/2015
Date Data Arrived at EDR: 12/01/2015
Date Made Active in Reports: 01/04/2016
Number of Days to Update: 34

Source: EPA Region 4
Telephone: 404-562-9424
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: Semi-Annually

INDIAN UST R5: Underground Storage Tanks on Indian Land

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

Date of Government Version: 11/05/2015
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: 312-886-6136
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
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: 08/20/2015
Date Data Arrived at EDR: 10/30/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 111

Source: EPA Region 6
Telephone: 214-665-7591
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
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
Date Data Arrived at EDR: 11/25/2014
Date Made Active in Reports: 01/29/2015
Number of Days to Update: 65

Source: EPA Region 7
Telephone: 913-551-7003
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: Varies

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: 10/13/2015
Date Data Arrived at EDR: 10/23/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 118

Source: EPA Region 8
Telephone: 303-312-6137
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
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
Date Data Arrived at EDR: 02/13/2015
Date Made Active in Reports: 03/13/2015
Number of Days to Update: 28

Source: EPA Region 9
Telephone: 415-972-3368
Last EDR Contact: 01/27/2016
Next Scheduled EDR Contact: 05/09/2016
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).

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GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

Date of Government Version: 01/07/2016
Date Data Arrived at EDR: 01/08/2016
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 41

Source: EPA Region 10
Telephone: 206-553-2857
Last EDR Contact: 01/25/2016
Next Scheduled EDR Contact: 05/09/2016
Data Release Frequency: Quarterly

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: 07/27/2015
Date Data Arrived at EDR: 09/29/2015
Date Made Active in Reports: 02/18/2016
Number of Days to Update: 142

Source: EPA, Region 1
Telephone: 617-918-1102
Last EDR Contact: 12/28/2015
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
Date Data Arrived at EDR: 04/22/2008
Date Made Active in Reports: 05/19/2008
Number of Days to Update: 27

Source: EPA, Region 7
Telephone: 913-551-7365
Last EDR Contact: 04/20/2009
Next Scheduled EDR Contact: 07/20/2009
Data Release Frequency: Varies

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.

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GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

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

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
Date Data Arrived at EDR: 07/01/2013
Date Made Active in Reports: 01/03/2014
Number of Days to Update: 186

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

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

RGA 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

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
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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.

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GOVERNMENT RECORDS SEARCHED / DATA CURRENCY TRACKING

AHA Hospitals:

Source: American Hospital Association, Inc.

Telephone: 312-280-5991

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

Medical Centers: Provider of Services Listing

Source: Centers for Medicare & Medicaid Services

Telephone: 410-786-3000

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

Nursing Homes

Source: National Institutes of Health

Telephone: 301-594-6248

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

Public Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

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

Private Schools

Source: National Center for Education Statistics

Telephone: 202-502-7300

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

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

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

State Wetlands Data: Wetlands Inventory

Source: Office of Planning

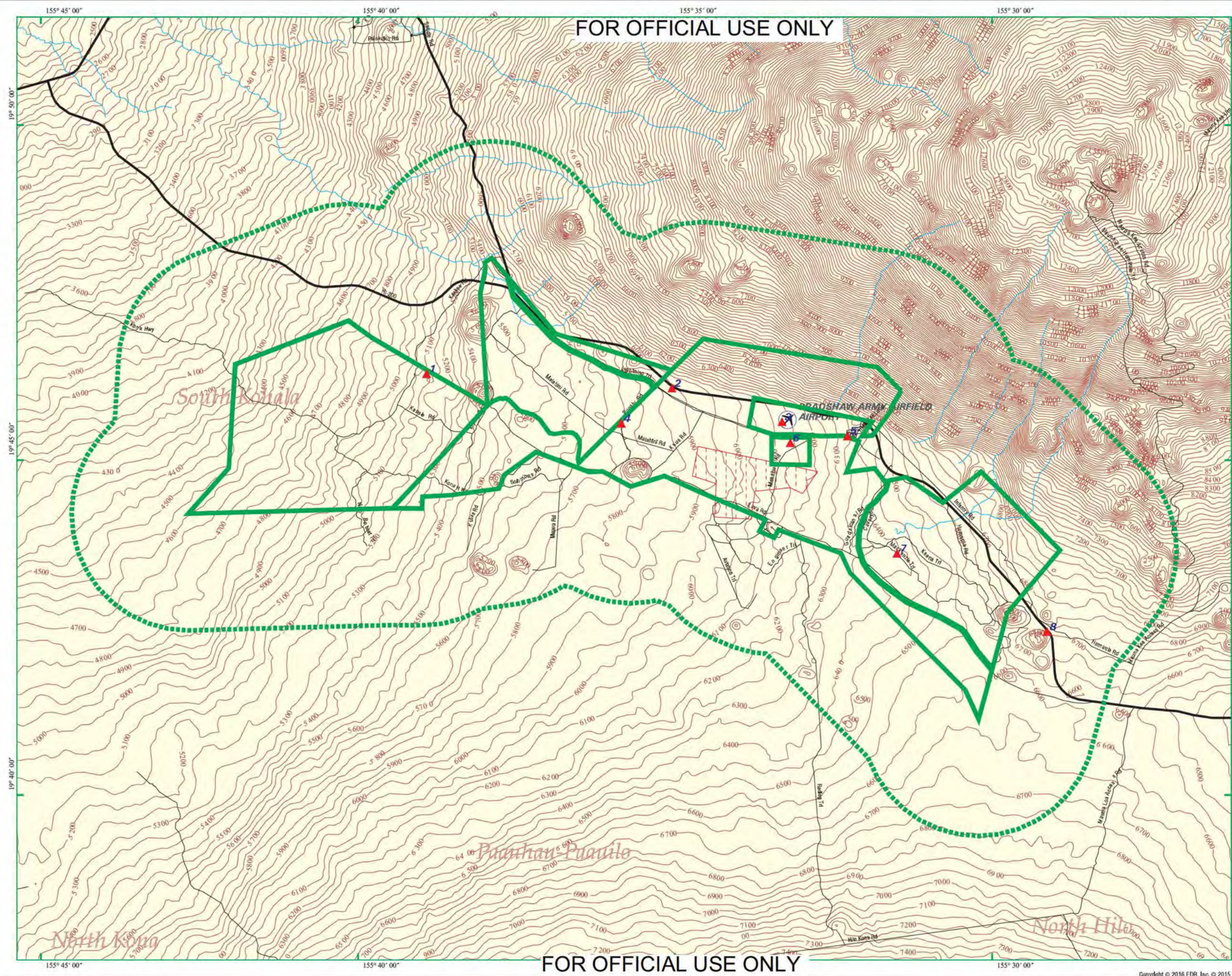
Telephone: 808-587-2895

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

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Pohakuloa Training Area ECOP Phase I ESA

- ▲ 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



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**FINAL ECOP REPORT PHASE I
POHAKULOA TRAINING AREA, HI**

APPENDIX D: SUPPORTING DOCUMENTATION

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POHAKULOA STATE LEASE

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its meeting held on September 11, 2009, has approved the amendment to General Lease No. S-3849 for the purposes of amending paragraph 22.

NOW, THEREFORE, the Lessor and Government covenant and agree that paragraph 22 of General Lease No. S-3849, is hereby deleted in its entirety and replaced with the following:

"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 coral, rock and similar materials occurring naturally on the said premises for the following construction activities; (a) road projects on the demised premises, (b) the Stryker Brigade Combat Team (SBCT) Battle Area Complex to be constructed partially on the demised premises and partially on lands set aside to the Government by Presidential Executive Order 11167 dated August 19, 1964; (c) the SBCT Tactical Vehicle Wash Facility to be constructed on lands set aside to the Government under Governor's Executive Order No. 1719 dated January 26, 1956; and (d) the SBCT Ammunition Holding Area #2 to be constructed on lands set aside to the Government under Presidential Executive Order 11167 dated August 19, 1964. In addition, the Government shall have the right to use ground and surface waters on, in or under the demised premises for purposes incident to the rights granted by this lease."

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-3849, except as herein provided.

This Amendment, read in conjunction with the General Lease No. s-3849 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.

356925_1.DOC

-2-
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION
P.O. BOX 621
HONOLULU, HAWAII 96809

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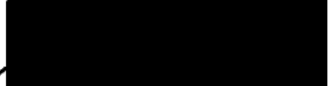
D-4



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.


STATE OF HAWAII

Approved by the Board of
Land and Natural Resources
at its meeting held on
September 11, 2009.

By 
Chairperson
Board of Land and
Natural Resources *WEM*


LESSOR

UNITED STATES OF AMERICA

By 
Its Realty Contracting Officer
US Army Corps of Engineers,
Honolulu District

GOVERNMENT

APPROVED AS TO FORM:


Deputy Attorney General

Dated: 11/23/09

STATE OF HAWAII

)

) SS

CITY AND COUNTY OF HONOLULU

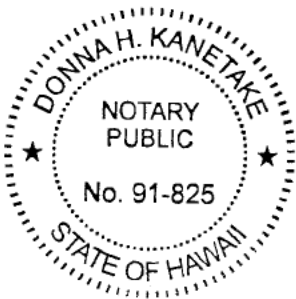
)

On this 9th Day of December 2009, in the First Circuit of the State of Hawaii, before me personally appeared _____, to me known to be the person described in and who executed the foregoing instrument, a 3-page Amendment of General Lease No. S-3849, U.S. Lease, Contract No. DA-94-626-ENG-80, undated at time of notarization, plus this acknowledgment, and acknowledged that he executed the same as his free act and deed.

Witness my hand and seal.

Notary Public, State of Hawaii

My Commission Expires: July 22, 2010



RECORDATION REQUESTED BY:

U. S. Army Engineer Division,
Pacific Ocean

STATE OF HAWAII
BUREAU OF CONVEYANCES
RECEIVED FOR RECORD

LIBER 4821 PAGES 425 TO 444

AFTER RECORDATION, RETURN TO:

U.S. Army Engineer Division,
Pacific Ocean
Phone: 542986

'64 AUG 20 PM 1:37

/s/ M. Adachi

INDEXED /1/ 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-3849

U. S. LEASE, CONTRACT NO. DA-94-626-ENG-80

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,
hereinafter called the "Lessor", and THE UNITED STATES OF
AMERICA, hereinafter called the "Government":

WITNESSETH: The parties hereto for the considera-
tion hereinafter mentioned covenant and agree as follows:

2. The Lessor hereby leases to the Government
three (3) parcels of land described on Exhibit "A" attached
hereto and hereby made a part hereof, all to be used for the
following purpose: Military purposes.

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D-7

004

POHAKULOA

Lead A-105-1,243

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 21 hereof.

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 activities.

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

7. Except as otherwise provided herein, the Government shall have unrestricted control and use of the demised premises including the right to fire all combat weapons

therefrom into the designated Pohakuloa Impact Area.

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 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 the island of Hawaii.

10(a). The Government hereby agrees that all Government vehicles of any type will at all times be prohibited from using that portion of the demised premises indicated by a red

cross hatch on the map attached to and made a part of this lease. In addition, the Government hereby agrees that it will maintain at all times at least a two-strand wire fence along that part of the boundary bordering Parcel "C" colored in green on the said map.

11. In the interest of safety the Government shall have the right to interrupt traffic on the Saddle Road during training activities involving firing of and/or the passage of troops across the Saddle Road; provided, however, that the Government shall minimize interference with traffic by limiting stoppages thereof to 15 minute periods.

12. With the exception of artillery simulators, atomic bomb simulators and any similar devices, and explosives used in construction work, the Government shall not fire any live ammunition into any portion of the demised premises. This restriction does not apply to any portion of Parcel "A" deemed by the Government to be safe for smallarms firing. In addition, the Government shall not fire any weapons within three-fourths (3/4) of a mile of the Pohakuloa Ranger Station.

13. 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 training 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.

14. 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, wildlife 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.

15. 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.

16. 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.

17. To the extent permitted by training requirements the Government will cooperate with the Lessor in the game development and hunting programs of the Lessor and, in connection therewith, the Government agrees that Parcels "A", "B" and "C" hereof shall remain available for the aforesaid programs of the Lessor and, further, that Parcels "B" and "C" and all that part of Parcel "A" which lies to the north of the Saddle Road shall be made exclusively available to the Lessor for hunting during the periods 1 July through 15 July and 1 December through 15 January and on national holidays from dawn to midnight and on weekends from midnight Friday through midnight Sunday during the periods 1 November through 30 November and 16 January through 31 January. The Lessor shall also have the right to construct a road along a mutually agreeable route through the northerly portion of Parcel "C" hereof.

18. 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 materials resulting from use of the said premises by the general public.

19. 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 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.

20. 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.

21. 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.

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 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 representatives makes such findings shall be in issue and may be reviewed in any competent court.

(b) In the event his lease is terminated as provided in paragraph (a) hereof, the Government shall be entitled (1) 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 (2) 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

[REDACTED]

Chairman and Member
Board of Land and Natural
Resources

And By

[REDACTED]

Member
Board of Land and Natural
Resources

THE UNITED STATES OF AMERICA

By

[REDACTED]
Deputy Assistant Secretary of the Army (I&L)
(Installations)

APPROVED AS TO FORM:

[REDACTED]

Attorney General
State of Hawaii

[REDACTED]

Deputy Attorney General
State of Hawaii

STATE OF VIRGINIA)
COUNTY OF ARLINGTON) SS

On this 17th day of August, 1964, before me
appeared _____, to me personally known
who, being by me duly sworn, did say that he is the _____
DEPUTY ASSISTANT SECRETARY OF ARMY
(JAL: 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 _____
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.

My Commission Expires November 6, 1966

NOTARY PUBLIC
Arlington County, Virginia

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 _____
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
_____ are entitled to full faith and credit; that I am
well acquainted with the handwriting of the said _____
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.

Clerk

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EXHIBIT "A"

TRACT A-105, ¹²⁴³POHAKULOA TRAINING AREA

PARCEL "A"

Land situated at Kaohe, Hamakua and Puuanahulu, North Kona, Hawaii.

Being portions of the Government lands of Kaohe and Puuanahulu.

Beginning at the southeast corner of this piece of land, the coordinates of the said point of beginning from Government Survey Triangulation Station "Omaokoili," being 5462.74 feet North and 14,081.19 feet West, thence running by azimuths measured clockwise from True South:

1. 111° 10' 6,000.00 feet along the Pohakuloa Impact Area;
2. 28° 30' 800.00 feet along the Pohakuloa Impact Area;
3. 118° 30' 1,400.00 feet along the Pohakuloa Impact Area;
4. 208° 30' 1,100.00 feet along the Pohakuloa Impact Area;
5. 113° 50' 9,600.00 feet along the Pohakuloa Impact Area;
6. 74° 20' 3,300.00 feet along the Pohakuloa Impact Area;
7. 116° 30' 2,900.00 feet along the Pohakuloa Impact Area;
8. 90° 48' 1,670.00 feet along the Pohakuloa Impact Area;
9. 110° 00' 4,700.00 feet along the Pohakuloa Impact Area;
10. 58° 00' 3,600.00 feet along the Pohakuloa Impact Area;
11. 22° 30' 1,300.00 feet along the Pohakuloa Impact Area;
12. 79° 40' 3,700.00 feet along the Pohakuloa Impact Area;
13. 85° 10' 3,000.00 feet along the Pohakuloa Impact Area;

14. 359° 29' 1,132.00 feet along the Pohakuloa Impact Area;
15. 89° 10' 21,730.00 feet along the Pohakuloa Impact Area;
16. 221° 36' 51" 5,539.10 feet along the remainder of the Government Land of Puuanahulu;
17. 183° 36' 51" 9,400.00 feet along the remainder of the Government Land of Puuanahulu;
18. 249° 06' 51" 11,000.00 feet along the remainder of the Government Land of Puuanahulu;
19. 306° 06' 51" 2,500.00 feet along the land of Waikoloa;
20. 300° 23' 51" 12,201.50 feet along the land of Waikoloa;
21. 175° 29' 01" 8,646.00 feet along the land of Waikoloa;
22. 181° 29' 01" 1,617.00 feet along the land of Waikoloa;
23. 191° 29' 01" 2,046.00 feet along the land of Waikoloa;
24. 174° 29' 01" 700.00 feet along the land of Waikoloa;
25. 237° 02' 31" 800.61 feet along portion of Kaehe;
26. 319° 59' 01" 9,000.00 feet along portion of Kaehe;
27. 287° 29' 01" 11,000.00 feet along portion of Kaehe;
28. 288° 40' 7,832.30 feet along "Parcel B" hereof;
29. 10° 53' 30" 2,713.32 feet along Parcel A of Governor's Executive Order 1719, and across the Saddle Road;
30. 288° 13' 2,247.05 feet along the southerly boundary of the Saddle Road;
31. 276° 47' 30" 207.36 feet along the southerly boundary of the Saddle Road;
32. 271° 54' 30" 4.00 feet along the southerly boundary of the Saddle Road;
33. 1° 54' 30" 2,600.00 feet along Parcel B of Governor's Executive Order 1719;
34. 271° 54' 30" 3,215.00 feet along Parcel B of Governor's Executive Order 1719;

35. 181° 54' 30" 2,598.25 feet along Parcel B of Governor's Executive Order 1719;
36. 271° 59' 937.10 feet along the southerly boundary of the Saddle Road;
37. 269° 44' 30" 2,115.14 feet along the southerly boundary of the Saddle Road;
38. 280° 44' 110.88 feet along the southerly boundary of the Saddle Road;
39. 290° 20' 1,036.00 feet along the southerly boundary of the Saddle Road;
40. 288° 44' 275.15 feet along the southerly boundary of the Saddle Road;
41. 22° 28' 45" 5,075.66 feet along Mauna Kea Forest Reserve and Parcel "C" hereof;
42. 354° 00' 5,350.00 feet along Parcel "C" to the point of beginning and containing a GROSS AREA OF 15,480 ACRES, more or less, excluding therefrom approximately 60 acres of Saddle Road, leaving a NET AREA OF 15,420 ACRES, more or less.

PARCEL "B"

Land situated at Kaohe, Hamakua, Hawaii, Hawaii.

Being a portion of the Government Land of Kaohe and also being a portion of Mauna Kea Forest Reserve.

Beginning at a point on the southwesterly boundary of this piece of land, also being the northwest corner of Parcel A of Governor's Executive Order 1719 dated 26 January 1956, the coordinates of said point of beginning from Government Survey Triangulation Station "Omaokoili" being 19,465.73 feet North and 22,857.15 feet West, thence running by azimuths measured clockwise from True South:-

1. 108° 40' 7,832.30 feet along Parcel A to the boundary of Mauna Kea Forest Reserve;
2. 224° 59' 01" 4,000.00 feet along a portion of the Government Land of Kaohe;
3. 279° 30' 16,000.00 feet along the remainder of Mauna Kea Forest Reserve;

4. 315° 30' 3,000.00 feet along the remainder of Mauna Kea Forest Reserve;
5. 32° 30' 1,700.00 feet along the remainder of Mauna Kea Forest Reserve;
6. 5° 25' 30" 354.25 feet along the remainder of Mauna Kea Forest Reserve;
7. 37° 00' 2,750.00 feet along the remainder of Mauna Kea Forest Reserve;
8. 85° 30' 950.00 feet along the remainder of Mauna Kea Forest Reserve to the boundary of Parcel A of Governor's Executive Order 1719;
9. 213° 45' 1,650.00 feet along Parcel A of Governor's Executive Order 1719;
10. 101° 18' 10,869.06 feet along Parcel A of Governor's Executive Order 1719 to the point of beginning and containing an AREA OF 1,944 ACRES, more or less.

PARCEL "C" *Part of A-105-1 & 2 along the A-105-2*

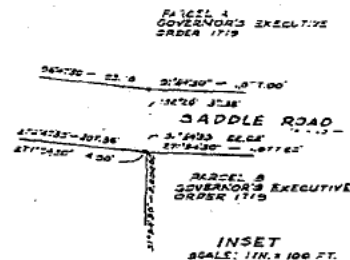
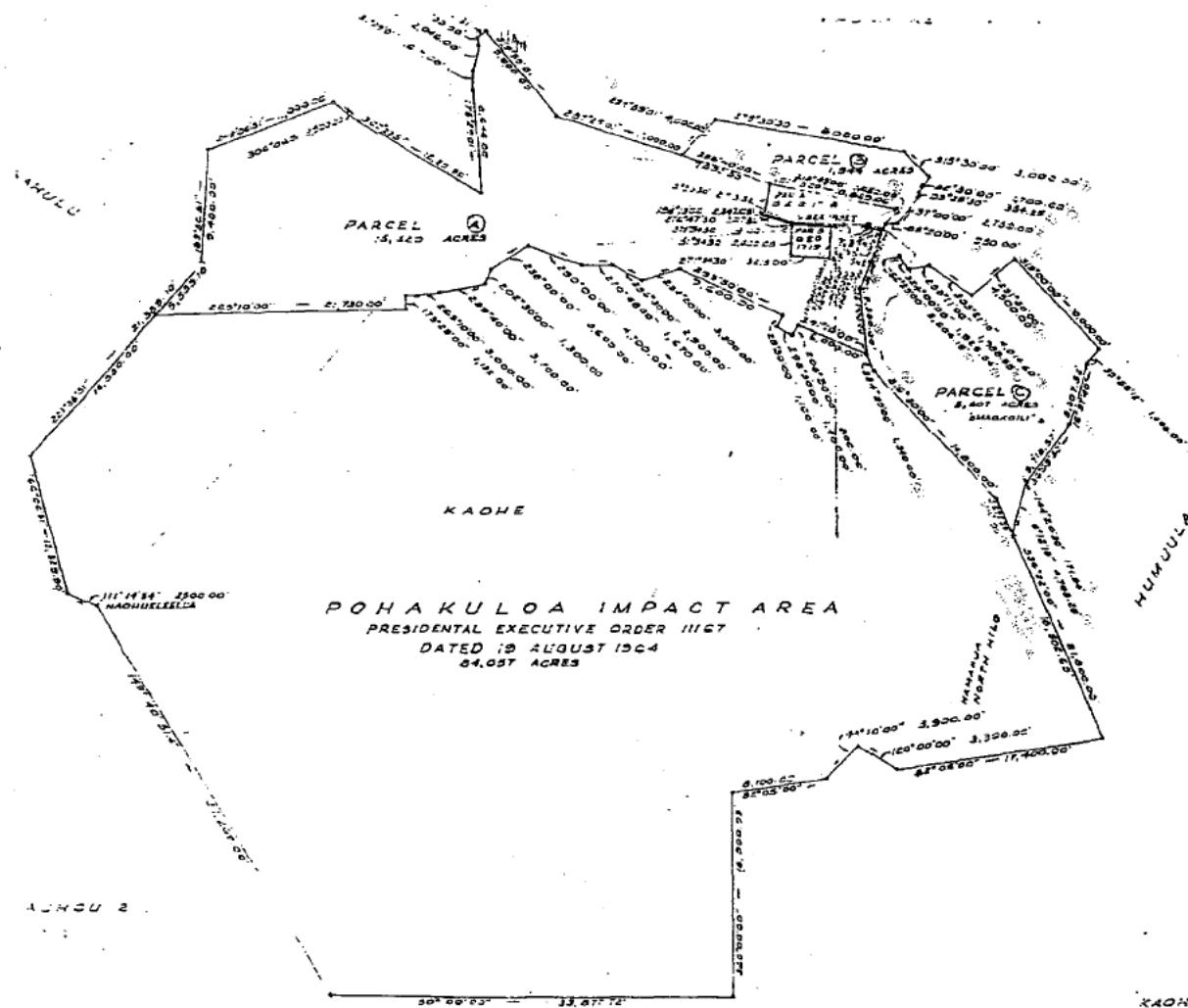
Land situated at Kahohe, Hamakua and Humuula,
North Hilo, Hawaii, Hawaii.

Beginning at the most southerly corner of this piece of land, also being on the easterly boundary of the proposed Impact Area of Pohakuloa Military Reservation, the coordinates of the said point of beginning from Government Survey Triangulation Station "Omaokoili" being 9685.30 feet South and 2632.28 feet West, thence running by azimuths measured clockwise from True South:-

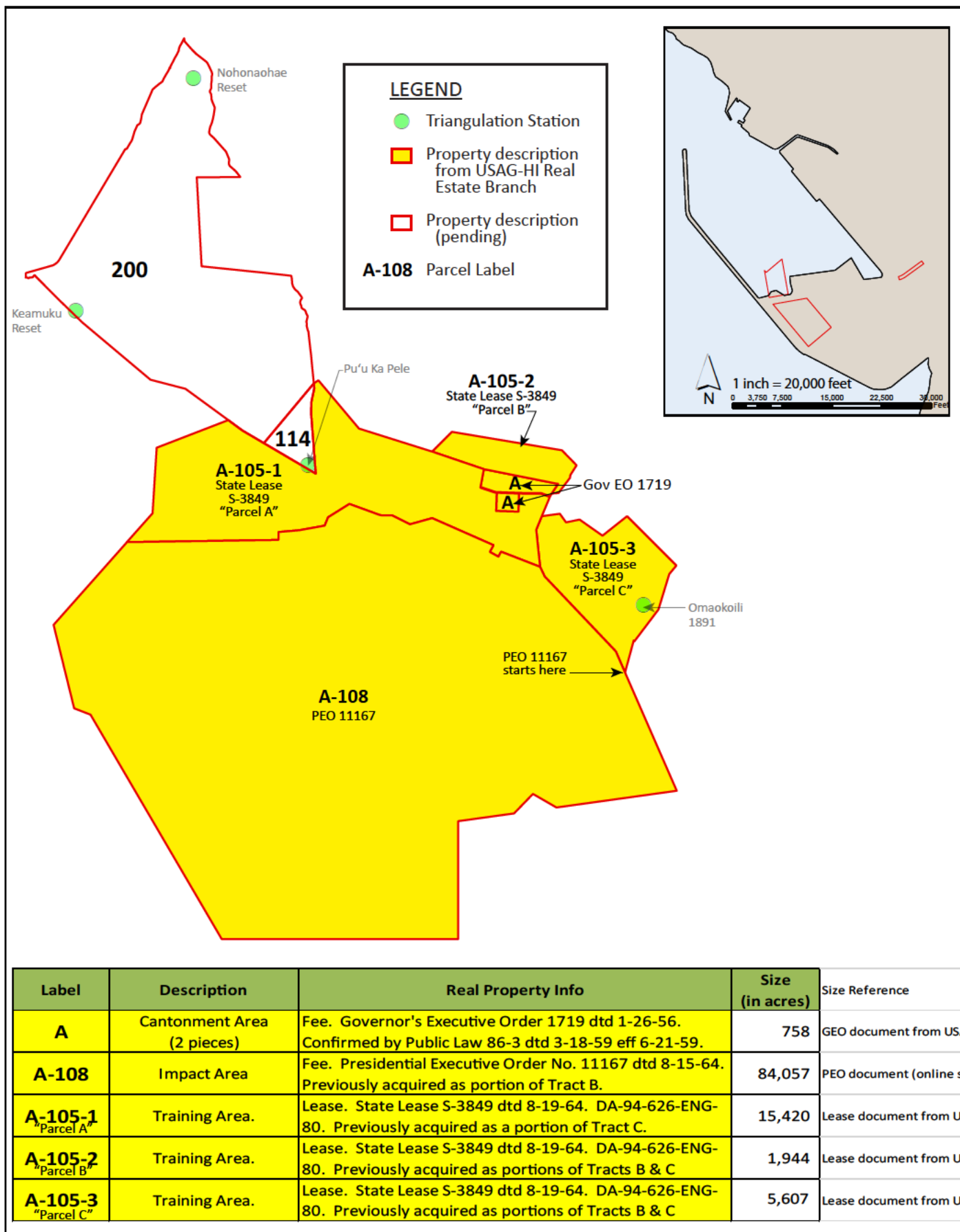
1. 156° 22' 3,297.35 feet along the proposed Impact Area of Pohakuloa Military Reservation;
2. 136° 30' 14,800.00 feet along the proposed Impact Area of Pohakuloa Military Reservation;
3. 154° 39' 1,540.00 feet along the proposed Impact Area of Pohakuloa Military Reservation;
4. 174° 00' 5,350.00 feet along Tract B of Pohakuloa Military Reservation;

5. 202° 28' 45" 2,100.00 feet along Tract B of Pohakuloa Military Reservation;
6. 262° 25' 2,604.15 feet along the remainder of Mauna Kea Forest Reserve (Governor's Proclamation dated May 2, 1938);
7. 324° 00' 1,525.54 feet along fence, along the remainder of Mauna Kea Forest Reserve (Governor's Proclamation dated May 2, 1938);
8. 258° 11' 1,988.55 feet along fence, along the remainder of Mauna Kea Forest Reserve (Governor's Proclamation dated May 2, 1938);
9. 305° 21' 10" 4,014.60 feet along the remainder of Mauna Kea Forest Reserve (Governor's Proclamation dated May 2, 1938);
10. 231° 30' 4,500.00 feet along the remainder of Mauna Kea Forest Reserve (Governor's Proclamation dated May 2, 1938);
11. 315° 00' 10,000.00 feet along the remainder of Mauna Kea Forest Reserve (Governor's Proclamation dated May 2, 1938) to the boundary between Humuula and Kaohe;
12. 39° 58' 12" 1,600.00 feet along Humuula;
13. 16° 57' 40" 5,307.56 feet along the remainder of Humuula;
14. 36° 58' 30" 5,718.57 feet along the remainder of Humuula;
15. 144° 20' 30" 171.84 feet along the northeasterly boundary of the Saddle Road to the boundary between Humuula and Kaohe;
16. 15° 12' 18" 4,768.28 feet along Humuula to the point of beginning, and containing a GROSS AREA OF 5,659 ACRES, more or less, excluding therefrom the Saddle Road, 100-foot wide right-of-way (52 acres, more or less) leaving a NET AREA OF 5,607 ACRES, more or less.





POHAKULOA TRAINING AREA
KAONE, HAMAKUA, PUHAKUHULA, NORTH KONA, HUMUULA, L.
HAWAII, HAWAII
U.S. ARMY ENGINEER DIVISION PACIFIC OCEAN
REAL ESTATE DIVISION



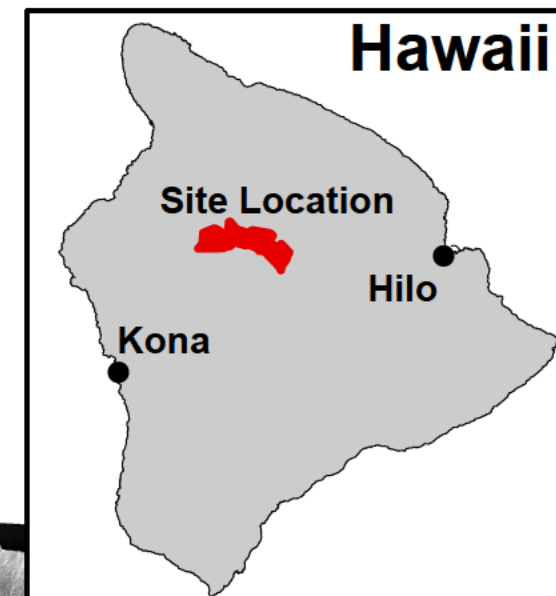
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POHAKULOA TRAINING AREA: HISTORIC AERIAL MAPS

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USGS



**Parcel A
A-105-1**

**Parcel B
A-105-2**

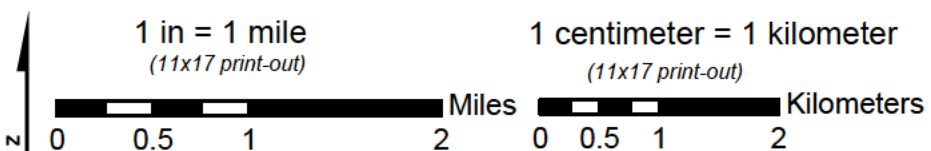
**Parcel C
A-105-3**

----- Route 200/Daniel K. Inouye Highway/Saddle Road (2016)

Site Location (PTA Parcel Boundaries/ID)

Source:
1954 Aerials: USGS. Dept of Interior. Hawaii Island Northwest and Northeast Quadrant.
From UH Manoa Online Library: Maps, Aerial Photographs and GIS.
Georeferenced Aerial Base: 2014 GeoEye IKONOS 1m resolution imagery for Hawaii

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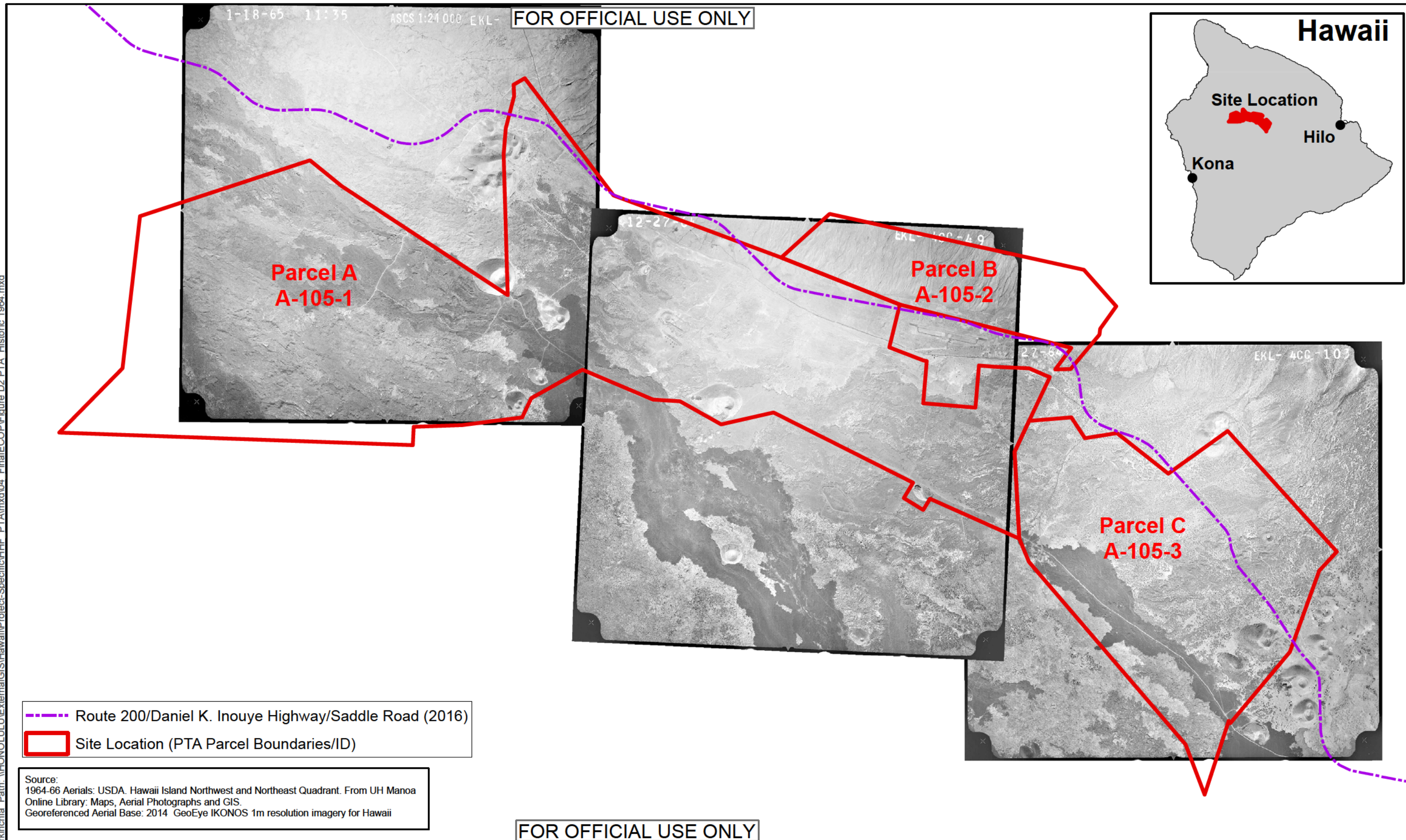


Final Environmental Condition of Property Report Phase I
Pohakuloa Training Area, HI

Appendix D
Figure D1
1954 Aerial
Pohakuloa Training Area, HI
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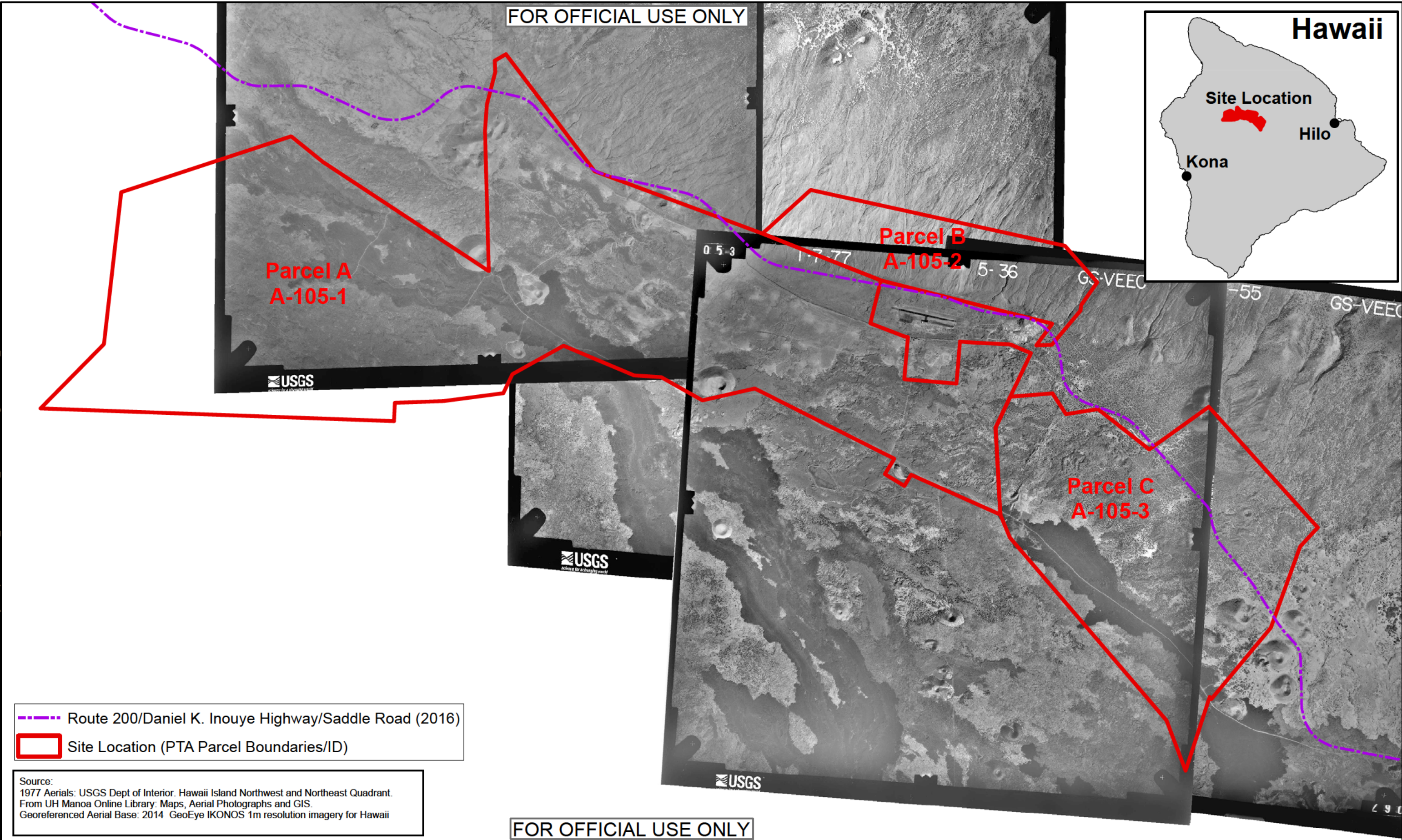
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k:\hawaii\external\GIS\Hawaii\Project-Specific\HHE\PTA\mxd\04_FinalECOPI\Figure D2 PTA_Historic_1964.mxd



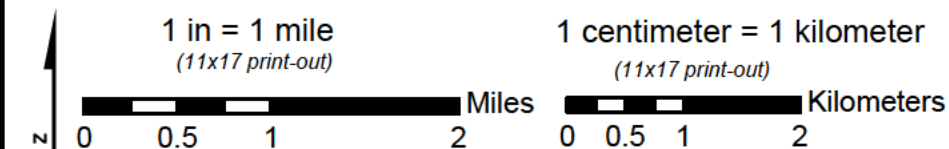
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k:\hawaii\GIS\Hawaii\Project-Specific\HHE_FTA\mxd\04_FinalECOPI\Figure D3 PTA_Historic_1977.mxd



- Route 200/Daniel K. Inouye Highway/Saddle Road (2016)
- Site Location (PTA Parcel Boundaries/ID)

Source:
1977 Aerials: USGS Dept of Interior. Hawaii Island Northwest and Northeast Quadrant.
From UH Manoa Online Library: Maps, Aerial Photographs and GIS.
Georeferenced Aerial Base: 2014 GeoEye IKONOS 1m resolution imagery for Hawaii

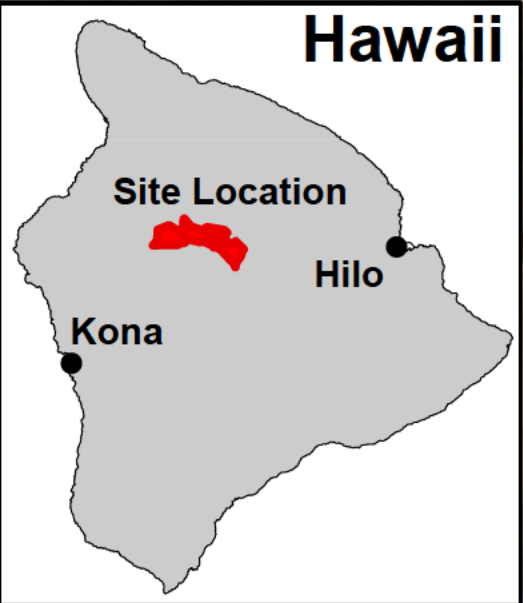


Final Environmental Condition of Property Report Phase I
Pohakuloa Training Area, HI

Appendix D
Figure D3
1977 Aerial
Pohakuloa Training Area, HI
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Daniel K. Inouye Hwy

Parcel A
A-105-1

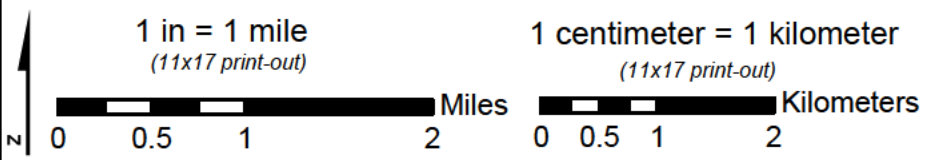
Parcel B
A-105-2

Parcel C
A-105-3

- Route 200/Daniel K. Inouye Highway/Saddle Road (2016)
- Site Location (PTA Leased Parcel Boundaries/ID)

Source:
2001/2002 Aerials GoogleEarth

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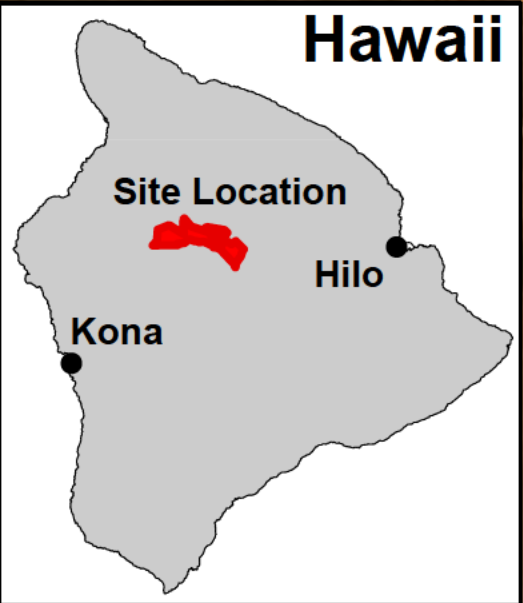
Final Environmental Condition of Property Report Phase I
Pohakuloa Training Area, HI

Appendix D
Figure D4
2001/2002 Aerial
Pohakuloa Training Area, HI
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\\hono\lul\external\GIS\Hawaii\Project-Specific\HHE\PTA\mxd\04_FinalECOPI\Figure D4 PTA Aerial 2002.mxd

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Parcel A
A-105-1

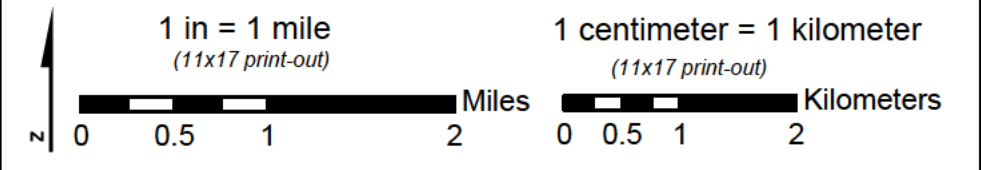
Parcel B
A-105-2

Parcel C
A-105-3

- Route 200/Daniel K. Inouye Highway/Saddle Road (2016)
- Site Location (PTA Parcel Boundaries/ID)

Source:
Georeferenced Aerial Base: 2014 GeoEye IKONOS 1m resolution imagery for Hawaii

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Final Environmental Conditions of Property Report Phase I
Pohakuloa Training Area, HI

Appendix D
Figure D5
2013/2014 Aerial
Pohakuloa Training Area, HI
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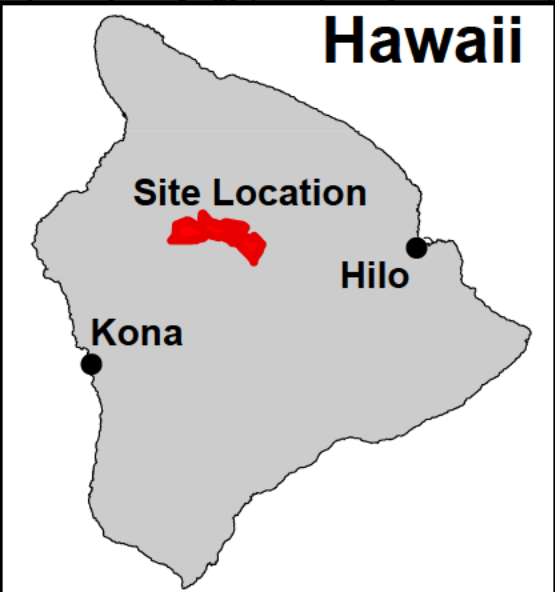
\\HONOLULU\external\GIS\Hawaii\Project-Specific\HIF PTA\mxd\04_FinalECOPI\Figure D5 PTA Aerial 2013.mxd

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**POHAKULOA TRAINING AREA: HISTORIC RANGE MAPS
AND TOPOGRAPHIC MAPS**

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Hawaii

Site Location

Hilo

Kona

Parcel A
A-105-1

Parcel B
A-105-2

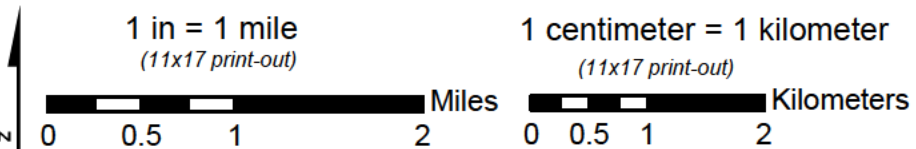
Parcel C
A-105-3

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Route 200/Daniel K. Inouye Highway/Saddle Road (2016)
Site Location (PTA Parcel Boundaries/ID)

Source: 1901 Topographic Map. W.D Alexander and Walter Wall. Hawaii Territory Survey. Georeferenced based created from ArcMap Topo Streaming: 2016.

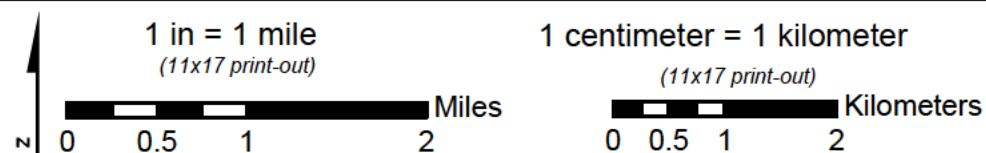
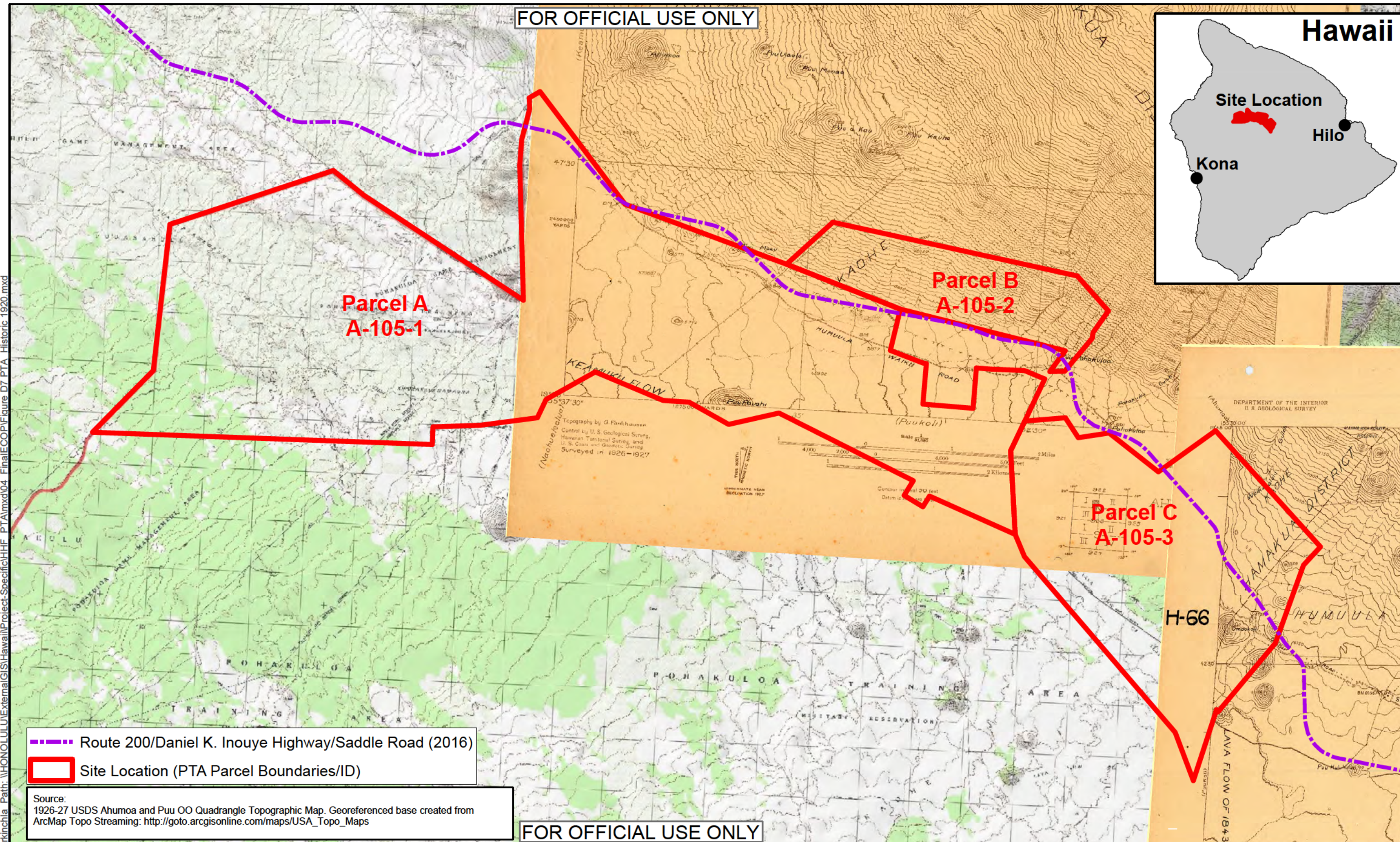
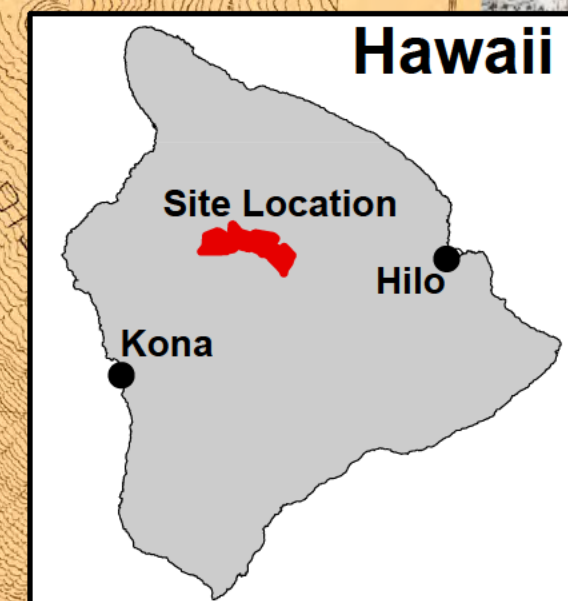


Final Environmental Condition of Property Report Phase I
Pohakuloa Training Area, HI

Appendix D
Figure D6
1901 Topographic Map
Pohakuloa Training Area, HI
FOR OFFICIAL USE ONLY

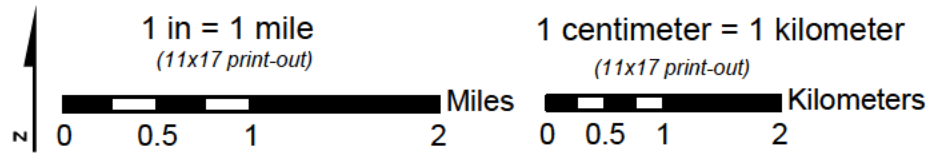
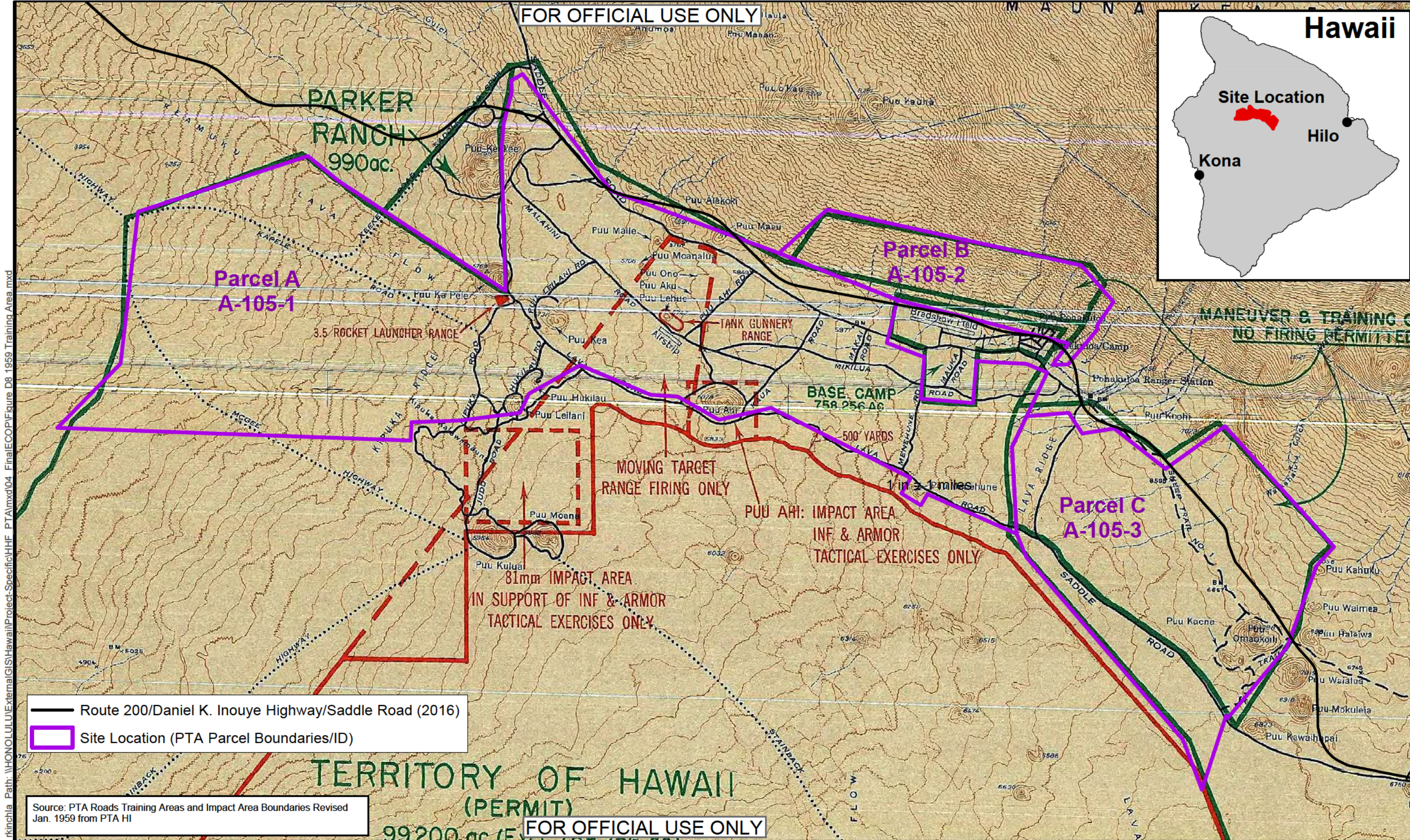
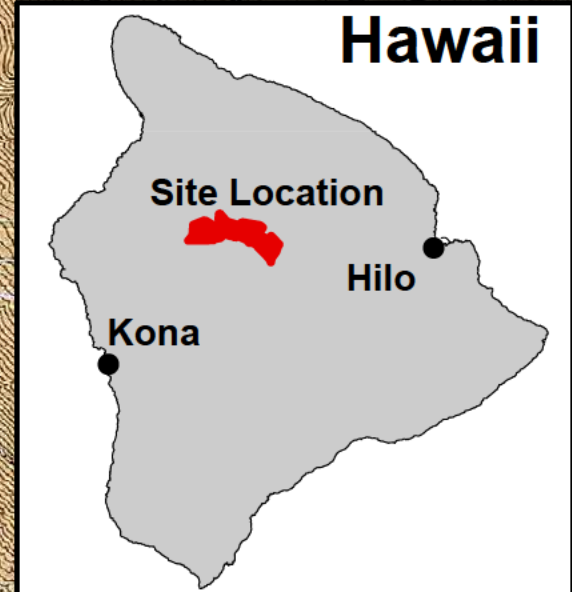
k:\hawaii\lul\external\GIS\Hawaii\Project-Specific\HHE_PTA\mxd\04_Final\ECOP\Figure D6 PTA_Historic 1901.mxd

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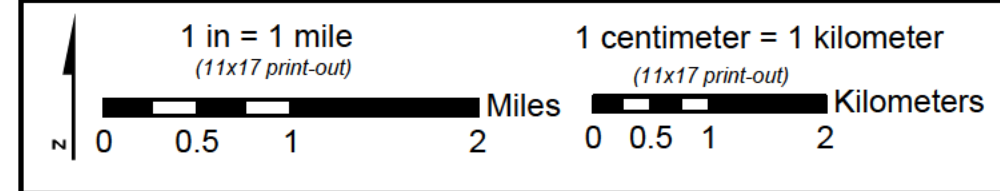
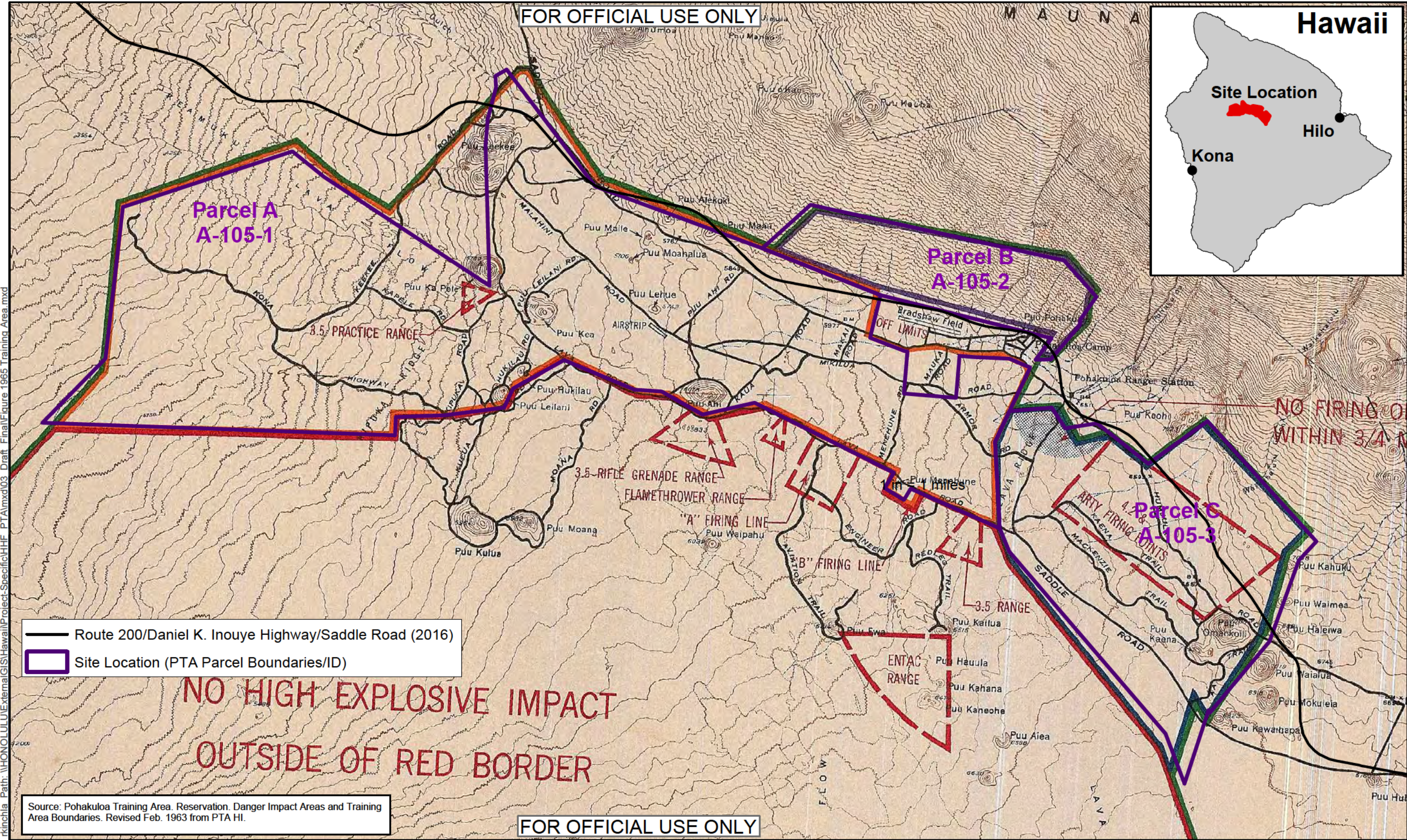
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Final Environmental Condition of Property Report Phase I
Pohakuloa Training Area, HI

Appendix D
Figure D8
1959 Roads, Training Areas, and Impact Area
Pohakuloa Training Area, HI
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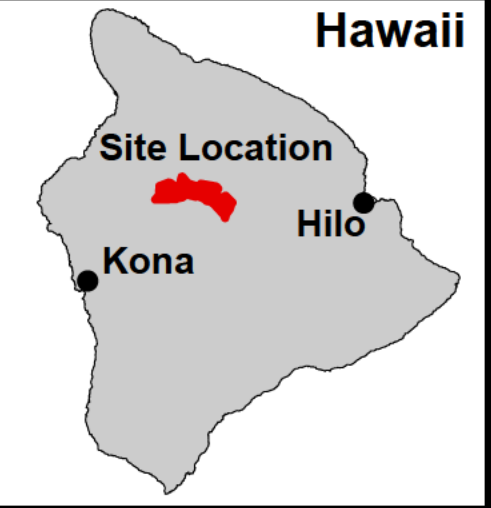


Final Environmental Condition of Property Report Phase I
Pohakuloa Training Area, HI

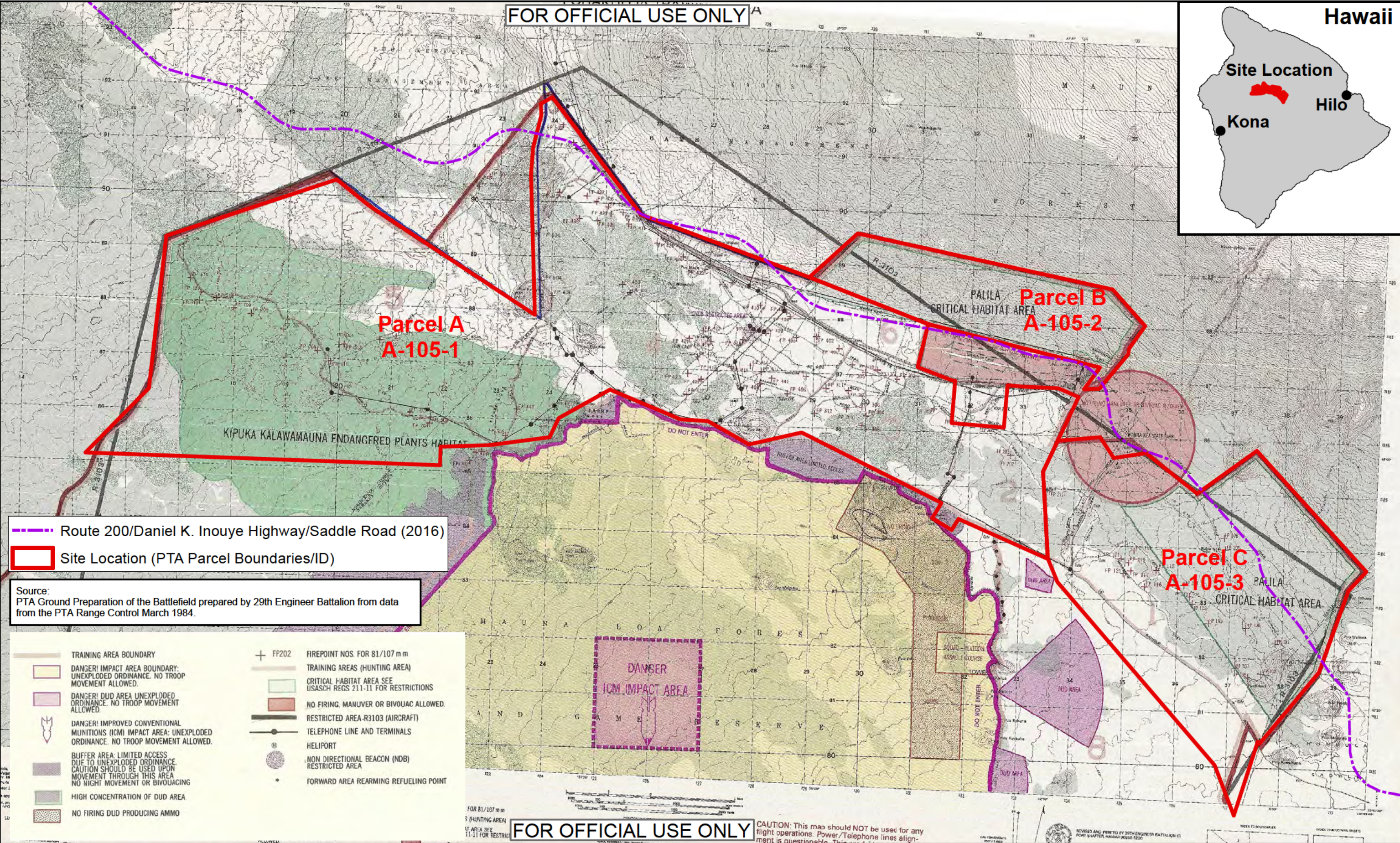
Appendix D
Figure D9
1965 Range Training and Danger Impact Areas
Pohakuloa Training Area, HI
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FOR OFFICIAL USE ONLY^A

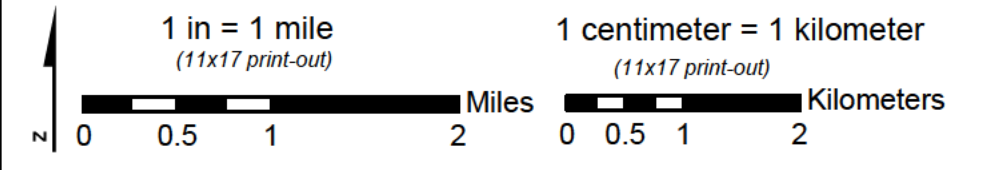


kinchia Path: \\HONOLULU\External\GIS\Hawaii\Project-Specific\HHE PTA\mxd\04 FinalECOPI\FigureD10 1984 Training Area.mxd



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CAUTION: This map should NOT be used for any flight operations. Power/Telephone lines alignment is questionable. This map is for official use only.

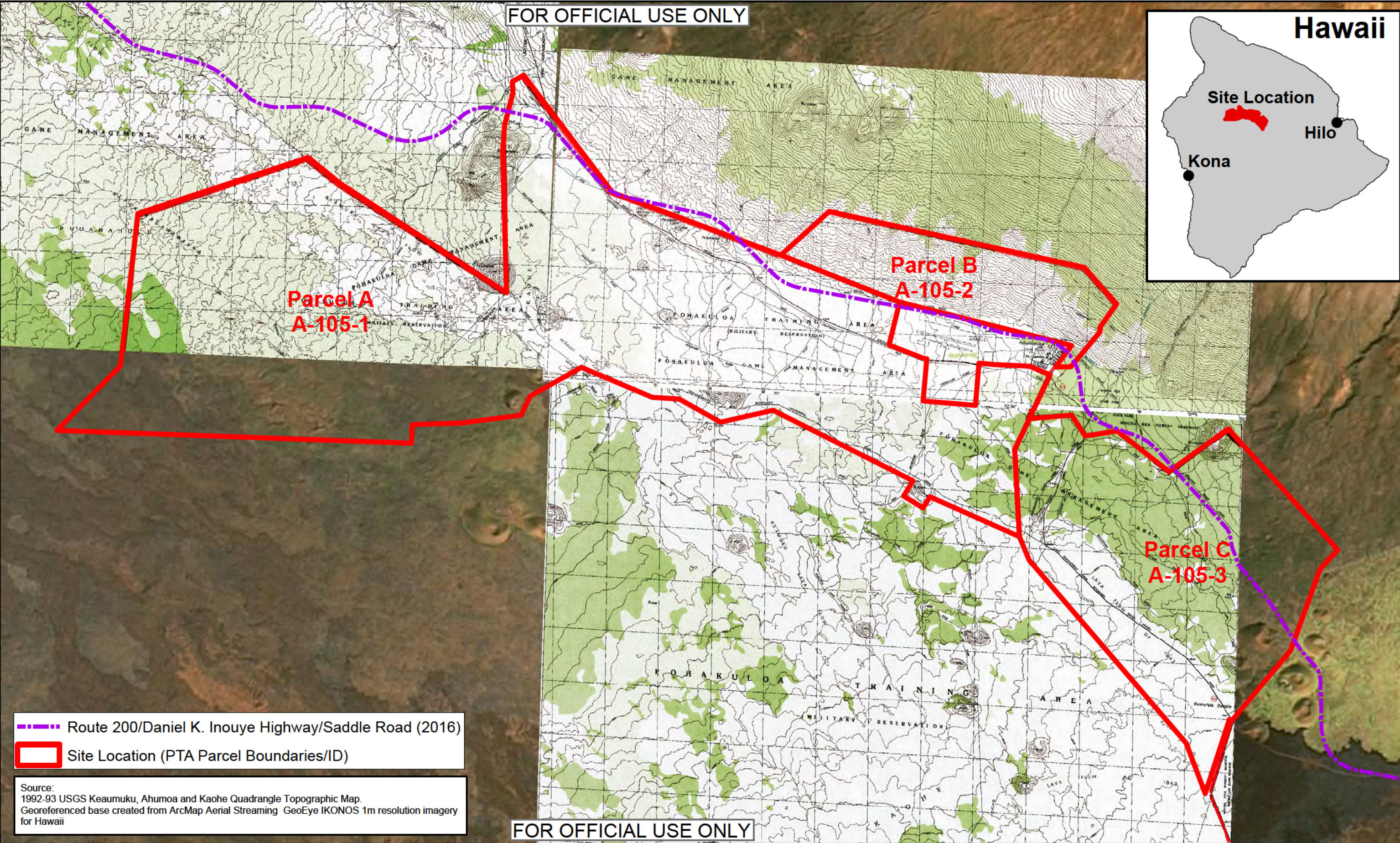
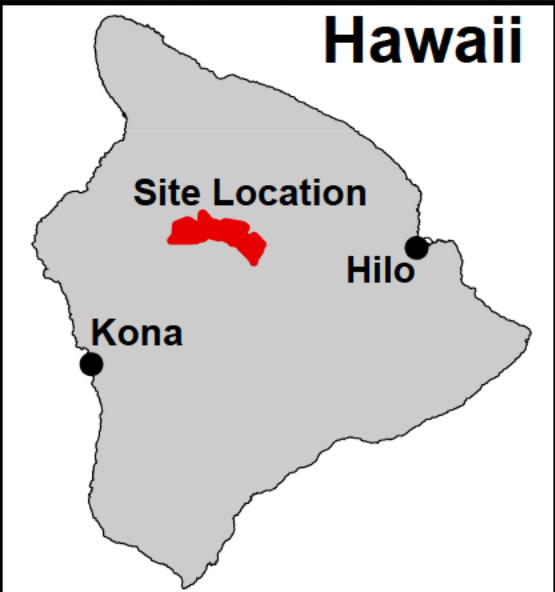


Final Environmental Condition of Property Report Phase I
Pohakuloa Training Area, HI

Appendix D
Figure D10
1984 Ground Preparation of the Battlefield Map
Pohakuloa Training Area, HI
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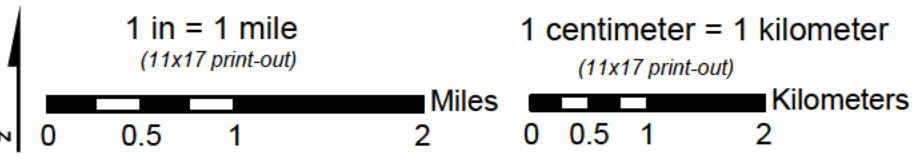
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--- Route 200/Daniel K. Inouye Highway/Saddle Road (2016)
Site Location (PTA Parcel Boundaries/ID)

Source:
1992-93 USGS Keaumuku, Ahumoa and Kaohe Quadrangle Topographic Map.
Georeferenced base created from ArcMap Aerial Streaming GeoEye IKONOS 1m resolution imagery for Hawaii



Final Environmental Condition of Property Report Phase I
Pohakuloa Training Area, HI

Appendix D
Figure D11
1992-93 Topographic Map
Pohakuloa Training Area, HI
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**FINAL ECOP REPORT PHASE I
POHAKULOA TRAINING AREA, HI**

APPENDIX E: USER QUESTIONNAIRE

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www.eaest.com

**PROPERTY OWNER/USER PRE-SURVEY QUESTIONNAIRE:
PHASE I ENVIRONMENTAL SITE ASSESSMENT**

EA has been retained to conduct an Environmental Condition of Property (ECOP) Preconstruction Assessment (PA) of the following property. The ECOP PA will involve site observations, interviews, and a review of available documentation. To ensure the success of the assessment, and in accordance with the Scope of Work for this assessment, we request that you complete this questionnaire and return it by e-mail (smoncrief@eaest.com) or rkinchla@eaest.com prior to the Site Visit.

Name of person completing questionnaire: [REDACTED]

Date: 6/7/16
Company: USAAR 4 W - RDIH

Length of association with property: Since 1991, 24 years

Phone Number: [REDACTED]

Property Name/Address: Pohakuloa Training Area, Pohakuloa, HI

Please check appropriate box(es): Property Owner: ☐ User: ☒

Directions: Please answer all questions to the best of your knowledge and in good faith. Mark the column corresponding to the appropriate response ("Y" = Yes; "N" = No; "U/NR" = Unknown). Additional details necessary to explain any yes or unknown responses should be provided in the "Comments" column.

QUESTION		RESPONSE			COMMENTS
		Y	N	U/NR	
1	Are you aware of any pending, threatened, or past litigation relevant to hazardous substances of petroleum products in, on or from the property?	X			units set up temporary fueling areas w/ fuel containers
2	Are you aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on or from the property?	X			UFO finding causes concern. Plaintiffs have identified them. Trying to get jump on them.
3	Are you aware of any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products?		X		155 mm and 105 mm mortar rounds
4	Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?		X		
5	Are you aware of any Activity and Use Limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?	X			LAND FILL - FENCED IN FORMER LANDFILL SOUTH OF EADONMENT PAULIA - MAWANE BIRUP STATION
6	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.	X			
7	Does the purchase price being paid for this property reasonably reflect 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?			X	

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E-1



PROPERTY OWNER/USER PRE-SURVEY QUESTIONNAIRE:
PHASE I ENVIRONMENTAL SITE ASSESSMENT
POHAKULOA TRAINING AREA, POHAKULOA, HI

QUESTION		RESPONSE			COMMENTS
		Y	N	U/NR	
8	Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional identify conditions indicative of releases or threatened releases? For example,				
	8A Do you know the past uses of the property?	λ			
	8B Do you know of specific chemicals that are present or once were present at the property?	X			Used just palletted as A dust suppressant Spoke to DAVE FAUCET ↳ ROUNDED FOR WOOD CON
	8C Do you know of spills or other chemical releases that have taken place at the property?		✓		
	8D Do you know of any environmental cleanups that have taken place at the property?		X		
9	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?		✓		Uncertain about dust palletted.

In addition to the above, are you aware of any of the following documents? If so, please provide copies to our Environmental Professional on the date of the on-site assessment:

- 1 - Environmental site assessment reports (i.e., Phase I, Phase II, tank testing results, radon, lead paint, or asbestos testing, etc.); Pa C [redacted] Safety
- 2 - Environmental compliance audit reports; NO
- 3 - Environmental permits (for example, solid waste disposal permits, hazardous waste disposal permits, wastewater permits, NPDES permits, underground injection permits); - DPW - [redacted]
- 4 - Registrations for underground storage tanks (USTs) and aboveground storage tanks (ASTs);
- 5 - Material safety data sheets;
- 6 - Community right-to-know plan;
- 7 - Safety plans; preparedness and prevention plans; spill prevention, countermeasure, and control plans; etc;
- 8 - Reports regarding hydrogeological conditions on the property and surrounding area;
- 9 - Notices or other correspondence from any governmental agency relating to past or current violations of environmental laws with respect to the property or relating to environmental liens encumbering the property;
- 10 - Hazardous waste generator notices or reports;
- 11 - Geotechnical studies;
- 12 - Risk assessments; and
- 13 - Recorded Activity and Use Limitations (AULs).

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**PROPERTY OWNER/USER PRE-SURVEY QUESTIONNAIRE:
PHASE I ENVIRONMENTAL SITE ASSESSMENT**

EA has been retained to conduct an Environmental Condition of Property (ECOP) Preconstruction Assessment (PA) of the following property. The ECOP PA will involve site observations, interviews, and a review of available documentation. To ensure the success of the assessment, and in accordance with the Scope of Work for this assessment, we request that you complete this questionnaire and return it by e-mail (smoncrief@eaest.com) or rkinchla@eaest.com prior to the Site Visit.

Date: 6-9-2016

Name of person completing questionnaire: [REDACTED] Company: CEMML
Length of association with property: 8 yrs Phone Number: [REDACTED]
Property Name/Address: Pohakuloa Training Area, Pohakuloa, HI

Please check appropriate box(es): Property Owner: ☐ User: ☒

Directions: Please answer all questions to the best of your knowledge and in good faith. Mark the column corresponding to the appropriate response ("Y" = Yes; "N" = No; "U/NR" = Unknown). Additional details necessary to explain any yes or unknown responses should be provided in the "Comments" column.

QUESTION		RESPONSE			COMMENTS
		Y	N	U/NR	
1	Are you aware of any pending, threatened, or past litigation relevant to hazardous substances of petroleum products in, on or from the property?		X		
2	Are you aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on or from the property?	X			Aware of the DU
3	Are you aware of any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products?		Y		
4	Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?	X			
5	Are you aware of any Activity and Use Limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?		X		
6	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.	X			
7	Does the purchase price being paid for this property reasonably reflect 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?		X		

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**PROPERTY OWNER/USER PRE-SURVEY QUESTIONNAIRE:
PHASE I ENVIRONMENTAL SITE ASSESSMENT
POHAKULOA TRAINING AREA, POHAKULOA, HI**

QUESTION		RESPONSE			COMMENTS
		Y	N	U/NR	
8	Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional identify conditions indicative of releases or threatened releases? For example,				
	8A Do you know the past uses of the property?	X			
	8B Do you know of specific chemicals that are present or once were present at the property?	X			
	8C Do you know of spills or other chemical releases that have taken place at the property?	X			Not on State Leased Land
	8D Do you know of any environmental cleanups that have taken place at the property?	X			
9	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? E-1	X			UXO

In addition to the above, are you aware of any of the following documents? If so, please provide copies to our Environmental Professional on the date of the on-site assessment:

- 1 - Environmental site assessment reports (i.e., Phase I, Phase II, tank testing results, radon, lead paint, or asbestos testing, etc.);
- 2 - Environmental compliance audit reports;
- 3 - Environmental permits (for example, solid waste disposal permits, hazardous waste disposal permits, wastewater permits, NPDES permits, underground injection permits);
- 4 - Registrations for underground storage tanks (USTs) and aboveground storage tanks (ASTs);
- 5 - Material safety data sheets;
- 6 - Community right-to-know plan;
- 7 - Safety plans; preparedness and prevention plans; spill prevention, countermeasure, and control plans; etc;
- 8 - Reports regarding hydrogeological conditions on the property and surrounding area;
- 9 - Notices or other correspondence from any governmental agency relating to past or current violations of environmental laws with respect to the property or relating to environmental liens encumbering the property;
- 10 - Hazardous waste generator notices or reports;
- 11 - Geotechnical studies;
- 12 - Risk assessments; and
- 13 - Recorded Activity and Use Limitations (AULs).

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**PROPERTY OWNER/USER PRE-SURVEY QUESTIONNAIRE:
PHASE I ENVIRONMENTAL SITE ASSESSMENT**

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Name of person completing questionnaire: [REDACTED] Date: 6/9/2016
Company: DPW/PTA
Length of association with property: 20 years Phone Number: [REDACTED]
Property Name/Address: Pohakuloa Training Area, Pohakuloa, HI

Please check appropriate box(es): Property Owner: ☐ User: ☒

Directions: Please answer all questions to the best of your knowledge and in good faith. Mark the column corresponding to the appropriate response ("Y" = Yes; "N" = No; "U/NR" = Unknown). Additional details necessary to explain any yes or unknown responses should be provided in the "Comments" column.

QUESTION		RESPONSE			COMMENTS
		Y	N	U/NR	
1	Are you aware of any pending, threatened, or past litigation relevant to hazardous substances of petroleum products in, on or from the property?		✓		
2	Are you aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on or from the property?		✓		
3	Are you aware of any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products?		✓		
4	Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?		✓		
5	Are you aware of any Activity and Use Limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?		✓		
6	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.		✓		
7	Does the purchase price being paid for this property reasonably reflect 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?			✓	

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PROPERTY OWNER/USER PRE-SURVEY QUESTIONNAIRE:
PHASE I ENVIRONMENTAL SITE ASSESSMENT
POHAKULOA TRAINING AREA, POHAKULOA, HI

QUESTION		RESPONSE			COMMENTS
		Y	N	U/NR	
8	Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional identify conditions indicative of releases or threatened releases? For example,		<input checked="" type="checkbox"/>		
	8A Do you know the past uses of the property?		<input checked="" type="checkbox"/>		
	8B Do you know of specific chemicals that are present or once were present at the property?		<input checked="" type="checkbox"/>		
	8C Do you know of spills or other chemical releases that have taken place at the property?		<input checked="" type="checkbox"/>		
	8D Do you know of any environmental cleanups that have taken place at the property?		<input checked="" type="checkbox"/>		
9	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?		<input checked="" type="checkbox"/>		

In addition to the above, are you aware of any of the following documents? If so, please provide copies to our Environmental Professional on the date of the on-site assessment:

- 1 - Environmental site assessment reports (i.e., Phase I, Phase II, tank testing results, radon, lead paint, or asbestos testing, etc.);
- 2 - Environmental compliance audit reports;
- 3 - Environmental permits (for example, solid waste disposal permits, hazardous waste disposal permits, wastewater permits, NPDES permits, underground injection permits);
- 4 - Registrations for underground storage tanks (USTs) and aboveground storage tanks (ASTs);
- 5 - Material safety data sheets;
- 6 - Community right-to-know plan;
- 7 - Safety plans; preparedness and prevention plans; spill prevention, countermeasure, and control plans; etc;
- 8 - Reports regarding hydrogeological conditions on the property and surrounding area;
- 9 - Notices or other correspondence from any governmental agency relating to past or current violations of environmental laws with respect to the property or relating to environmental liens encumbering the property;
- 10 - Hazardous waste generator notices or reports;
- 11 - Geotechnical studies;
- 12 - Risk assessments; and
- 13 - Recorded Activity and Use Limitations (AULs).

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**PROPERTY OWNER/USER PRE-SURVEY QUESTIONNAIRE:
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Name of person completing questionnaire: [REDACTED] Date: 8 June 2016
Company: _____
Length of association with property: 2006 Phone Number: _____
Property Name/Address: Pohakuloa Training Area, Pohakuloa, HI

Please check appropriate box(es): Property Owner: ☐ User: ☐

Directions: Please answer all questions to the best of your knowledge and in good faith. Mark the column corresponding to the appropriate response ("Y" = Yes; "N" = No; "U/NR" = Unknown). Additional details necessary to explain any yes or unknown responses should be provided in the "Comments" column.

QUESTION		RESPONSE			COMMENTS
		Y	N	U/NR	
1	Are you aware of any pending, threatened, or past litigation relevant to hazardous substances of petroleum products in, on or from the property?		✓		
2	Are you aware of any pending, threatened, or past administrative proceedings relevant to hazardous substances or petroleum products in, on or from the property?		✓		
3	Are you aware of any notices from any governmental entity regarding any possible violation of environmental laws or possible liability relating to hazardous substances or petroleum products?		✓		
4	Are you aware of any environmental cleanup liens against the property that are filed or recorded under federal, tribal, state or local law?		✓		
5	Are you aware of any Activity and Use Limitations (AULs), such as engineering controls, land use restrictions or institutional controls that are in place at the site and/or have been filed or recorded in a registry under federal, tribal, state or local law?		✓		
6	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.		✓		
7	Does the purchase price being paid for this property reasonably reflect 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?			✓	

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PROPERTY OWNER/USER PRE-SURVEY QUESTIONNAIRE:
PHASE I ENVIRONMENTAL SITE ASSESSMENT
POHAKULOA TRAINING AREA, POHAKULOA, HI

QUESTION		RESPONSE			COMMENTS
		Y	N	U/NR	
8	Are you aware of commonly known or reasonably ascertainable information about the property that would help the environmental professional identify conditions indicative of releases or threatened releases? For example,	<input checked="" type="checkbox"/>			
8A	Do you know the past uses of the property?	<input checked="" type="checkbox"/>			
8B	Do you know of specific chemicals that are present or once were present at the property?		<input checked="" type="checkbox"/>		The same used today
8C	Do you know of spills or other chemical releases that have taken place at the property?				Nothing besides the explosives used during training
8D	Do you know of any environmental cleanups that have taken place at the property?	<input checked="" type="checkbox"/>			
9	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?	<input checked="" type="checkbox"/>			MEC, explosives

In addition to the above, are you aware of any of the following documents? If so, please provide copies to our Environmental Professional on the date of the on-site assessment:

- 1 - Environmental site assessment reports (i.e., Phase I, Phase II, tank testing results, radon, lead paint, or asbestos testing, etc.);
- 2 - Environmental compliance audit reports;
- 3 - Environmental permits (for example, solid waste disposal permits, hazardous waste disposal permits, wastewater permits, NPDES permits, underground injection permits);
- ✓ 4 - Registrations for underground storage tanks (USTs) and aboveground storage tanks (ASTs); *only ASP-AST*
- 5 - Material safety data sheets;
- 6 - Community right-to-know plan;
- 7 - Safety plans; preparedness and prevention plans; spill prevention, countermeasure, and control plans; etc;
- 8 - Reports regarding hydrogeological conditions on the property and surrounding area;
- 9 - Notices or other correspondence from any governmental agency relating to past or current violations of environmental laws with respect to the property or relating to environmental liens encumbering the property;
- 10 - Hazardous waste generator notices or reports;
- 11 - Geotechnical studies;
- 12 - Risk assessments; and
- 13 - Recorded Activity and Use Limitations (AULs);—

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**FINAL ECOP REPORT PHASE I
POHAKULOA TRAINING AREA, HI**

APPENDIX F: RESPONSE TO COMMENTS

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Comments for the DRAFT Phase 1 PTA ECOP Hawaii, HI					Comment period START: 01 September 2016	
					Comment period END: 15 February 2017	
Comment Number	Commenter	Page(s)	Section	Line(s)	Comment	Response
Comments Received on 04 January 2017						
1	CN	all			There should be consistent use of Hawaiian diacritical marks throughout the document.	Concur - The changes have been made as requested. Since use of diacritical marks varies between official entities in their titles and official place names (e.g., Hawaii State Department of Health or publications), consistent use of diacritical symbols would not be possible throughout the document. Because of this variability all diacritical marks have been removed from this document.
2	CN	ES-1	ES	6	The correct/exact acreage should be used instead of 23,000. Here and in a couple of other places in the document.	Concur - The changes have been made as requested in reference to 22,971 acres.
3	CN	ES-2	ES	38-39	Davy Crockett should be referred to as "Davy Crockett Weapons System" or "recoilless spigot gun" vice rifle - here and throughout the document.	Concur - The changes have been made as requested including the maps and appendices.
4	CN	ES-2 to ES-3	ES	40-41, 1-3	Please cite the report.	Concur - The changes have been made as requested and now state: "...the Final PTA Firing Range Baseline Human Health Risk Assessment for Residual Depleted Uranium was completed and found no adverse human health impacts likely to occur as a result of exposure to the uranium present in the soil at PTA under current land uses (Cabrera Services 2010)."
5	CN	ES-vii	ES		I think the GC needs a place to sign.	Concur - Section 1.3 Garrison Commander Certification has been added for this purpose.
6	CN	3-1	3.2	20	Please change "occupant" to "lessee".	Concur - A change was made from occupant to lessee.
7	CN	3-12	3.5.8	30	The range referenced is not shown on Figure D8.	Concur - However, no change to Figure D8 has been made. The former tank gunnery range was located above the former airstrip in the middle of the Subject Site on D8. This area is located north of the current MOUT area. The area description has been updated to "tank gunnery range" for clarity.
8	CN	7-5	7.3.6	3-7	In reference to MI sampling, there is not always soil that can be sampled due to large amounts of a'a and pahoehoe lava.	Concur - Because MI sampling involves the collection of aliquots of soil across the entire decision unit, the location of each aliquot can be adjusted to those areas where soil is present rather than those where solid aa and pahoehoe lava are located as long as it is still within the decision unit. The following sentence will be added "In the event that the MI sample aliquot location is within aa or pahoehoe lava, the aliquot location will be moved to the closest location where fine-grained material of the sufficient aliquot volume may be collected."
9	CN	7-5	7.3.6	6-7	I think the last sentence needs to be revised/more details added. Clarify what "located" means with respect to MC - detect? detect above an action level? what action level?	Concur - The last sentence was changed as follows: "If suspected UXO are identified, prior to immediately leaving the area, the field crew will record the location with a global positioning system unit and/or flagging and notify the PTA Explosive Ordinance Disposal unit for the appropriate safe removal of the UXO item. If munitions constituents are found in soil above HDOH Environmental Action Levels or USEPA Regional Screening Levels, recommendations will be made for the appropriate management in accordance with applicable State of Hawaii and federal guidelines."
Comments Received on 04 January 2017						

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1	A. Loo	ES-2	ES	28 & 29	TMK 3-4-4-016:005: Suggest revising this sentence to ... located within PTA "A-105-1, A-105-2, and A-105-3."	Concur - The text has been revised to identify the Parcels based on the 17 Aug 1964 lease (lease) boundaries, and are identified as Parcel A (A-105-1), B (A-105-2) and C (A-105-3) throughout the document. The TMK boundaries do not align with those of the lease parcels.
2	A. Loo	ES-2	ES	29	TMK 3-4-4-016:005: TMK approximate acreage is stated as 13,300 acres. Reference attached Hawaii County Parcel 44016005 map which indicates 12,892 acres. Please re-verify acreage.	Concur - The acreage differed between the County of Hawaii TMKs and the lease. The area descriptions have been revised to reflect the Parcel descriptions and the acreage specified in the lease agreement. The Parcel boundaries do not follow the TMK boundaries precisely and sub-divide the largest TMK. The total acreage of the subject site listed in our report reflects the lease total of 22,971 acres. Also since TMK boundaries do not align with parcels the text throughout the document has been revised to emphasize locations with respect to the Parcels based on the 17 Aug 1964 lease (lease) boundaries, and are identified as Parcel A (A-105-1), B (A-105-2) and C (A-105-3).
3	A. Loo	3-1	3.1	8	• (3)4-4-016:005: Refer to Comment 2 above. Please re-verify acreage.	Concur - The text has been revised to identify the Parcels based on the lease boundaries. The TMK boundaries do not align with lease parcels. The text identifies the TMKs within the Parcels, but emphasizes the Parcel IDs.
4	A. Loo	4-1	4.1	8-17	Reference attached Information Paper and Exhibits A thru F and Draft ECOP Page D-27. Please revise accordingly.	Concur - The changes have been made as requested and the documents have been cited as needed.
5	A. Loo	4-1	4.2	23	• (3)4-4-016:005: Refer to Comments 2 and 3 above. Please re-verify acreage.	Concur - Please see our responses to Comments 2 and 3.
6	A. Loo	5-1	Table 1	21, Column 4	19 Aug 1964 - Present: Refer to Comment 4 above. Suggest revising Column 4 to ... "Lessee under DLNR State Lease S-3879 (US Lease DA-94-626-ENG-80)".	Concur - Table 1 has been simplified for clarity to show historical ownership only. Information about lessees have been removed.
7	A. Loo	D-27	A-105-1, A-105-2, and A-105-3		DA94-626-ENG-80 should be revised to "DA-94-626-ENG-80".	Concur - The changes have been made as requested.
Comments Received on 06 February 2017						
1	L. Schnell	3-5	Section 3.5.4	para. 3	The Four candidates were listed as endangered in September 2016. We have 20 federally-listed plant species.	Concur - This is new information since the Final Rule occurred after completion of this draft document. The total listed in the document has been updated to 20 endangered species.
2	L. Schnell	3-5	Section 3.5.4	para. 4	I do not know where they got six endangered birds from. The USAG-HI 2010 Implementation plan lists 3 endangered bird species on page 1 of the Executive Summary. We have 4 endangered birds that utilize PTA habitats - Hawaiian Hawk, Hawaiian Goose, Hawaiian Petrel, and Band-rumped Storm Petrel (listed in Sep 2016).	Concur - The text identifies the four endangered bird species at PTA (Hawaiian Hawk, Hawaiian Goose, Hawaiian Petrel, and Band-rumped Storm Petrel). The Subject Site also contains designated critical habitat for the palila (<i>Loxioides bailleui</i>) - while it hasn't been observed since 1980, the critical habitat is still present at the Subject Site. The document includes discussion of the palila critical habitat. Because the Hawaiian honeycreeper (<i>Hemignathus munroi</i>) has not been seen since 1995, and designated critical habitat for this species is not within PTA, discussion of this bird has been removed.

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3	L. Schnell	3-5	Section 3.5.4	para. 5	This sentence is unclear. I assume they mean not all "animal" species. Is this how they came up with additional endangered animals? They need to explain this better otherwise the "fact" that PTA has 6 endangered birds gets into the literature and then gets copied and pasted into future documents.	Concur - The text has been revised and now reads: "As of 2016, the Subject Site provides potential habitat for 20 endangered plant species, 1 endangered mammal species (<i>Lasiurus cinereus semotus</i>), 1 endangered invertebrate species (<i>Hylaean anthracinus</i>), 4 endangered bird species, and designated critical habitat of the palila (<i>Loxioides bailleui</i>) (USAG-HI 2010, USFWS 2016b, 2016c). Not all of the species have been specifically identified within the Subject Site, but the area provides potential habitat for them."
4	L. Schnell	3-5	Section 3.5.4	para. 4	This entire paragraph contains OLD information is totally incorrect. Who ever is writing this document needs to submit a request for information to my office to get updated information. Over 37,000 ac have been fenced as of 2013.	Concur - The text refers to the Subject Site Parcels A, B, and C only. The Restricted Areas shapefile from July 2016 indicates a restricted area of approximately 8,500 acres within the Subject Site, primarily the western portion of Parcel A, an Area of Species Recovery in Parcel A, and the southern border of Parcel C. These areas appear to be distinct from the palila designated critical habitat. The text has been clarified to read "Over 37,000 acres at PTA have been fenced-off from roaming herds of sheep (<i>Ovis aries</i>), goats (<i>Capra hircus</i>), and pigs (<i>Sus scrofa</i>). The fenced-off areas include approximately 8,500 acres within Parcels A, B, and C (Appendix A, Figure 3: See "restricted areas")."
5	L. Schnell	3-5	Section 3.5.4	para. 5	Palila Critical Habitat (PCH) is located in portions of TA 1, 2, 3, 4, 10, and 11.	Concur - The text will refer to the Subject Site Parcels B and C.
6	L. Schnell	3-6	Section 3.5.4	formerly para. 5; current para. 3	This sentence regarding active removal of sheep from PCH is only partially true. The State fenced a portion of PCH on PTA (TA 2, 10, 11). While the State actively controls ungulates inside their fence, they do not control ungulates on Army-controlled lands (TA 2, 10, and 11). Ungulates are NOT actively controlled in unfenced sections of PCH (TA 1,3,4) under Army-control. The Army does allow access for recreational game mammal hunting by the public as training permits.	Concur - The following sentence regarding ungulate removal at the PCH has been removed. "The area has been undergoing active ungulate removal to prevent grazing on mamane, the preferred food and nesting location of the palila (Camp, Brinck, and Banko 2012, 2014). (USGS 2010)."
7	L. Schnell	3-6	Section 3.5.4	para. 6	This sentence should be "Three endangered birds". This list should include Band-rumped Storm petrel. Also, we know the band-rumped storm petrel breeds at PTA seasonally.	Concur - The current text only refers to the Subject Site of Parcels A, B, and C. An additional sentence has been added: "The endangered band-rumped storm petrel (<i>Oceanodroma castro</i>), Hawaiian hawk/'io (<i>Buteo Solitarius</i>) and Hawaiian petrel/'ua'a (<i>Pterodroma sandwichensis</i>) have been observed south of the Subject Site. The band-rumped storm petrel (<i>Oceanodroma castro</i>) is known to breed seasonally within PTA."
Comments Received on 15 February 2017						
1	J. Taomia	3-6	3.5.5	para. 1	3.5.5 insert "and" in from of resource and delete "cultural purposes"	Concur - The following deletions and insertion were made to the referenced text: "Historically, the PTA area was primarily used for transportation, bird hunting, <u>and</u> resource gathering and cultural purposes prior to and after European contact. The Mauna Kea adze quarry northeast of the general PTA area provided valuable basalt tools from 1000 AD to the mid-17th century (National Aeronautics and Space Administration 2004)."
2	J. Taomia	3-6	3.5.5	para. 1	replace with west	Concur - The subject text has been updated to " Five miles west of PTA..."

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3	J. Taomia	3-6	3.5.5	para. 2	"I don't know what the subject site is because I don't have the full document, and therefore I cannot evaluate how accurate the sentence is. Given the first two sentences of the paragraph I'm a bit skeptical." In a follow-up email on 15 February 2015 J. Taomia clarified: "The references are fine. I was thinking reports, not newspaper and bulletin publications. Although the Lewis & Taomia article is still reporting on work done in the IPBC."	Comment acknowledged and noted.
4	J. Taomia	3-6	3.5.5	para. 2	Ref: lines 14-18: The USAG-HI 2008 report that is cited (we usually reference it as Taomia et al 2008) was an annual report for the RCUH Coop. At that time the Annual Reports were following the State's fiscal year, July 1 to June 30, so it looks like two years (e.g., 2007-2008). But cultural resources studies began at PTA in 1977, and the Cultural Resources Section with an archaeologist permanently stationed at PTA was established in 1997. And has been in operation ever since with ongoing field work every year, and additional outside contracts as needed for larger projects. I don't know if that helps to re-write those sentences. Let me know if you have any more questions.	Concur - References have been changed to Taomia et al. 2008, and Taomia et al. 2013 to coordinate with PTA. A new paragraph was added to the text that states: "Cultural resources studies began at PTA in 1977, and an archaeologist has been permanently stationed at PTA since 1997. The cultural resource management projects are designed to meet the requirements under Section 106 of the National Historic Preservation Act, the Archaeological Resources Protection Act, the Native American Graves Protection and Repatriation Act, and AR Regulation AR-200-4 among others. Prior to, and during construction projects, the Cultural Resources Section performs archaeological surveys within the proposed project area(s), monitors construction activities, and gathers additional information to facilitate drafting site protection plans (Taomia et al. 2008). If needed, additional contracts are used to conduct field work on larger-scale projects."
5	J. Taomia	3-6	3.5.5	para. 2	I don't know what this is referring to. PTA Cultural Resources was established in the 1990s and has been active ever since. I don't know how to fix this because I don't know what they're trying to say, but the existing text mischaracterizes PTA Cultural Resources Section	Concur - See clarification for Comment 3. We were primarily concerned with the relevant regulations for Cultural Resource Management. The Taomia et al 2008 states that all Cultural Resource Management projects must meet the <ul style="list-style-type: none"> • Section 106 of the National Historic Preservation Act and associated Codes of Federal Regulations • Archaeological Resources Protection Act (ARPA) • Native American Graves Protection and Repatriation Act (NAGPRA). • Army Regulation AR-200-4
6	J. Taomia	3-6	3.5.5	para. 3	Delete the following sentence: In 2006, PTA was part of a two-year cultural resource activity which inventoried and monitored cultural sites under Section 106, the Archaeological Resources Protection Act, the Native American Graves Protection and Repatriation Act and AR Regulation AR-200-4. Cultural resource monitoring is on-going and Section 106 consultations are conducted for potentially impacted areas (USAG-HI 2008).	Concur - The text in the revised document had been addressed and we have updated the RTC matrix that will be included in Appendix F as follows: The following deletions were made to the referenced text: " In 2006, PTA was part of a two-year cultural resource activity which inventoried and monitored cultural sites under Section 106, the Archaeological Resources Protection Act, the Native American Graves Protection and Repatriation Act and AR Regulation AR-200-4. Cultural resource monitoring is on-going and Section 106 consultations are conducted for potentially impacted areas (USAG-HI 2008). "
7	J. Taomia	3-6	3.5.5	para. 3	The 2013 cave season did not do any work in the Subject Site that is the topic of the ECOP, so the end of the sentence on lines 19-20 on page 3-6 should be deleted ("many during the 2013 cave survey within the Subject Site"). That work was all in the IPBC, which is south of the Subject Site.	Concur - The sentence now reads "The richest archaeological sites have been found within lava tube caves south of the Subject Site."

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8	J. Taomia	3-6	3.5.5	para. 3	Delete/replace: The primary areas of interest <u>richest archaeological</u> sites have been found within lava tube caves...."	Concur - The sentence has been revised as follows: "The richest archaeological sites have been found within lava tube caves south of the Subject Site."

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