



PROPOSED PLAN

Waikane Valley Impact Area Munitions Response Site
Kaneohe, Oahu, Hawaii

January 2012

THE U.S. MARINE CORPS ANNOUNCES PROPOSED PLAN

The United States Marine Corps invites the public to review and comment on this **Proposed Plan** for Waikane Valley Impact Area. The Waikane Valley Impact Area (WVIA) is a 187-acre area located in the Waikane Valley on Oahu's windward side, approximately 10 miles northwest of Kaneohe Bay. It was once part of a 2,000-acre lease (see Figure 1) used for military jungle training and field maneuvers. The remaining acres fall under the Defense Environmental Restoration Program for Formerly Used Defense Sites and are not addressed in this Proposed Plan. Under the **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)**, the Marine Corps is responsible for the investigation and cleanup of contamination resulting from its past operations.

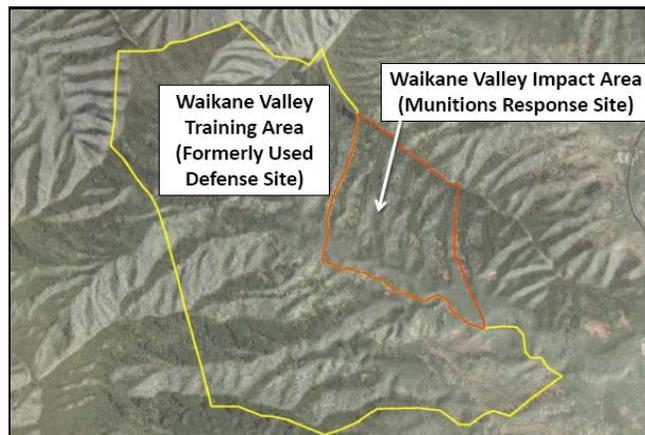


Figure 1: Map of Waikane Valley Impact Area

INTRODUCTION

This Proposed Plan summarizes the background and characteristics of WVIA, explains the findings of investigations and results of risk assessments, discusses the cleanup objectives and remedial alternatives considered, summarizes the alternatives analysis, and identifies the preferred alternative. Detailed site information is provided in the reports referenced at the end of this Proposed Plan. The Marine Corps issues this Proposed Plan to invite public involvement in the process of selecting the final remedy for the site and fulfill the requirements of CERCLA and the National Oil

and Hazardous Substances Pollution Contingency Plan (NCP). The Marine Corps, as the lead agency, and the State of Hawaii Department of Health (DOH), as the lead oversight agency, present their conclusions and recommendations in this Proposed Plan.

The former WVIA has been investigated under the Navy and Marine Corps Munitions Response Program to determine what types of cleanup actions are needed to reduce risks from Munitions and Explosives of Concern (MEC) or Munitions Constituents (MC) remaining from past training activities. MEC includes unexploded ordnance (UXO), discarded military munitions, and MC which pose human health or ecological risks.

The WVIA was divided into three action areas (see Figure 2) based on the distribution of MEC items found in previous investigations, accessibility of the areas, and former and potential future land use.

The **Southern Area** contains most of the cultural features of Waikane Valley. Although it shows no evidence of MEC, clearance is recommended to confirm the assumption that there is no MEC in the area.

The **Northern Non-Target Area** includes the steepest slopes of WVIA, with field teams unable to investigate the majority of the area. The accessible portions contain minimal MEC, but the area still has potential for explosive hazards.

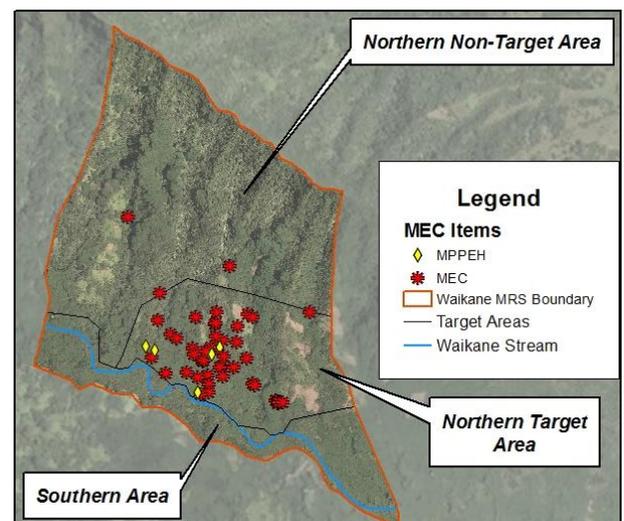


Figure 2: Map of Investigated Areas

PUBLIC COMMENT PERIOD: January 12, 2012 – February 13, 2012
PUBLIC MEETING: January 12, 2012, 7:00 pm at Waiahole Elementary School

The **Northern Target Area** contains the highest concentration of MEC and has the highest potential explosive hazards. Most of the slopes in this area are also extremely steep.

This Proposed Plan describes the following Preferred Alternative for MEC and MC response at the WVIA:

- Surface clearance of accessible areas in the Southern Area and the Northern Target Area
- Removal of the existing fencing from the Southern Area and installation of new fencing between the Southern and Northern Areas
- Subsurface clearance of a 10-foot-wide buffer strip along the south side of the new fence separating the Southern and Northern Areas
- Subsurface clearance in the Southern Area in a 50-foot radius of any MEC found during the surface clearance
- Subsurface clearance of corridors to and around the Kamaka Shrine and Waikane Spring; installation of fencing along and around these cleared areas, to allow free access to these sites from the Southern Area
- Additional Land Use Controls, including notification letters to local landowners and an educational program to inform the community of risks and mitigation measures.

The Preferred Alternative addresses community concerns by providing the potential for unrestricted land use in the Southern Area and access to sites of cultural significance in the Northern area. If unrestricted land use cannot be attained in the Southern Area, construction land use controls will be instituted to allow the most flexibility with future land use.

No further action is needed to reduce MC risks at WVIA because previous investigations (2008 Site Inspection and 2010 Remedial Investigation) concluded that MC concentrations at WVIA are not high enough to pose unacceptable risks to human health or the environment.

This Proposed Plan is issued by the Marine Corps with agreement from the State of Hawai'i DOH. The Marine Corps may modify the Preferred Alternative or select another response action presented in this Plan based on new information or public comments. Therefore, the public is encouraged to review and comment on all the alternatives presented in this Proposed Plan.

The Marine Corps is issuing this Proposed Plan as part of its public participation responsibilities under the NCP.

This Proposed Plan provides information that can be found in greater detail in the Feasibility Study (FS) Report and other documents contained in the Information Repositories and Administrative Record file for this site. The Marine Corps and DOH encourage the public to review these documents to gain a better

understanding of the site and the investigations that have been conducted at the site.

SITE HISTORY

WVIA's military history dates back to the early 1940s, when the U.S. Army leased over 2,000 acres in the Waiahole and Waikane Valleys between 1943 and 1953 for jungle training, small arms, artillery, and mortar firing, field maneuvers and a bombing range for air-to-ground ordnance delivery practice. The area was known as the Waiahole Training Area and managed by the U.S. Army as property of Fort Hase.

In 1944, four people were injured, two fatally, when a 60-millimeter (mm) mortar discovered in Waikane Valley accidentally detonated. Three children were injured in 1963, when a souvenir rifle grenade reportedly discovered in Waikane Valley exploded after it was thrown against a wall. No other fatalities or injuries due to MEC have been reported for Waikane Valley.

In 1953, the Marine Corps leased 1,061 acres of the training area. Training consisted of small arms fire, 3.5-inch rockets, and possibly medium artillery fire. Live fire stopped in the early 1960s. Because of fire hazards, incendiaries were prohibited and all ammunition in excess of 0.50 caliber was to be fired into the designated impact area. The lease was terminated in 1976 and the land was returned to the original owners.

The Marine Corps conducted an ordnance clearance sweep in 1976, resulting in the removal of over 24,000 pounds of practice ordnance and fragments, including 42 items of UXO. The after action report stated that 187 acres of the WVIA can never be certified free of UXO because of the ground cover and topography.



Figure 3: Warning Sign on existing fence at WVIA.

In December 1983, heavy rain exposed ordnance on the property and Marine Corps Explosive Ordnance Disposal (EOD) removed a number of 3.5-inch rockets. In January 1984, Marines conducted a second clearance sweep and removed 480 3.5-inch rockets. In June 1984, an intensive ordnance clearance resulted in the removal of an additional 16,000 pounds of practice ordnance and 190 items of UXO from the parcel. The after action report supported the 1976 report conclusion that the property could never be certified clear of ordnance.

In 1989, the government acquired title to the 187-acre ordnance contaminated area of the original WVIA because of safety concerns from the ordnance that remained on the site after the previous clearance efforts. A perimeter chain-link fence was installed in 1992 and the area remains as government property (see Figure 3). The area is currently controlled and maintained by Marine Corps. The project site is managed as an “other than operational range,” with access controlled fencing and warning signs. Civilians may legally enter the property only if accompanied by EOD personnel.

SUMMARY OF PREVIOUS INVESTIGATIONS

An Investigation and Preliminary Range Assessment & Archives Search was conducted in 1998, and recommended further action based on historic data.

Significant evidence of MEC, Material Potentially Presenting an Explosive Hazard (MPPEH), and Materials Documented as Safe (MDAS) were discovered on the ground surface during the 2008 Site Inspection (SI). Seventy MEC items were found, concentrated in the area now identified as the Northern Target Area. As a result of these discoveries, a Remedial Investigation (RI) was conducted in 2010.

During the 2010 RI, 92 MEC items and 26 MPPEH items were identified, concentrated in the Northern Target Area, almost all on the ground surface. One of the MEC items and one of the MPPEH items were found during the subsurface investigations, both items less than 1 foot below ground surface. No MEC or MPPEH items were found within Northern Non-Target Area, only expended small arms projectiles.

The areas where MEC/MPPEH items were found are characterized by steep slopes, erosion features, and various degrees of vegetation density. Storm water runoff and erosion in these areas may cause limited migration of MEC/MPPEH from the upper elevations to lower locations; however, there is no evidence that MEC/MPPEH has migrated down to Waikane Stream. The entire length of the stream within the site boundaries was observed by UXO Technicians during the RI and no evidence of MEC or MPPEH was observed near the stream.

During the SI and RI fieldwork, 2.92 acres in transects

and grids were investigated in the Southern Area with metal detectors. Additional undocumented acres were inspected by UXO personnel during the RI fieldwork while traversing this area. No MEC or MPPEH items were observed in the Southern Area during the RI. Three items identified as MDAS were found south of the stream during the SI and removed during the RI. Based on their location and position, they were likely carried out from the Northern Target Area. Two items, 3.5-inch practice rockets, were found propped against the fence along the access road. One item, a practice rifle grenade, was found leaning against a tree, next to an abandoned bus. None of these three items were embedded in the topsoil or vegetation; all were above the vegetation deadfall, and all pointed in a direction incompatible with impact from the firing area.

SCOPE AND ROLE OF THE ACTION

This action will be the final action for the site. ***The Remedial Action Objectives for the site are to prevent exposure to MEC through reduction of MEC hazards, and to support future agricultural, recreational, cultural, and forest reserve land use.*** This response will permanently reduce the explosive hazard and the toxicity, mobility, and volume of source materials that constitute the principal threat at the site.

SUMMARY OF SITE RISKS

As part of the RI/FS, a MEC Hazard Assessment (MEC HA) was conducted to determine the risks associated with MEC at the site. The RI/FS also included human health and ecological risk assessments.

The land area within and near the Southern Area was previously used for taro farming and agriculture. Some of the land within the Northern Target Area was also used for agriculture. The entire Northern area and the portion of the Northern Target Area not used for agriculture are above the Forest Reserve line. These land uses were considered the anticipated future land use.

MEC Risks

The MEC HA addressed the likelihood of exposure to MEC, the severity of the exposure, and the likelihood of detonation. It is important to note that exposure to MEC does not mean that an incident or injury will occur. A person would have to disturb the MEC item (e.g., apply heat, friction, or shock to the item) to be exposed to actual explosive hazards.

The Northern Target Area has a high MEC risk. Despite the surface clearance conducted during the RI, shoulder-fired grenades and rockets may still exist and may cause major injuries if detonated by an individual's actions.

Northern Non-Target Area has a moderate MEC risk. Most of this area was inaccessible during the previous

investigations, but a few MEC items were found and therefore others may exist.

In the Southern Area, three MDAS items were found; however, the placement of these items (leaning on a tree and against a perimeter fence) suggest these items were carried out of the Northern Target Area, and therefore it was concluded that the southern area was not a target area. Absence of MEC in the Southern Area led to the determination that no risk assessment was necessary.

The land area surrounding the site is heavily vegetated and human activity throughout the site is infrequent; boundary fences and gates prevent access. However, trespassers break through the fence or cut the gate locks to gain access for boar hunting.



Figure 4. MDAS found during RI.

Human Health and Ecological Risks

Soil and sediment samples were taken from around the site during the SI and the RI to determine if MC contamination presented any risk at the WVIA. Several samples exceeded the State of Hawaii action limits for lead. A Tier 2 Baseline Risk Assessment consisting of a Human Health Risk Assessment (HHRA) and Ecological Risk Assessment (ERA) was conducted to assess potential risks from MC.

The HHRA evaluated potential risks to future residential land users due to MC remaining on WVIA. Potential risks to human health were determined to be below regulatory threshold values or action levels.

The ERA evaluated potential risks to animals and the environment from MC remaining on WVIA. Based on soil and sediment sample analysis, the potential risks were determined to be within acceptable levels. Therefore,

there are no risks to human health and the environment at the WVIA with respect to MC.

It is the Marine Corps' current judgment that the Preferred Alternative identified in this Proposed Plan is necessary to protect public health and the environment from actual or threatened explosive hazards which may present an imminent and substantial endangerment to public health and the environment.

WVIA Remedial Action Objectives (RAOs)

- Prevent current and future exposure to MEC through reduction of MEC hazards
- Restore the site to support existing and future land use (agricultural, recreational, cultural, and forest reserve)
- Protect and provide access to cultural sites
- Prevent migration of MEC into accessible areas.

SUMMARY OF REMEDIAL ALTERNATIVES

Four munitions response alternatives were evaluated to identify the most appropriate response for the site. All alternatives (except "No Action") include annual inspections by the Marine Corps to ensure the effectiveness of the remedy.

No Action

The "No Action" alternative involves no active response or controls to locate, remove, dispose of, or limit the exposure to any potential MEC present within the site. The "No Action" alternative is used in the evaluation of alternatives to provide a baseline for comparison of other response alternatives.

The "No Action" alternative assumes continued use of the site in its present state. If the potential exposure and hazards associated with the site are compatible with current and future developments in the area, then "No Action" may be warranted. It is important to note that the government will respond to any future MEC discovery at the site regardless of whether the site was designated for "No Action."

Land Use Controls

Required for any cleanup action, Land Use Controls (LUCs) consist of administrative and physical measures designed to control access to the site, make the public aware of the hazards, and maximize safety. LUCs include such controls as fences, signs, fact sheets, and public education.

- Construction support by explosives safety experts may be required for activities involving soil disturbance below the maximum clearance depth.

- Warning signs would be installed to prohibit entrance to unauthorized personnel, warn of potential MEC hazards, and provide a telephone number to contact if potential MEC is observed. Fencing and signage would be installed around a selected area to tie into the existing fencing that currently extends to 600- to 700-foot elevations.
- Annual inspection would be performed to ensure that the fencing or signage is uncompromised and erosion has not exposed MEC causing potential migration of MEC to cleared areas. Breaks in the fence would be repaired to prevent unauthorized entry. Annual reports would be completed describing the inspection results, maintenance, evaluation of erosion and potential migration of MEC, and assessment of the effectiveness of the LUC.
- Five-year reviews would be conducted to evaluate the implementation and performance of LUCs in order to determine if the remedy continues to be protective of human health and the environment.
- The fenced area would remain in government ownership if only the LUC alternative is implemented. UXO personnel escorts would be provided for the public to access cultural sites upon request. An education program would be provided to raise public awareness of the risks and control measures at WVIA, and minimize risk to human receptors.
- These measures would avoid contact between potential human receptors and MEC, monitor potential MEC migration to areas not covered by LUCs and meet the site-specific RAOs.

Surface Removal of MEC and LUCs

This alternative considers clearance of MEC from the ground surface in accessible areas using metal detector assistance and safety lines where necessary and practical. The clearance is followed by implementation of LUCs. Under this alternative, the following tasks are accomplished:

- Cut sufficient vegetation to allow for effective use of detection equipment and safe removal of surface MEC related items
- Survey and subdivide the site into grids
- Remove MEC related items from the ground surface of each grid
- Perform explosive demolition of MEC at the site
- Transport MDAS for offsite treatment and disposal.

Surface and Subsurface Removal of MEC and LUCs

This alternative includes all elements of the Surface Removal alternative, but the removal of MEC related

items would extend to 2 feet below the ground surface, which is a depth consistent with investigative findings. This alternative is the most ambitious of the four alternatives.

EVALUATION OF ALTERNATIVES

Nine criteria are used to evaluate the different munitions response alternatives individually and against each other in order to select a remedy. These nine criteria are grouped into three categories: threshold, balancing, and modifying criteria. This section of the Proposed Plan profiles each alternative against the nine criteria, noting how it compares to the other options under consideration. The detailed “Comparative Analysis of Alternatives” can be found in the FS Report.

Threshold Criteria – Must be met before an alternative can be evaluated further.

1. Overall Protection of Human Health and the Environment

All of the alternatives provide protection of human health and the environment. Even the No-Action alternative provides protection due to the existing fence and signage.

2. Compliance with Applicable, Relevant, and Appropriate Requirements

All of the alternatives comply with Applicable, Relevant and Appropriate Regulations.

Balancing Criteria – technical merits are scored objectively from least desirable to most desirable. Table 1 provides a comparison of alternatives based on the Balancing Criteria.

3. Long-Term Effectiveness and Permanence

Subsurface Clearance with LUCs scores highest in all three areas in long-term effectiveness and permanence because it minimizes surface and subsurface exposure to MEC. Surface Clearance scores second highest. LUCs and No Action score third and fourth, respectively.

4. Reduction of Toxicity, Mobility, or Volume of Contaminants through Treatment

Subsurface Clearance with LUCs scores highest for all three areas as it achieves the greatest reduction of MEC. Surface Clearance with LUCs scores second highest as it reduces surface MEC at all three sites. The LUC and No Action alternatives score the lowest because they do not reduce toxicity, mobility, or volume.

5. Short-Term Effectiveness

The No Action and LUC alternatives score highest for all three areas because they require little time to implement, and have minimal adverse effect on the community and the environment. Surface Clearance with LUCs scores

ALTERNATIVE	Long-Term Effectiveness	Reduction of Contaminants	Short-Term Effectiveness	Implementability	Cost	Overall
SOUTHERN AREA						
LUCs	2	1	4	4	4	15
Surface Clearance w/LUCs	4	4	3	3	2	16
Surface & Subsurface Clearance w/LUCs	5	5	2	2	1	15
NORTHERN NON-TARGET AREA						
LUCs	2	1	4	4	4	15
LUCs w/ Construction Support	2	1	4	4	3	14
Surface Clearance w/LUCs	4	4	3	3	2	16
Surface & Subsurface Clearance w/LUCs	5	5	2	2	1	15
NORTHERN TARGET AREA						
LUCs	2	1	4	4	4	15
LUCs w/ Construction Support	2	2	3	4	3	14
Surface Clearance w/LUCs	4	4	2	3	2	15
Surface & Subsurface Clearance w/LUCs	5	5	1	1	1	13

Table 1 Overall Scoring of Alternatives Based on Balancing Criteria

second highest as it reduces risk, requires more time and effort to implement, and has short-term adverse impacts on the community and the environment. Subsurface Clearance with LUCs scores lowest because it takes the longest time to implement and has the most short-term impact on the community and environment.

6. Implementability

The No Action alternative is the most implementable for all three areas since it requires no resources to implement. The LUC alternative scores second highest because it requires a limited amount of resources to implement. Surface Clearance with LUCs scores lower since it requires specialized equipment and trained personnel working on steep terrain and thick vegetation. Subsurface Clearance with LUCs scores lowest because it requires the same amount of resources as the Surface Clearance with LUCs with the addition of subsurface clearance, and is the most difficult to implement.

7. Cost

For all three areas, the No Action alternative scores highest because it is the least costly. The LUC alternative scores second highest. The Surface Clearance with LUCs alternative is third highest. The Surface and Subsurface Clearance with LUCs alternative scores lowest because it is the most costly.

Modifying Criteria – Agency and community concerns are evaluated, and may be used to modify the remedial alternatives.

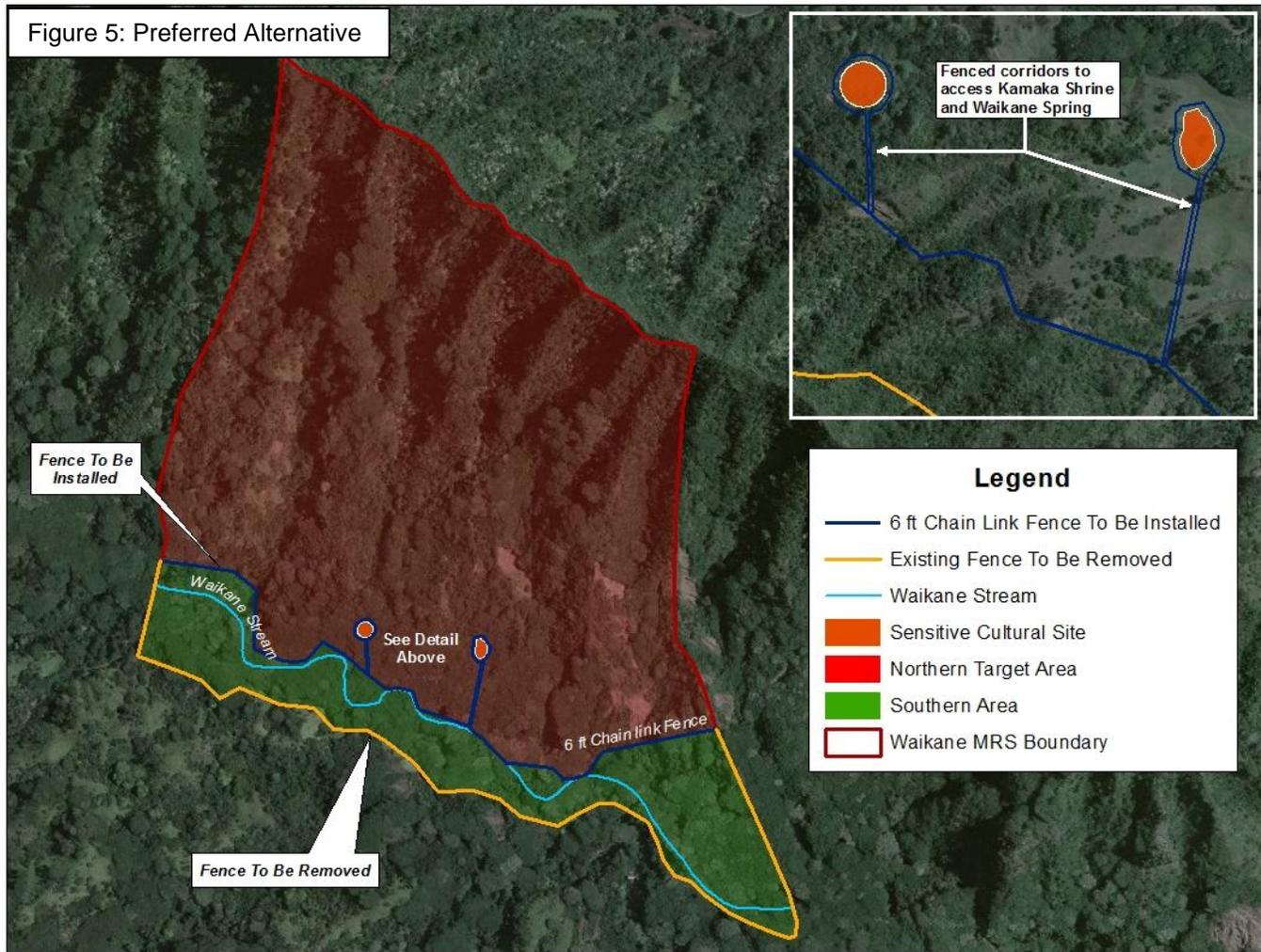
8. State/Support Agency Acceptance

This criterion evaluates the technical and administrative issues and concerns that the State of Hawaii may have regarding each of the alternatives. State of Hawaii issues and concerns were addressed in comments on the draft Feasibility Study report. Based on interaction with the State of Hawaii it is assumed the Preferred Alternative (presented below) will be accepted.

Community Acceptance

This criterion evaluates the issues and concerns the public may have regarding each of the alternatives. Adjacent landowners include Kualoa Ranch and SMF Enterprises, Inc (which own undeveloped forest to the north, south, and west), the City and County of Honolulu (which have designated the area as the Waikane Nature Preserve) and the Roberts family (which owns a small parcel adjacent to the southern border of the project site). Non-contiguous coastal lands east of the site include a mix of residential and recreational properties.

Stakeholders provided input during Restoration Advisory Board meetings and provided comments during the public review period for the draft Feasibility Study report. Stakeholder concerns were addressed in the final FS



report and incorporated into the Preferred Alternative presented in this Proposed Plan. The community is likely to support the Preferred Alternative as the most acceptable alternative for WVIA based on previous comments.

Community acceptance of the preferred alternative will be formally evaluated after the public comment period on the Proposed Plan.

PREFERRED ALTERNATIVE

The Preferred Alternative for addressing the potential risks at WVIA is as shown in Figure 5 and as follows:

- 1) Surface clearance of accessible areas in the Southern Area and Northern Target Area;
- 2) Removal of the existing fence from the Southern Area, and installation of new fencing between the Southern and Northern Areas;
- 3) Subsurface clearance of a 10-foot wide buffer strip along the south side of the new fence separating the Southern area from the Northern Areas;
- 4) Subsurface clearance in the Southern Area in a 50-

foot radius of any MEC found during the surface clearance;

- 5) Subsurface clearance of corridors to and around the Kamaka Shrine and Waikane Spring, and the installation of fencing along and around these cleared areas, to allow free access to these sites from the Southern Area; and
- 6) The Northern Target Area and the Northern Non-Target Area would be combined into a single area. Land use controls include construction of a fence between southern and northern areas; notification letters to local landowners, and an educational program to inform the community of risks and mitigation measures. The existing fence around the Southern Area would be removed.

The Preferred Alternative was selected over other alternatives because it:

- Provides the removal of risk through removal of MEC;
- Provides controls to minimize future exposure to MEC potentially remaining at the site;
- Can be implemented in a reasonable time frame;

- Provides an opportunity to use the property for the land uses desired by the community;
- Provides access to cultural sites of known significance.

Based on the information available at this time, the Marine Corps believes the Preferred Alternative would be protective of human health and the environment, would comply with ARARs, would be cost effective, and would utilize permanent solutions and removal technologies to the maximum extent practicable. Because it would treat the source materials constituting principal threats, the remedy would also meet the statutory preference for a remedy that involves treatment as a principal element.

The Preferred Alternative also best addresses the concerns of the community for future land use by providing the potential for unrestricted land use in the Southern Area with free and safe access to sites of cultural significance in the Northern area. If unrestricted land use cannot be attained in the Southern Area, construction support can be requested to allow soil disturbance activities to occur below the maximum clearance depth.

The Marine Corps may modify the Preferred Alternative in response to public comments or new information.

GLOSSARY

Applicable or Relevant and Appropriate Requirement (ARAR): Requirements, including cleanup standards, standards of control and other substantive environmental protection requirements and criteria, for hazardous substances as specified under federal and state laws and regulations, that must be met under CERCLA.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): The federal law that regulates environmental investigation and cleanup of sites identified as possibly posing a risk to human health or the environment.

Decision Document: A legal document that certifies the remedy selected complies with CERCLA and documents the final remedial response action decision.

Feasibility Study (FS): Generates data to enable the selection of appropriate response action for site hazards or contamination identified during an RI.

Land Use Control (LUC): Physical, legal, or administrative mechanisms restricting the use of, or limiting access to, contaminated property in order to reduce risk to human health and the environment. Examples are deed restrictions, access limits, zoning restrictions, permit requirements, fencing, and signage.

Material Documented as Safe (MDAS): MPPEH which has undergone a dual-inspection process and been determined to contain no explosives.

Material Potentially Presenting an Explosive Hazard (MPPEH): Material potentially containing explosives or munitions (e.g., munitions containers and packaging material; munitions debris remaining after munitions use, demilitarization, or disposal; and range-related debris).

Munitions and Explosives of Concern (MEC): Specific categories of military munitions that may pose unique explosives safety risks, including unexploded ordnance (UXO), discarded military munitions (DMM), or Munitions constituents (e.g., TNT, RDX) present in high enough concentrations to pose an explosive hazard.

Munitions Response: Response actions, including investigation, removal actions and remedial actions to address the explosives safety, human health, or environmental risks presented by MEC, or to support a determination that no such action is required.

Munitions Response Site (MRS): A discrete location on a defense site known to require a munitions response.

National Oil and Hazardous Substances Contingency Plan (NCP): 40 Code of Federal Regulations 300 establishes EPA's response policy and lays out key response steps for implementing CERCLA.

Preferred Alternative: The cleanup alternative selected following a detailed comparative analysis using the nine evaluation criteria identified in the NCP.

Proposed Plan: A document that reviews the proposed action, summarizes the recommended proposed action, explains the reasons for recommending it, and solicits comments from the community.

Remedial Investigation (RI): The RI is an onsite investigation which follows an SI, and is intended to further characterize the nature and extent of hazards identified during the SI, evaluate risks to human health and the environment, and recommend alternatives to be evaluated during the ensuing FS.

Restoration Advisory Board (RAB): RABs expand community involvement in decisions about cleanup at military bases. By bringing together people who reflect the many diverse interests within the community, a RAB can help identify issues of concern and reduce potential communication problems that could result in delay. In addition, each RAB acts as a liaison between the community and the installation.

Risk Assessment: Qualitative or quantitative evaluation of the risk posed to human health or the environment by the actual or potential presence or release of hazardous substances, pollutants, or contaminants.

Site Inspection (SI): The SI is an onsite inspection intended to gather enough information to determine whether there is a release of hazardous substances, and

to characterize the nature of the release and associated threats to human health and the environment.

REFERENCES

USA Environmental, Inc. 26 July 2011. Final Remedial Investigation Report, Munitions Response Site, Waikane Valley Impact Area, Kaneohe, Hawaii.

USA Environmental, Inc. 13 November 2009. Final Site Inspection Report, Munitions Response Program, Waikane Valley Training Area, Kaneohe Hawaii.

U.S. Army Corps of Engineers. 1998. Range Investigation and Preliminary Range Assessment and Archives Search Report, Marine Corps Base Hawaii and Associated Sites.

COMMUNITY PARTICIPATION

The Marine Corps encourages the public to gain a comprehensive understanding of the WVIA site, the activities that have been conducted there, and the response action/ final remedy recommended for the site. Community members and regulatory agencies have provided input through periodic Restoration Advisory Board (RAB) meetings and by reviewing and commenting on written reports and documents. The Marine Corps provides information to the community through public meetings, fact sheets, posting site reports and related documents in information repositories and on line, and announcements published in the Honolulu Star-Advertiser.

WHAT'S NEXT?

The Marine Corps encourages all interested parties to review and comment on this Proposed Plan. Comments received from community members are valuable in helping the Marine Corps determine the final decision for this site. The Marine Corps may revise the recommended final remedy based on new information or public comments.

After carefully considering all comments received during the public comment period, the Navy and EPA will select the final remedy for WVIA with concurrence from the DOH. The final remedy selected will be presented in a **Decision Document**.

FOR MORE INFORMATION

If you have questions or need additional information please call the Marine Corps Base Hawaii Environmental Restoration Office at (808) 257-7142. Visit the Waikane Valley RAB website or the Information Repositories to review official WVIA documents including the Feasibility Study.

Website Address:

<http://www.mcbh.usmc.mil/g4/envIRON/WaikaneRAB.htm>

Information Repository Locations:

- Kaneohe Public Library, 45-829 Kamehameha Hwy., Kaneohe, HI 96744
- KEY Project, 47-200 Waihee Road, Kaneohe, HI 96744
- Hamilton Library, Hawaiian & Pacific Collection, 2550 McCarthy Mall, Honolulu, HI 96822

PUBLIC COMMENT PERIOD:
January 12, 2012 – February 13, 2012

PUBLIC MEETING: January 12, 2012

The meeting will be held at the Waiahole Elementary School at 7:00 p.m.

There are two ways for you to provide your comments during the 30-day public comment period:

1. Send written comments to:

COMMANDING OFFICER
ATTN LE (R HU)
BOX 63062 ENVIRONMENTAL
MCBH KANEOHE BAY HI 96863-3062

2. Provide your comments during the public meeting. A court reporter will be present to record comments.

USE THIS SPACE TO WRITE YOUR COMMENTS

Your input on the Proposed Plan for the Waikane Valley Impact Area is important to the Marine Corps and DOH. Comments provided by the public are valuable in helping the Marine Corps select a final cleanup remedy for the site.

You may use the space below to write your comments. Those with internet access may submit their comments to the Marine Corps via email to randall.hu@usmc.mil. Comments submitted by mail must be postmarked by February 13, 2012 and should be addressed to:

COMMANDING OFFICER
ATTN LE (R HU)
BOX 63062 ENVIRONMENTAL
MCBH KANEOHE BAY HI 96863-3062

If you have any questions about the comment period, please contact Randall Hu at (808) 257-7142.

Name _____

Address _____

City _____

State, Zip _____

Comments:
