Record of Decision
Site 10, Building 65 Disposal Area
NRTF LUALUALEI, JOINT BASE PEARL HARBOR-HICKAM, LUALUALEI ANNEX, OAHU, HAWAII

NCTAMS PAC National Priorities List Site

April 2015

Department of the Navy
Naval Facilities Engineering Command, Hawaii
400 Marshall Road
JBPHH HI 96860-3139

Architect-Engineer Services
Contract Number N62742-11-D-1821, CTO 0007

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ACRONYMS AND ABBREVIATIONS

°F	degree Fahrenheit
µg/L	micrograms per liter
bgs	below ground surface
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CERCLIS	CERCLA Information System
CFR	Code of Federal Regulations
COPC	chemical of potential concern
CSM	conceptual site model
CTO	Contract Task Order
DoD	Department of Defense, United States
DOH	Department of Health, State of Hawaii
DON	Department of the Navy, United States
DRO	diesel range organic
EAL	environmental action level
EPA	Environmental Protection Agency, United States
ERA	Environmental Risk Assessment
ERP	Environmental Restoration Program
FFA	Federal Facility Agreement
IAS	Initial Assessment Study
JBPHH	Joint Base Pearl Harbor-Hickam
LRO	lube oil range organic
MCL	maximum contaminant level
mg/kg	milligram per kilogram
MI	multi-increment
msl	mean sea level
NAVFAC Hawaii	Naval Facilities Engineering Command, Hawaii
NAVFAC Pacific	Naval Facilities Engineering Command, Pacific
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NCTAMS PAC	Naval Computer and Telecommunications Area Master Station, Pacific
NEESA	Naval Energy and Environmental Support Activity
NFA	no further action
NMC EAD DET PH	Navy Munitions Command, East Asia Division Detachment, Pearl Harbor
no.	Number
NPL	National Priorities List
NRTF	Naval Radio Transmitting Facility
OU	operable unit
PAH	polynuclear aromatic hydrocarbon
PCB	polychlorinated biphenyl
PP	Proposed Plan
RAB	Restoration Advisory Board
RBS	Risk-Based Screening
RCRA	Resource Conservation and Recovery Act
RI	Remedial Investigation

ROD	Record of Decision
RSL	Regional Screening Level
SARA	Superfund Amendments and Reauthorization Act
SRA	Screening Risk Assessment
TPH	Total Petroleum Hydrocarbon
U.S.	United States
VOC	volatile organic compound

1. Declaration

1.1 Site Name and Location

This record of decision (ROD) has been prepared by the United States (U.S.) Navy for the Building 65 Disposal Area located within the Naval Radio Transmitting Facility (NRTF) Lualualei of Joint Base Pearl Harbor-Hickam (JBPHH), Lualualei Annex, on the island of Oahu, Hawaii (Figure 1).

NRTF Lualualei is one of two operable units (OUs) located within the Naval Computer and Telecommunications Area Master Station, Pacific (NCTAMS PAC) National Priorities List (NPL) site. JBPHH Wahiawa Annex is the other OU within the JBPHH facility. NRTF Lualualei was placed on the U.S. Environmental Protection Agency (EPA) NPL in May 1994 as EPA Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) Information System (CERCLIS) Number (no.) HI0170090054.

1.2 Statement of Basis and Purpose

This ROD documents, for the Administrative Record, the decision by the U.S. Department of the Navy (DON) and the EPA, with concurrence from the State of Hawaii Department of Health (DOH) to select the final remedy of no further CERCLA action or No Further Action (NFA) [1] for the Building 65 Disposal Area located at NRTF Lualualei.

The final remedy was chosen in accordance with CERCLA, as amended by the Superfund Amendments and Reauthorization Act (SARA), and to the extent practicable the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) and the Office of the President of the U.S. Executive Order 12580. Information supporting the decisions leading to the selected remedy is contained in the Administrative Record file for the site.

1.3 Description of the Selected Remedy

The Navy and EPA, with the concurrence of DOH, has determined that no CERCLA remedial action at the Building 65 Disposal Area (i.e., no engineering or institutional controls and no treatment or remediation) is necessary to be protective of human health and the environment. This decision is based on the:

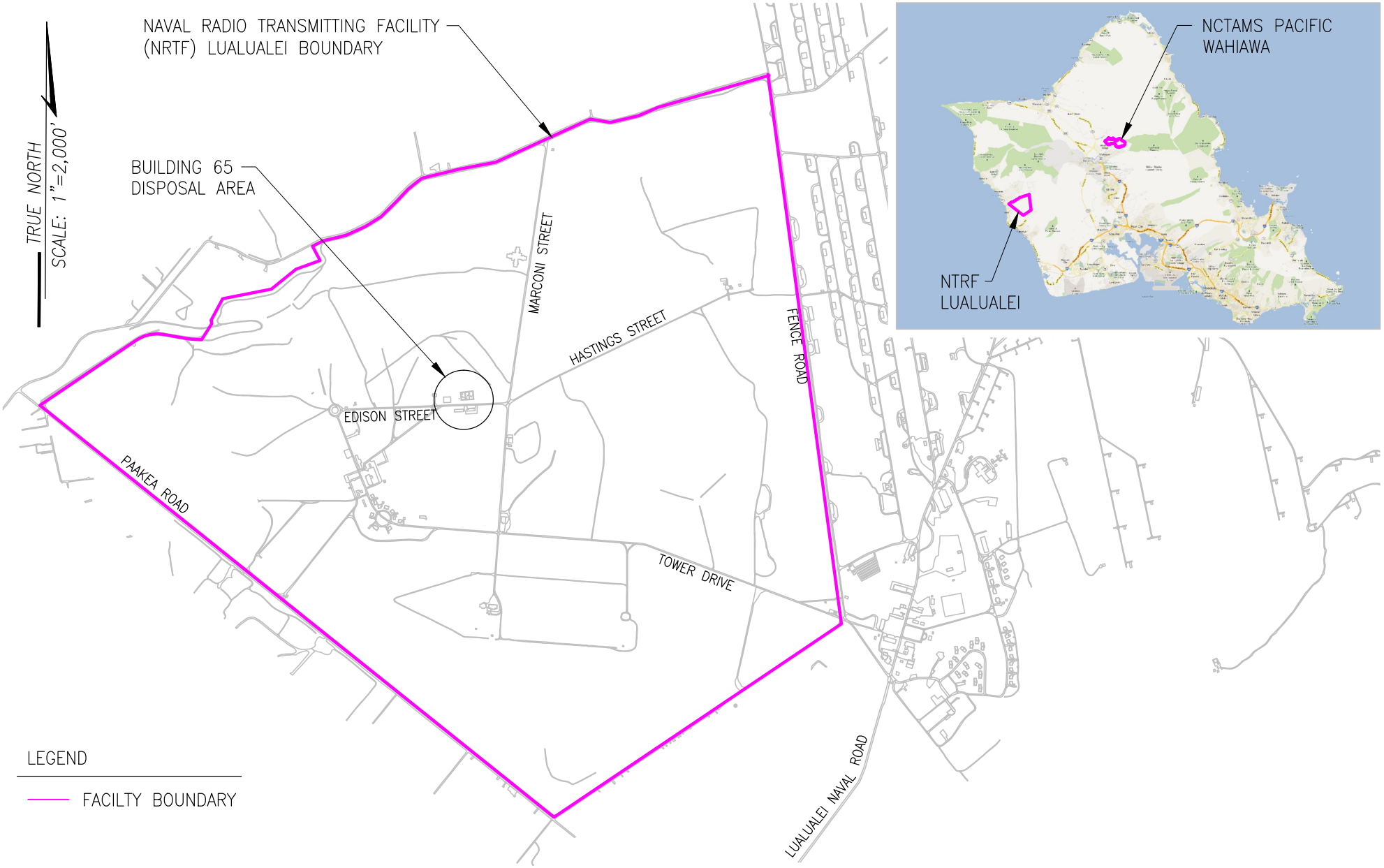
- Results of the Remedial Investigation (RI) conducted at the Building 65 Disposal Area that determined human health risks are below or within the EPA risk management range. There were no ecological site risks.

The results of the completed RI indicate that the site is environmentally suitable for unrestricted reuse under CERCLA, and that five-year reviews per the NCP (40 CFR 300.430(f)(4)(ii) are unnecessary.

[1] Text in blue font identifies where detailed cross-reference site information is available (Attachment A). In the event of any inconsistency between the text in this ROD and the text in any of the cross-reference documents, the text in this ROD will take precedence.

1.4 STATUTORY DETERMINATIONS

The selected remedy for these sites is protective of human health and the environment, complies with federal and state requirements that are applicable or relevant and appropriate, are cost effective, and utilize permanent solutions and alternate treatment technologies to the maximum extent practicable. The selected remedy for the Building 65 Disposal Area does not satisfy the statutory preference for treatment as a principal element of the final remedy because the RI results indicate that residual risks associated with metals present in the soil and groundwater do not pose a threat to human health or the environment (AECOM 2011). In addition, any potential risk reduction that would be attained through the use of treatment as a remedy component would be limited. Because this remedy will not result in hazardous substances, pollutants, or contaminants remaining on site above levels that allow for unlimited use and unrestricted exposure, a five-year review per NCP (40 CFR 300.430(f)(4)(ii)) will not be required for the Building 65 Disposal Area.



	DATE: FEB 2015	PROJECT TITLE: RECORD OF DECISION SITE 10, BUILDINGG. 65 DISPOSAL AREA JBPHH, LUALUALEI ANNEX, OAHU, HI
	FIGURE TITLE: PROJECT LOCATION MAP	FIGURE NO.: 1

1.5 SIGNATURE AND SUPPORT AGENCY ACCEPTANCE OF FINAL REMEDY

The Navy and EPA Region IX, with the concurrence of the DOH, have selected No Further Action as the final remedy for the Building 65 Disposal Area. This remedy is protective of human health and the environment at the Building 65 Disposal Area within NCTAMS PAC NPL at NRTF Lualualei, JBPHH Lualualei Annex, Oahu, Hawaii.

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S. Keeve
Captain, U.S. Navy
Commander, Joint Base Pearl Harbor-Hickam

02 FEB 2015
Date

Angeles Herrera
Assistant Director, Federal Facilities and Site Cleanup Branch
Superfund Division, U.S. EPA Region IX

12 March 2015
Date

The State of Hawaii DOH concurs with the selected remedy as documented in this ROD.

Keith E. Kawaoka,
Environmental Program Manager
Hazard Evaluation and Emergency Response Office
State of Hawaii, Department of Health

4.7.15
Date

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2. Decision Summary

This section summarizes site characteristics, previous investigations, current site risks, and the rationale for selecting NFA as the final remedy for the Building 65 Disposal Area.

2.1 SITE NAME, LOCATION, AND DESCRIPTION

NRTF Lualualei (EPA CERCLIS Number HI0170090054) is an active military installation situated within a large coastal valley between the western base of the Waianae Range on approximately 1,700 acres of land on the west coast of Oahu, Hawaii.

The Building 65 Disposal Area occupies approximately 20,000 square feet along Edison Street near the center of the NRTF Lualualei facility (Figure 2). The Building 65 Disposal Area lies within a relatively flat area surrounded by over 1,200 acres of grassland habitat maintained by periodic mowing (AECOM 2011).

Executive Order 12580 authorizes the DON to act as the lead agency for environmental response action at Navy sites, such as Building 65 Disposal Area. The EPA and DOH have provided oversight during the environmental investigation activities at the site pursuant to the 2009 Federal Facilities Agreement (FFA) between EPA, State of Hawaii and the Navy (EPA, State of Hawaii, and DON 2009). Funding for the site work at the Building 65 Disposal Area is provided by the Navy Environmental Restoration Program.

2.2 SITE HISTORY AND ENFORCEMENT ACTIVITIES

2.2.1 Site History

NRTF Lualualei is part of the NCTAMS PAC, whose mission is to provide operational direction and management of all Naval Telecommunications System assets in the Commander, Naval and Telecommunications Command Pacific area of responsibility. In the early to mid 1950s, the Building 65 Disposal Area was used for disposal of wastes from former Building 65. The disposal area was initially reported to be 50-feet wide by 200-feet long by 15 to 20-feet deep and included empty drums, oils, trash, and construction debris (NEESA 1986).

2.2.2 Site Investigations

The results of the previous environmental investigations and response actions performed to address chemicals potentially released at the Building 65 Disposal Area are summarized in this section. All investigations and response actions were conducted in accordance with CERCLA and the applicable or relevant and appropriate requirements identified for the site.

Initial Assessment Study. The purpose of the Initial Assessment Study (IAS) was to identify areas that may require further investigation or cleanup. The IAS identified potentially contaminated sites from historical records, aerial photographs, field inspections, and interviews. In the 1986 IAS, the Naval Energy and Environmental Support Activity (NEESA) identified that a 50-feet wide by 200-feet long by 15 to 20-feet deep disposal site across Edison Street from former Building 65 was used during the early to mid-1950s to receive empty drums, oils, trash, and debris. The report concluded that it was doubtful that large numbers of drums were buried because the local populace always had a need for empty drums. Because of the probable inert quality of the majority of the waste and the small quantity and degradability of the oils, the IAS recommended NFA for this site. However, the EPA stated in a letter dated 2 July 1991 that a review of the IAS by Ecology & Environment, Inc., EPA Region IX's contracted reviewer, recommended further study of the Building 65 Disposal Area (EPA 1991).

Preliminary Sampling. In 1996, the Public Works Center performed an investigation that included the collection of three surface soil samples and three subsurface soil samples from the Building 65 Disposal Area. Samples were analyzed for arsenic, cadmium, chromium, lead, mercury, and benzene, toluene, ethylbenzene, and xylenes. The exact sampling locations could not be obtained.

The maximum detected concentrations of arsenic and cadmium exceeded the screening criteria in use at that time. A small amount of toluene was the only organic detected. A comparison of the data with current 95th percentile background concentrations, 2012 EPA Regional Screening Levels (RSLs), and 2011 DOH Environmental Action Levels (EALs) is presented in Table 1, and shows the maximum detection of arsenic exceeds current screening levels. Thus, an RI was conducted for the Building 65 Disposal Area to determine whether a response action is needed or if the site can proceed to NFA closeout (PWC 1996 in AECOM 2011).

Table 1: Comparison of Historical Data of Detected Analytes to Current Screening Levels

Analyte	Maximum Detected Concentration [a]	Current Screening Criterion Level	Screening Criterion Reference	95th Percentile Background Concentration for Waianae Volcanic Soils [b]
Arsenic	21	0.39	RSL [c]	15 [d] 4.5 [e]
Cadmium	4.3	14	EAL [f]	1.8
Chromium	30	1,100	EAL [f]	142
Lead	36	200	EAL [f]	19 [g]
Mercury	0.5	4.7	EAL [f]	0.15
Toluene	0.55	32	EAL [f]	n/a

Notes:
All concentrations are in milligrams per kilogram (mg/kg).
n/a not available
[a] From surface and subsurface soil (unspecified) in Public Works Center *Unpublished Summary of Sampling Results* (1996).
[b] *Environmental Background Analysis for Metals in Soil at Navy Oahu Facilities* (Earth Tech 2006).
[c] EPA RSL for residential soil (EPA 2012).
[d] Is the concentration for surface soils.
[e] Is the concentration for subsurface soils.
[f] DOH EALs for soils: potentially impacted groundwater. Groundwater is NOT a current or potential drinking water resource; surface water body is NOT located within 150 meters of the release site (DOH 2011).
[g] Lead from natural background sources only.

Remedial Investigation. In 2011, the Navy completed a RI to collect and evaluate the data needed to quantify risk associated with the Building 65 Disposal Area and, if necessary, identify appropriate remedial actions. The Building 65 Disposal Area was investigated as a distinct source area of hazardous substances, pollutants, and contaminants.

Perimeter trenching was conducted to verify the extent of the disposal area's boundaries. The site boundaries were located using a visual survey and geophysical survey. During the initial visual survey, a slight depression could be seen in the soil where the former disposal area was located. The trenching results later verified that these visually-estimated site boundaries were correct. Observations of native soil primarily outside of the disposal area and previously backfilled soil within the disposal area confirmed that the disposal area was properly located based on the 1969 historical aerial photo and geophysical survey.

200' 0 200' 400'

SCALE: 1"=200'

LEGEND

BOUNDARY OF BUILDING 65 DISPOSAL AREA

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	FIGURE TITLE: BUILDING 65 DISPOSAL AREA	FIGURE NO.: 2

Nine test pits (three pits in each of the three decision units) were excavated to a depth of five feet to evaluate the types of debris present in the disposal area. All test pits contained waste consisting of concrete rubble, cinder blocks, wires, etc. indicative that the test pits were representative of the entire disposal area and that the disposal area was used for the disposal of inert construction related debris.

One relatively shallow groundwater monitoring well was installed in the down-gradient groundwater flow direction and immediately outside the disposal area where contaminant transport, if present, would be anticipated. The monitoring well was located 40 feet west of the southwest corner of the disposal area where groundwater was encountered at 55 feet bgs.

The RI report identified polynuclear aromatic hydrocarbons (PAHs), chlorinated pesticides, total petroleum hydrocarbon (TPH) as diesel range organics (DRO) and TPH as lube oil range organics (LRO), and metals as chemicals of potential concern (COPCs) in soil and groundwater. Polychlorinated biphenyl (PCB)-Aroclors was an additional COPC in soil, and volatile organic compounds (VOCs) was an additional COPC in groundwater.

Arsenic exceeded EPA RSL criteria in one or more multi-increment (MI) surface soil samples (see Table 2). Arsenic, iron, and zinc exceeded EPA RSL and/or DOH EAL criteria in one or more composite subsurface soil samples. Vanadium exceeded DOH EAL criteria in the groundwater sample (see Table 3). No other screening criteria exceedances were detected in the soil or groundwater samples.

Table 2: Comparison of RI Soil Data of Detected Analytes to Current Screening Levels

Analyte	Maximum Detected Concentration	Current Screening Criterion Level	Screening Criterion Reference	95th Percentile Background Concentration for Waianae Volcanic Soils [a]
Acenaphthylene	0.0013 J	127	EAL [b]	n/a
Anthracene	0.0018 J	2.47	EAL [b]	n/a
Benzo(a)anthracene	0.0032 J	0.15	RSL [c]	n/a
Benzo(a)pyrene	0.0028 J	0.015	RSL [c]	n/a
Benzo(b)fluoranthene	0.0094	0.15	RSL [c]	n/a
Benzo(g,h,i)perylene	0.012	26.6	EAL [b]	n/a
Benzo(k)fluoranthene	0.0088	1.5	RSL [c]	n/a
Chrysene	0.006	13.7	EAL [b]	n/a
Fluoranthene	0.022	40.0	EAL [b]	n/a
Indeno(1,2,3-cd)pyrene	0.005 J	0.15	RSL [c]	n/a
Phenanthrene	0.016	17.9	EAL [b]	n/a
Pyrene	0.012	56.2	EAL [b]	n/a
4,4'-DDE	0.12	1.40	RSL [c]	n/a
4,4'-DDT	0.043 J	1.70	RSL [c]	n/a
Aroclor 1254	0.22	0.22	RSL [c]	n/a
Aroclor 1260	0.091	0.22	RSL [c]	n/a
TPH-DRO	23	500	EAL [b]	n/a
TPH-GRO	95	500	EAL [b]	n/a
1,2,4-Trimethylbenzene	0.0075	62.0	RSL [c]	n/a
1,3,5-Trimethylbenzene	0.027	780	RSL [c]	n/a
Acetone	0.015 J	0.857	EAL [b]	n/a
Ethylbenzene	0.00091 J	1.65	EAL [b]	n/a
Methylene Chloride	0.0011 J	0.875	EAL [b]	n/a

Analyte	Maximum Detected Concentration	Current Screening Criterion Level	Screening Criterion Reference	95th Percentile Background Concentration for Waianae Volcanic Soils [a]
Total Xylenes	0.0023 J	116	EAL [b]	n/a
Aluminum	13,600 J	77,000	RSL [c]	84,000
Antimony	1.8 J	6.26	EAL [b]	2.2
Arsenic (surface)	1.2 J	0.39	RSL [c]	15
Arsenic (subsurface)	8 J	0.39	RSL [c]	4.5
Barium	130 J	750	EAL [b]	441
Cadmium	1.7 J	12.0	EAL [b]	1.8
Chromium	42.1 J	500	EAL [b]	142
Cobalt	19.7 J	23.0	RSL [c]	67
Copper (surface)	19.2 J	225	EAL [b]	119
Copper (subsurface)	99.3	225	EAL [b]	90
Iron	98,000 J	55,000	RSL [c]	115,000
Lead (natural sources only)	190 J	200	EAL [b]	19
Manganese	1,130 J	1,800	RSL [c]	2,700
Mercury	0.17	4.69	EAL [b]	0.15
Nickel	51.8 J	150	EAL [b]	153
Selenium	1.7 J	10.0	EAL [b]	3.1
Silver	0.53	20.0	EAL [b]	1.1
Vanadium	73.9 J	110	EAL [b]	221
Zinc	1,640 J	600	EAL [b]	200

Notes:
All concentrations are in milligrams per kilogram (mg/kg).
J estimated detection
n/a not applicable
[a] *Environmental Background Analysis for Metals in Soil at Navy Oahu Facilities* (Earth Tech 2006).
[b] DOH EALs for soils: potentially impacted groundwater. Groundwater is NOT a current or potential drinking water resource; surface water body is NOT located within 150 meters of the release site (DOH 2011).
[c] EPA RSL for residential soil (EPA 2012).

Table 3: Comparison of RI Groundwater Data of Detected Analytes to Current Screening Levels

Analyte	Maximum Detected Concentration	Current Screening Criterion Level	Screening Criterion Reference
Aluminum	250	37,000	RSL [b]
Barium	59.8	2,000	EAL [c]
Chromium	1.4 J	100	MCL [d]
Selenium	6.4	20.0	EAL [c]
Thallium	1.9 J	2.00	MCL [d]
Vanadium	21.4	19	EAL [c]

Notes:
All concentrations are in micrograms per liter (µg/L).
J estimated detection
[b] EPA RSL for tapwater (EPA 2012).
[c] DOH EALs for groundwater: Groundwater is NOT a current or potential drinking water resource; surface water body is NOT located within 150 meters of the release site (DOH 2011).
[d] Maximum Contaminant Level for drinking water.

A human health Screening Risk Assessment (SRA) was conducted using the results of the investigation, which included a Tier 1A risk-based screening (RBS) evaluation. The RBS identified no chemicals of

potential concern at the Building 65 Disposal Area. A Tier 1B evaluation was not required based on these results. An Ecological Risk Assessment (ERA) was not conducted due to the site's small size, the low quality of the site's habitat, and the better quality of habitat in the surrounding area. Based on observations, analytical results, and risk assessment conducted as part of this investigation, human health and ecological risks due to COPCs indicate that NFA was warranted at Building 65 Disposal Area (AECOM 2011).

2.2.3 Enforcement Activities

There have been no CERCLA enforcement activities at the Building 65 Disposal Area.

2.3 COMMUNITY PARTICIPATION

Public participation in the decision process for environmental activities at NRTF Lualualei has continually been encouraged throughout the environmental restoration and site closure processes for the Building 65 Disposal Area. In an effort to involve the public in the decision-making process, a Restoration Advisory Board (RAB) was established. The RAB is composed of DOH, EPA, Navy, and community representatives. The Navy has held RAB meetings (typically on a semi-annual basis) and other public meetings, as well as issued fact sheets that summarize the site investigation activities. The RAB team has provided review and comment leading to selection of this decision for NFA as the final remedy for the Building 65 Disposal Area. Additionally, the Navy also established a point-of-contact for the public in the Naval Facilities Engineering Command, Hawaii (NAVFAC Hawaii).

A Proposed Plan (PP) was prepared to formally present the selected remedy to the public and to solicit public comment. A public meeting for the PP was held on 30 January 2013 at the Waianae Public Library. The public comment period for the PP was held between 30 January and 1 March 2013. Questions and concerns received during the meeting were addressed at the meeting and documented in the meeting transcript. Responses to verbal comments received during the comment period and public meeting are presented in the Responsiveness Summary (Attachment B). No written comments were received during the public comment period.

Throughout the investigation process, the Navy has prepared several fact sheets to inform and update the community on the progress of NRTF Lualualei environmental investigation activities. These fact sheets and other project documents, including work plans, technical reports, and other materials relating to the NRTF Lualualei investigation activities, can be found in the Navy information repositories at the following addresses:

Waianae Public Library
85-625 Farrington Hwy
Waianae, Hawaii 96792
808-622-6345

Hamilton Library at the
University of Hawaii at Manoa Hawaiian and Pacific Collection
2550 McCarthy Mall
Honolulu, Hawaii 96822
808-956-8264

Additional project information is located in the Administrative Record file located at Naval Facilities Engineering Command, Pacific (NAVFAC Pacific) in JBPHH. The address for the Administrative Record file is provided below:

Naval Facilities Engineering Command, Pacific
258 Makalapa Drive, Suite 100
JBPHH Hawaii 96860-3134

2.4 SCOPE AND ROLE OF THE RESPONSE ACTION

The Building 65 Disposal Area addressed in this ROD is located within the NRTF Lualualei. The NRTF Lualualei is listed on the NPL, which identifies priorities among known or threatened releases of hazardous substances, pollutants, or contaminants throughout the United States and its territories. The Navy, EPA, and DOH through the FFA (EPA, State of Hawaii, and DON 2009), effective July 2009, have agreed to:

- Ensure that environmental impacts associated with past and present activities are thoroughly investigated and that appropriate remedial actions are taken, as necessary, to protect human health and the environment.
- Establish a procedural framework and schedule for developing, implementing, and monitoring appropriate remedial actions in accordance with CERCLA, SARA, NCP, Superfund guidance and policy, Resource Conservation and Recovery Act (RCRA) guidance and policy, and applicable State of Hawaii law.
- Facilitate cooperation, exchange of information, and participation of the Navy, EPA, and DOH.
- Ensure adequate assessment of potential injury to natural resources necessary to ensure the implementation of remedial actions appropriate for achieving suitable cleanup levels.

Based on the current site risks, the NFA decision for the Building 65 Disposal Area is designed to fulfill the objectives of the FFA for NRTF Lualualei.

The final remedy of NFA was chosen in accordance with CERCLA, as amended by SARA, and to the extent practicable the NCP. Information supporting the decisions leading to the selected remedy is contained in the Administrative Record file for the site.

2.5 SITE CHARACTERISTICS

2.5.1 Site Overview

This section describes the physical characteristics of the NRTF Lualualei, including demography, cultural resources, topography, geology, surface water hydrology, and hydrogeology.

2.5.1.1 SURFACE FEATURES

NRTF Lualualei has generally flat to slightly rolling terrain between 10 and 100 feet above mean sea level (msl). The elevation at the Building 65 Disposal Area is approximately 56.75 feet above msl and is in a generally level area. The facility is situated in the Lualualei Valley immediately west and adjacent to Navy Munitions Command, East Asia Division Detachment, Pearl Harbor (NMC EAD DET PH), NS PH Lualualei Annex, which rises to over 3,000 feet above msl several miles to the east.

2.5.1.2 CLIMATE AND METEOROLOGY

The mean annual temperature for NRTF Lualualei is 76 degrees Fahrenheit (ºF), with a mean minimum of 72 ºF and a mean maximum of 79 ºF. The average rainfall is 20 inches per year (Earth Tech and

TTEMI 2001). The heaviest rainfall occurs during the wet season from October through April, while the dry season is generally without precipitation (Helber et al. 1986). Local land and sea breezes are predominant because the Kona (leeward) coasts of the Hawaiian Islands are sheltered from the prevailing northeast trade winds by mountains (Earth Tech and TTEMI 2001).

2.5.1.3 SURFACE/WATER HYDROLOGY

Runoff from NRTF Lualualei is restricted by factors such as semiarid conditions, flat to gently rolling topography, and relatively permeable surface soils. Cracks in the surface soil form during dry weather, and the underlying porous limestone provides a pathway for subsurface migration. Surface water from NRTF Lualualei that does not infiltrate into the ground drains into the Mailiilii Stream, an intermittent stream that flows westward along the northern boundary of the facility to the Pacific Ocean (NEESA 1986). No drainage features were observed around the Building 65 Disposal Area.

The Niulii Reservoir at NRTF Lualualei receives wastewater and stormwater runoff from NMC EAD DET PH, NS PH Lualualei Annex. Comparison of historical and more recent aerial photographs of the area indicates that the ponds may be filled with water during heavy rains. The ponded water may recharge shallow groundwater to a limited extent.

The Niulii Reservoir Ponds were constructed in the early 1930s and function as a system of three in-line sewage treatment oxidation ponds that receive sewage effluent from the NMC EAD DET PH, NS PH Lualualei Annex facility. The intermittent stream that drains the NMC EAD DET PH, NS PH Lualualei Annex facility, area flows north into the farthest downstream of the three Niulii Reservoir Ponds. Drainage swales direct any overflow from the third pond to Mailiilii Stream. Flowing water has never been observed in the intermittent drainage at the Lualualei Annex (AECOM 2011).

2.5.1.4 GEOLOGY

NRTF Lualualei is located on land that consists of a thin layer of Quaternary-age alluvial and coastal sediments, and reef deposits overlying Tertiary-age Waianae volcanics (NEESA 1986). The accumulation of alluvial sediments in Lualualei Valley has been found to be more than 1,200 feet thick and likely extends below sea level (Earth Tech 2003). These accumulations are generally thicker toward the center of the valley and toward the coast, forming a wedge-shape caprock over the deeper volcanic rocks (Earth Tech 2003). Calcareous sediments consist of fossil coral reef limestone and detrital limestone composed of broken shell fragments and beach sands. Noncalcareous materials are younger alluvium, consisting mainly of reworked fragments of underlying older alluvium or weathered volcanic rocks and deposits from streams (NEESA 1986). The Waianae volcanics comprise lower, middle, and upper basalt members with a total thickness of more than 6,000 feet (Earth Tech 2003). With the exception of the upper member, which is mainly massive andesite ’a’a flows, the other two members consist of distinct thin-bedded pahoehoe basalt layers and ’a’a flows. The middle member is also characterized by a 400-foot-thick trachyte flow. In most places, the lower and middle members are separated by an angular unconformity (NEESA 1986). The Waianae volcanics crop out northwest and southwest of the facility (Earth Tech 2003). Rocks at higher elevations are cinders and lava flows of the upper member of the Waianae Volcanic Series. Rocks at lower elevations of the range contain breccia and lava flows of the lower and middle members of the Waianae Volcanic Series (NEESA 1986).

2.5.1.5 SOILS

The island of Oahu is the eroded remnant of two large coalesced shield volcanoes, the Waianae and Koolau volcanoes. Shield-building lavas emanated primarily from the rift zones of both of these

volcanoes, and the island of Oahu consists predominantly of basalt flows. These volcanic rocks have been severely weathered by fluvial processes. Erosional and weathered remnants of these two volcanoes form two of Oahu's four geomorphic provinces: the Waianae Range on the west and the younger Koolau Range on the east. The other two provinces are the Schofield Plateau and the Coastal Plain (NEESA 1986). For the purposes of background comparisons, the Waianae Volcanic Soil category will be used.

NRTF Lualualei is located on the central west side of Oahu, near the relatively flat portion of the Lualualei Valley. The area encompassing NRTF Lualualei is mostly covered by Lualualei stony clay and Ewa silty clay loam (Earth Tech 2003). The Lualualei stony clay is a well-drained, very dark, grayish-brown clay surface soil that occurs adjacent to drainage ways. Permeability is slow, and the erosion hazard is none to slight. This soil is very sticky and very plastic when wet. The Ewa silty clay loam is a well-drained surface soil derived from basic igneous rock, which is found in basins and alluvial fans (NEESA 1986, Earth Tech 2003).

Boring log information obtained from three monitoring wells (MWs) previously installed east of the Building 1 Sewage Pond (Antenna 354 Disposal Area) indicates that subsurface soils in two of the well borings consisted mainly of fat clays. Sands and gravel were encountered below the clay at depths greater than 10 feet in one of the borings (Earth Tech 2003).

During the RI, the Site Geologist identified the types of soil collected during trenching and test pit excavation and monitoring well installation using NAVFAC Pacific Environmental Restoration Program (ERP) Procedure I-E, *Soil and Rock Classification* (DON 2007). Soil and waste material were continuously identified and logged by the Site Geologist.

Surface and shallow subsurface soils collected from the Building 65 Disposal Area were, generally, poorly graded sand with silt or clay. Root matter and decomposing organic material was present in the top 6 inches of soil. Soils were dry with no odor or staining visible. Medium to low plasticity were estimated in a majority of the surface and subsurface soil samples. Samples were described primarily as brown to dark brown to dark yellowish brown. In the surface soils, (0–6 inches below ground surface [bgs]) gravel was not generally present, except in trace amounts (10 percent or less). In soils below 6 inches bgs, gravel was present in greater quantities up to 50 percent. Gravel present in subsurface sediments was typically coralline, subangular, and recorded in sizes not typically larger than 140 millimeters in diameter. Coralline cobbles were identified in some subsurface test pits and were probably the result of breaking up the native surrounding geology during excavation (AECOM 2011).

2.5.1.6 HYDROGEOLOGY

Groundwater is the principal source of drinking water on the island of Oahu (Earth Tech 2003). Although dike-impounded water and perched groundwater are sources of groundwater in the island, the most extensive resource is the basal aquifer, which is suspected to be approximately 100 feet bgs near the Building 65 Disposal Area. The term "basal aquifer" is used to refer to groundwater floating on the heavier intruded seawater because of a density differential between the relatively lighter fresh water and relatively denser seawater. The basal groundwater in Lualualei Valley occurs in primarily basalt lava flows, but also partially in the coralline and alluvial deposits (Earth Tech 2003).

Potable drinking water for NRTF Lualualei is purchased from NMC EAD DET PH, Lualualei Annex. Groundwater beneath NRTF Lualualei is generally present under unconfined conditions in calcareous and noncalcareous sediments with water levels ranging from approximately 10 to 100 feet bgs, depending on ground surface elevation. The groundwater gradient is approximately 1 foot per mile and flows toward the southwest (NEESA 1986). Groundwater data collected during the RI indicate that perched

groundwater beneath the Building 65 Disposal Area is found approximately 55 feet bgs. The majority of wells in this area tap groundwater within the alluvial cap, where high permeability allows only a thin water lens at elevations a few feet above sea level (Earth Tech and TTEMI 2001). Wells developed in alluvium could furnish small supplies of potable groundwater. However, the majority of wells drilled into this aquifer (approximately 100) have been abandoned because chloride concentrations in the water have increased with continued pumping (NEESA 1983). Chloride concentrations across NRTF Lualualei range from 500 to 1,000 milligrams per liter (Earth Tech 2003). This brackish water is not potable (Mink and Lau 1990).

2.5.1.7 CULTURAL RESOURCES

Most portions of NRTF Lualualei are highly disturbed. The area in the immediate vicinity of the Building 65 Disposal Area is open, mostly covered with gravel and devoid of vegetation. No cultural resources are known at or near the Building 65 Disposal Area (AECOM 2011).

2.5.1.8 BIOLOGICAL RESOURCES

The majority of NRTF Lualualei is vegetated with regularly mowed fields of exotic grasses, ruderal habitat, and koa haole scrub on the eastern portion of the facility. The Building 65 site is currently surrounded by over 1,200 acres of mixed grassland/ruderal habitat maintained by periodic mowing. Ruderal habitat around the outside of the buildings and under all of the antennae includes buffelgrass, Bermuda grass, Henry's crabgrass, bristly foxtail, hialoa, and koa haole seedlings (Earth Tech 2003).

The ruderal habitat is inhabited by non-native species including house sparrows, common myna, zebra doves, cattle egrets, red-crested cardinal, house mouse, and several species of rats. The Pacific golden plover, which is protected by the Federal Migratory Bird Act, may use the ruderal habitat. Also, the state-listed endangered Hawaiian short-eared owl (pueo) may also forage the grassland ruderal habitat and was recorded at the facility in 1991 (Earth Tech 2003). Because of the poor quality of the ruderal habitat at the site and over 1,200 acres of better grassland habitat surrounding the site, the Building 65 Disposal Area is assumed to have little attractiveness for ecological receptors. As a result, it is assumed that there is no significant ongoing exposure of ecological receptors and an ecological risk assessment is not warranted (AECOM 2011).

2.5.2 Conceptual Site Model

The conceptual site model (CSM) is used to guide the evaluation of potential exposures so that relevant pathways, exposure routes, and ultimately risk can be evaluated in the SRA (Figure 3). The primary purpose of the CSM is to structure the SRA to determine whether exposure pathways are incomplete (requiring no further evaluation) or potentially complete. Only potentially complete exposure pathways are evaluated quantitatively in the risk assessment, which is consistent with EPA guidance (EPA 1989). A potentially complete exposure pathway must include all of the following elements before a quantitative assessment is performed:

- Sources and type of chemicals present
- Affected media
- Chemical release and transport mechanisms (e.g., spillage and advection, vaporization)
- Known and potential routes of exposure (e.g., ingestion, dermal contact, inhalation)
- Known or potential human and environmental receptors (e.g., residents, workers, wildlife)

The absence of any one of these elements results in an incomplete exposure pathway. Thus, for an incomplete pathway with no potential human exposure, the potential for adverse health effects would be deemed negligible and would not warrant further evaluation.

The CSM describe the contaminant sources, contaminant migration pathways, and receptor exposure pathways potentially present at the Building 65 Disposal Area. The human health CSM is summarized on Figure 3.

2.6 CURRENT AND POTENTIAL FUTURE SITE AND RESOURCE USES

2.6.1 Current Site Use

NRTF Lualualei operates and maintains communications facilities for the Navy in the eastern Pacific, which is considered an industrial/commercial use. It is part of the Defense Communications System and the military satellite communications system. The Building 65 Disposal Area lies below ground within a flat vegetated area and is currently unused. The perimeter trenches and test pit excavations were subsequently backfilled and the area was revegetated. The surrounding area around the RI site boundary is vegetated. No activities currently occur at the site. The site boundaries and current site conditions are shown on Figure 2.

2.6.2 Future Site Use

NRTF Lualualei will continue to be maintained by the Navy for use as a communications facility, which is considered an industrial/commercial use; however, the potential for unrestricted (residential) use was also considered. There is no current plan to develop the site, and no land use changes are anticipated in the near future.

2.6.3 Groundwater Classification and Use

The State of Hawaii does not currently have an EPA-approved comprehensive state groundwater protection plan in place; therefore, federal and other state guidance were considered to determine the status of groundwater at the Building 65 Disposal Area, as well as site-specific factors. The groundwater at the Building 65 Disposal Area was classified in accordance with the *Classification of Shallow Caprock Groundwater at Navy Oahu Facilities, Oahu, Hawaii* (Earth Tech 2007). This classification was developed through a partnership with EPA Region IX and the DOH to develop and agree upon a framework for groundwater classification at Navy facilities in Hawaii, and the agencies have approved the findings of the document. This framework allows site-specific factors to be considered to determine whether groundwater meets the criteria for beneficial use as a public or private drinking water source in the future as defined in the EPA's *Guidelines for Ground-Water Classification Under the EPA Ground-Water Protection Strategy* (EPA 1988).

According to the guidelines (EPA 1988), groundwater is classified as Class I, II, or III, as follows:

- Class I groundwater is highly vulnerable to contamination and is an irreplaceable source of drinking water for a substantial population, or is ecologically vital.
- Class II groundwater is a current or potential source of drinking water.
- Class III groundwater is not a potential source of drinking water and is of limited beneficial use.

Figure 3
Human Health Screening Risk Assessment Conceptual Site Model

Exposure Pathway			Receptors				Rationale/Data Needs
			Current Use		Future Use		
Contributing Source	Transport Mechanism	Exposure Route	Onsite Workers	Trespasser/ Hunter	Resident (Adult/Child)	Onsite Workers	
Surface Soil	Direct Contact	Dermal Adsorption	Potentially Complete	Potentially Complete	Potentially Complete	Potentially Complete	Direct contact with surface soil potentially complete for current onsite workers or trespassers/hunters, as well as for future residents and workers.
		Incidental Ingestion	Potentially Complete	Potentially Complete	Potentially Complete	Potentially Complete	
	Air Transport	Inhalation of Particulates	Potentially Complete	Insignificant	Potentially Complete	Potentially Complete	Air transport via inhalation of particulates is a potentially complete pathway for current or future workers and future residents that may dig or disturb the surface soil during gardening or excavation activities. VOCs are not expected to be found in surface soil due to their high volatility and proximity to the air.
		Inhalation of VOCs	Insignificant	Insignificant	Insignificant	Insignificant	
	Surface Water Runoff/ Discharge to Dry Drainage Swale	Dermal Adsorption	Insignificant	Insignificant	Insignificant	Insignificant	Surface water run-off is insignificant due to the level nature of the site. Fish for human consumption are not available onsite.
		Incidental Ingestion	Insignificant	Insignificant	Insignificant	Insignificant	
		Bio-Accumulation/ Consumption of Fish	Insignificant	Insignificant	Insignificant	Insignificant	
Subsurface Soil	Direct Contact	Dermal Adsorption	Potentially Complete	Insignificant	Potentially Complete	Potentially Complete	Direct contact with, and incidental ingestion of, subsurface soil is potentially complete for future-current onsite workers (construction, utility, or remediation) and for future residents. Exposure to subsurface soil may occur when future residents or onsite workers engage in gardening or excavation activities.
		Incidental Ingestion	Potentially Complete	Insignificant	Potentially Complete	Potentially Complete	
	Unsaturated/ Saturated Zone Transport to Groundwater	Dermal Adsorption	Incomplete	Incomplete	Potentially Complete	Incomplete	For current workers, human receptor exposure to groundwater is considered incomplete due to the depth to perched groundwater. Perched groundwater underlying the site is not currently used for drinking water or irrigation purposes, although nearby wells extract groundwater from the underlying basal aquifer. Vapor intrusion of VOCs for future residents may be a potentially complete pathway, though unlikely due to the depth of perched groundwater. Inhalation for current or future construction workers is also unlikely but potentially complete during excavation Incomplete Incomplete activities.
		Incidental Ingestion	Incomplete	Incomplete	Potentially Complete	Incomplete	
		Inhalation of VOCs	Potentially Complete	Incomplete	Potentially Complete	Potentially Complete	
		Drinking Water	Incomplete	Incomplete	Incomplete	Incomplete	
		Bio-Accumulation/ Consumption of Produce	Incomplete	Incomplete	Potentially Complete	Potentially Complete	

The Waianae basal aquifer meets the criteria for Class I groundwater. The shallow groundwater in the alluvial cap may meet the EPA criteria for sustainability as Class II groundwater, but is not likely to be suitable as a potential future drinking water source due to chloride concentrations (Earth Tech 2007).

2.7 SUMMARY OF CURRENT SITE RISKS

The human health SRA documenting site conditions are presented in the RI Report (AECOM 2011). The methodology and results of the evaluations were conducted in accordance with Navy and EPA guidance (DON 1999, 2001; EPA 1989, 1997). A summary of the updated evaluations is presented below.

2.7.1 Human Health Screening Risk Assessment

This section describes the human health risk assessment that was preformed and the associated results.

2.7.1.1 HUMAN HEALTH RESIDUAL RISK EVALUATION

The human health RBS for Bldg. 65 Disposal Area included the following steps:

- *Development of a CSM.* The CSM identified potentially complete exposure pathways for both current and future land uses (see Figure 3).
- *Identification of Relevant Data Sets.* For this risk assessment, surface soil, subsurface soil, and groundwater data were evaluated quantitatively.
- *Identification of COPCs.* Any detected chemical was considered a preliminary COPC. Although residents were only identified as potential future receptors for this SRA, all maximum concentrations were screened against residential criteria (RSLs and EALs) to identify COPCs for further evaluation of the site.
- *Comparison of COPC Maximum Concentrations to Background.* Although a background comparison is not typically performed in an RBS, maximum concentrations were compared to background concentrations because only a few of chemicals exceeded screening criteria.

2.7.1.2 SURFACE SOIL

Arsenic was the only chemical detected in the Building 65 Disposal Area surface soil with concentrations that exceeded a screening criterion. Arsenic concentrations ranged from 0.81 to 1.2 mg/kg (both qualified J). All four MI results exceeded the RSL of 0.390 mg/kg, but not the EAL of 20.0 mg/kg, which is based on the DOH background level for arsenic. Although all four results exceeded the RSL, they were below the 95th percentile surface soil background concentration (15.0 mg/kg) for the Waianae Volcanic Soils.

2.7.1.3 SUBSURFACE SOIL

Arsenic, iron, and zinc were the only chemicals detected in Building 65 Disposal Area subsurface soil with concentrations that exceeded a screening criterion. Arsenic was detected in two of the three subsurface composite soil samples. Both concentrations of arsenic (6.2 J and 0.66 mg/kg) exceeded the RSL of 0.390 mg/kg, but not the EAL of 20.0 mg/kg, based on the DOH background concentration for arsenic. Only the maximum detection of arsenic exceeded the 95th percentile subsurface soil background concentration (4.5 mg/kg) for the Waianae Volcanic Soils. However, this concentration of arsenic did not exceed the background level of 20 mg/kg established by DOH (DOH 2009) or the surface soil 95th percentile background concentration of 15 mg/kg (Earth Tech 2006). Arsenic at this site is likely naturally occurring and within background for this location. Thus, it was not considered a true COPC and was not evaluated further in the SRA.

One of the three detected concentrations of iron (87,300 mg/kg) exceeded the RSL of 55,000 mg/kg; no EAL was provided for iron. However, the maximum concentration was below the 95th percentile soil background concentration (115,000 mg/kg) for the Waianae Volcanic Soils.

One of the three detected concentrations of zinc (1,415 mg/kg) exceeded the EAL of 600 mg/kg (based on ecotoxicity), but not the RSL of 23,000 mg/kg. The maximum concentration also exceeded the 95th percentile soil background concentration (200 mg/kg) for the Waianae Volcanic Soils. However, the DOH EAL for zinc is based on ecotoxicity and not human health. Therefore, the DOH EAL for direct human exposure (4,700 mg/kg) would be a more appropriate screening criterion for zinc. Thus, the maximum concentration of zinc did not exceed the EAL of 4,700 mg/kg or the RSL of 23,000 mg/kg. Therefore, zinc was not considered a COPC and was not be evaluated further in the SRA.

2.7.1.4 GROUNDWATER

One round of groundwater samples (an original and a field duplicate) was collected from a groundwater monitoring well at the site. Metals were the only chemicals detected in these samples. Vanadium exceeded DOH EAL criteria in the groundwater sample (see Table 3); however, it did not exceed the DOH Drinking Water screening criteria (AECOM 2011). None of the other detected results exceeded either screening criteria.

Based on the results of the RBS, no COPCs were identified for the Building 65 Disposal Area. Thus, the Tier 1B risk evaluation was not conducted (AECOM 2011).

2.7.1.5 CONCLUSIONS

A human health SRA was conducted in the RI, which included a Tier 1A RBS evaluation. Based on the results of the RBS, no COPCs were identified for the Building 65 Disposal Area. Thus, a Tier 1B risk evaluation was not conducted. Because of the low risk, the site risk is considered acceptable and protective of human health and NFA is warranted.

2.7.2 Ecological Risk Assessment

The majority of NRTF Lualualei is vegetated with regularly mowed lawns of exotic grasses, ruderal habitat, and koa haole scrub on the eastern portion of the facility. Ruderal habitat around the outside of the buildings and under all of the antennae includes buffelgrass, Bermuda grass, Henry's crabgrass, bristly foxtail, hialoa, and koa haole seedlings (Earth Tech 2003).

The ruderal habitat is inhabited by non-native species including house sparrows, common myna, zebra doves, cattle egrets, red-crested cardinal, house mouse, and several species of rats. The Pacific golden plover, which is protected by the Federal Migratory Bird Act, may use the ruderal habitat. Also, the state-listed endangered Hawaiian short-eared owl (pueo) may also forage the grassland ruderal habitat and was recorded at the facility in 1991 (Earth Tech 2003).

Currently, the area in the immediate vicinity of the Building 65 Disposal Area is stark and sparsely vegetated. Because of its poor quality, this site was assumed to have little or no value as habitat for the plants and animals listed above. Therefore, an ecological risk evaluation was not performed at the site (Earth Tech 2003).

2.8 DOCUMENTATION OF SIGNIFICANT CHANGES

The PP identified NFA as the final selected remedy for the Building 65 Disposal Area. The PP was released for public comment on 30 January 2013, and a public meeting to present and discuss the PP was held on 30 January 2013. The public comment period for the PP was held between 30 January and 1 March 2013. None of the comments affect the preference for the selected final remedy for the Building 65 Disposal Area. Therefore, no significant changes to the final remedy, as originally identified in the PP, were necessary or appropriate.

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3. Responsiveness Summary

The public comment period for the PP was held between 30 January and 1 March 2013. The public meeting for the PP was held on 30 January 2013 at the Waianae Public Library. Responses to the verbal comments received during the comment period and public meeting are presented as a responsiveness summary in Attachment B within this ROD. No written comments were received during the public comment period. The complete transcript of the public meeting is available in the Administrative Record file.

3.1 STAKEHOLDER ISSUES AND LEAD AGENCY RESPONSES

The transcript of the public meeting conducted on 30 January 2013 was thoroughly reviewed by the Navy to prepare the Responsiveness Summary. The comments and questions from the public have been condensed to provide a better understanding of each specific issue. The Navy and EPA Region IX, with concurrence from the DOH, have selected the final remedy for the Building 65 Disposal Area only after careful consideration of the public's comments on the PP.

3.2 TECHNICAL AND LEGAL ISSUES

No key technical or legal issues have been identified for the selected final remedy of NFA for the Building 65 Disposal Area.

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Attachment A
Detailed Reference Table

Table A-1: Portable Document Format Hyperlink Index Table

Item	Reference Phrase in ROD	Location in ROD	Identification of Referenced Document Available in the Administrative Record[1]
1	No Further Action	Section 1.2, Page 1-1	*Site 10, Building 65 Disposal Area, Remedial Investigation Report, NRTF Lualualei, Joint Base Pearl Harbor-Hickam, Lualualei Annex, Oahu, Hawaii, NCTAMS PAC National Priorities List Site*, Executive Summary, page iii, AECOM Technical Services, Inc. (AECOM), September 2011.
2	Remedial Investigation	Section 1.3, Page 1-1	*Site 10, Building 65 Disposal Area, Remedial Investigation Report, NRTF Lualualei, Joint Base Pearl Harbor-Hickam, Lualualei Annex, Oahu, Hawaii, NCTAMS PAC National Priorities List Site*, Executive Summary, page iii, AECOM Technical Services, Inc. (AECOM), September 2011.
3	Chemicals of Potential Concern	Section 2.2.2, Page 2-5	*Site 10, Building 65 Disposal Area, Remedial Investigation Report, NRTF Lualualei, Joint Base Pearl Harbor-Hickam, Lualualei Annex, Oahu, Hawaii, NCTAMS PAC National Priorities List Site*, Section 2 page 2-1, AECOM Technical Services, Inc. (AECOM), September 2011.
4	Human health and ecological risks	Section 2.2.2, Page 2-6	*Site 10, Building 65 Disposal Area, Remedial Investigation Report, NRTF Lualualei, Joint Base Pearl Harbor-Hickam, Lualualei Annex, Oahu, Hawaii, NCTAMS PAC National Priorities List Site*, Section 7.3, page 7-1, AECOM Technical Services, Inc. (AECOM), September 2011.
5	FFA for NRTF Lualualei	Section 2.4, Page 2-8	*Federal Facilities Agreement under CERCLA Section 120 in the Matter of: The U.S. Department of the Navy, Naval Computer and Telecommunications Area Master Station Pacific, Oahu, Hawaii*, Section V, pages 8 and 9, March 2009.

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Attachment B
Responsiveness Summary

Table B-1: Responses to Comments on the PP

Comment No.	Comment	Response to Comment
1	**Comment from Ms. Cynthia Rezentes:** On Slide 14, your last bullet, instead of "Human health SRA found chemicals in soil and groundwater are safe for people," would it be more correct to say "Human health SRA found chemicals in soil and groundwater are of no higher risk than background level availability of those chemicals"? Because, you're already saying that you're higher than the trigger level. But you're saying that the background level is already high. I'm a little bit concerned about the way that statement is framed because you're saying that even though we triggered it, it's safe for people. Well, if it's high enough to trigger, that level is set for a specific reason by EPA and Department of Health to cause a trigger, so I'm a little bit uncomfortable with your statement there in your conclusion.	**Response given by Mr. Bob Kaito:** Yes, I understand what you're saying. Maybe it could be stated, there is no higher risk than what's available in the background, which is basically what's in everyone's backyard in the region.
	But to state a conclusion it's safe for people, when we already have this limiting factor that says if you see this, trigger further investigation, this is kind of disingenuous to frame it this way, in my opinion. I think we have Department of Health folks here tonight, or others who probably have a better view on that. I just think it needs to be distinguished so that it's, you're not concluding that it's, quote-unquote, safe for people. What you're concluding is, it's no worse than what's already available.	**Response given by Ms. Janice Fukumoto:** I agree for the metals, because it's within background. For the other chemicals that were tested, those were below the screening. **Response given by Mr. Bob Kaito:** They were all below screening. **Response given by Ms. Janice Fukumoto:** So we would say that for the metals, that it was within the background, it was already available to the public, or for the area. And for the other chemicals that were sampled, they're within. So, we can make that distinction. **Response given by Mr. Bob Kaito:** It's no higher risk, than the background levels that exists.
	That's splitting hairs, but this is a formal report that's eventually going further than us. So I think it behooves us to make sure the report, recommendations, and statements are concise and true as possible.	**Response given by Mr. Bob Kaito:** I would make note that it would be metals, as Janice was saying, yes. 'Cause all other contaminants of concern are below all the screening criteria.

Comment No.	Comment	Response to Comment
2	**Comment from Mr. Michael Fry:** I'm Michael Fry, United States Fish and Wildlife Service. Very often, No Further Action is the recommended action for many of these sites. And while I understand this is a small site, two-thirds of an acre, basically, part of the site's act and part of CERCLA say restoration of this site for habitat is one of the factors to be considered. Here, you don't want to do it because the site is small, and there are other sites that are better habitat in the area. My question is, is there a plan for Lualualei, as an entire site, for restoration of habitat as it is cleaned up and possibly not used by the military, as there is, say, for Makua Valley, with the Army?	**Response given by Ms. Janice Fukumoto:** For the Environmental Restoration Program, the evaluation that we are conducting would be to look at what the future use of the site is and anticipated. So in the scenario we've used for evaluation is what we know, from what we've been told, from the installation operating area, that that's the future use, will continue to be. Now, if it happens that the Navy excesses the property where it's released, then evaluation would have to be done again. Now, whether or not it would be to an ecological reserve of some sort, or whether it's to be used as homes or for industrial use, it would be evaluated because you would have to have -- if it were done under BRAC, if they do that, what's the reuse scenario and it would have to ensure that it's acceptable. If it were sold or released, it would have to have the ECPs, Environmental Condition Plans, that we do now, where it would say what was the history of the site. And it would identify, probably for this one, that it was an environmental restoration site, and it would go through what the conclusions were, and it would also go to what's the future use after the property is accessed. So, it's not a direct answer to, is there a plan, but that's the process that we have for how we address the sites that we have, and, one is, how we address it as we know we currently operate it, and the other is the approach that we would have if property were to be accessed.
	The current plans are to maintain the entire property still, isn't it?	**Response given by Mr. Bob Kaito:** Currently, there are no plans to excess the property. Yes.
3	**Comment from Mr. Bob Harter:** Bob Harter, from the Department of Emergency Management, City and County of Honolulu. The monitoring well, is that still in place, or has that been removed and filled in?	**Response given by Mr. Bob Kaito:** Oh, no, it's still in place.
	And how frequently is it monitored?	It was a one-sampling event that was performed in 2011. Unless there was something found there, I don't believe there is any need for further sampling.
	But it is still there?	Yes.
	So if you had to go back and do a sampling –	We can still sample, yes. **Response given by Ms. Janice Fukumoto:** But, truthfully, after the project is, the site is closed, it's common for us to say, you know, I would want to have wells out there, but you don't need them and it's not going to be used, it's more prudent to close them.
	Is it filled back in with whatever you took out of it?	In some cases you may pull the case, and in some cases you're filling it. And making sure that you're flushed with the surface.