US Army Corps of Engineers ®

Proposed Plan

Sector 15 Munitions Response Site
Former Waikoloa Maneuver Area

FUDS PROJECT NO. H09HI035919
ISLAND OF HAWAI'I, HAWAI'I

July 2023

1 Introduction

This **Proposed Plan** summarizes the reasons behind the proposed decision of **No Further Action** at the Project 19 – Sector 15 (Sector 15) **Munitions Response Site (MRS)** located within the former **Waikoloa Maneuver Area (WMA)** **Formerly Used Defense Site (FUDS)**. The **U.S. Army Corps of Engineers (USACE)** proposes that No Further Action is necessary to protect human health and the environment in Sector 15 because there is **no evidence of use (NEU)** of **munitions and explosives of concern (MEC)** or **munitions constituents (MC)** by the military in Sector 15. There are numerous active **Military Munitions Response Program (MMRP)** FUDS projects at WMA, as presented in ***Figure 1***. This plan provides USACE's rationale for the Sector 15 MRS, which is based on investigative actions that demonstrate there is no source of MEC or MC that requires **remedial action**.

USACE is issuing this Proposed Plan as part of its public participation responsibilities under the **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)** and Section 300.430 (f)(3) of the National Oil and Hazardous Substances Pollution Contingency Plan (NCP) (40 Code of Federal Regulations Part 300). This Proposed Plan summarizes information that can be found in greater detail in the MMRP Final **Remedial Investigation (RI)** Report https://eha-cloud.doh.hawaii.gov/iheer/api/documents/201123/download and other documents contained in the **Administrative Record** file for this Site. This Proposed Plan summarizes the following:

- Site Background (Section 2)
- Site Characteristics (Section 3)
- Previous Investigations and RI Findings and Conclusions (Section 4)
- Scope and Role of Response (Section 5)
- Summary of Site Risks (Section 6)
- Preferred Alternative (Section 7)
- Community Participation (Section 8)

Public Comments Are Requested

PUBLIC COMMENT PERIOD

July 24, 2023 through August 25, 2023

Written comments on this Proposed Plan may be submitted to USACE during the comment period. Comment letters must be postmarked no later than **August 25, 2023,** and may be sent to USACE–Honolulu District, WMA FUDS Project Manager:

WMAUXOInfo@usace.army.mil

U.S. Army Corps of Engineers, Honolulu District
ATTN: CEPOH-PPE
230 Otake St., Room 104
Fort Shafter, Hawaii 96858-5440

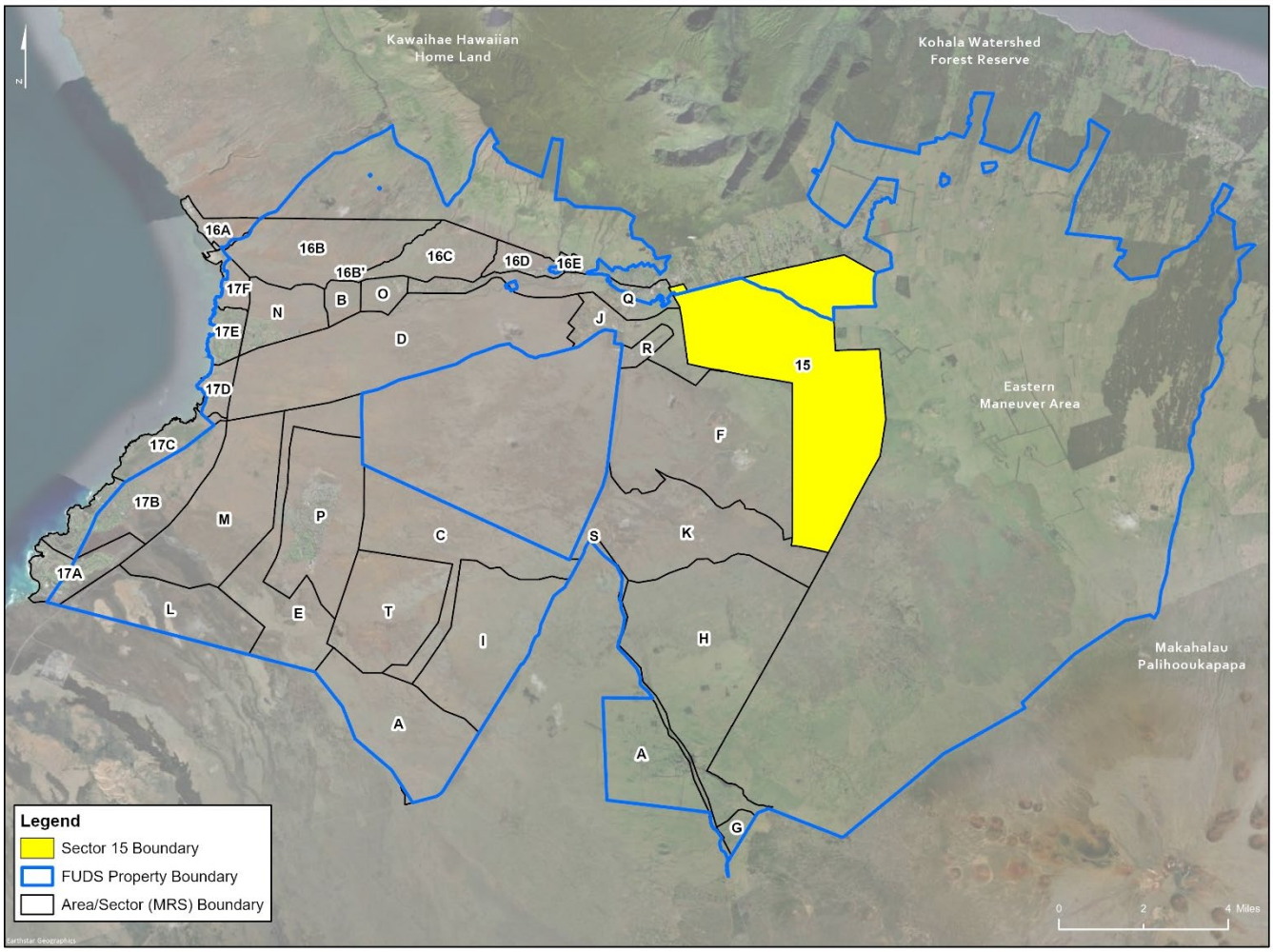
PUBLIC MEETING
August 12, 2023

USACE will host a public information session at 2 p.m. at Waimea Elementary School, 67-1225 Mamalahoa Highway Kamuela, Hawai'i 96743 to provide information and answer questions in an informal setting. This meeting will include a brief introduction and summary by USACE.

A glossary defining terms (identified by bold and underlined text) used in this document, as well as an acronym list and a document reference page, is included at the end of this Proposed Plan.

USACE is the lead agency for investigating, reporting, making decisions, and implementing remedial actions on FUDS projects. Representatives from the State of Hawai'i Department of Health, the regulatory agency for WMA Project 19 (Sector 15), reviewed the RI Report and agreed with its conclusions and recommendations. The RI is available at the Administrative Record/Information Repository for review.

Figure 1. Sector 15 Site Location and Overview



USACE will coordinate with the State of Hawai'i Department of Health and take into consideration their comments and the public comments received on the Proposed Plan. Information on how to participate in this decision-making process is presented in Section 8.

The Administrative Record file that supports this Proposed Plan is available for review at the USACE–Honolulu District Office and the Information Repository located at:

- USACE–Honolulu District
  Building 230 Room 104
  Fort Shafter, Hawai'i 96858-5440
  Telephone: 808-835-4089

- Information Repository
  Thelma Parker Memorial Library
  67-1209 Mamalahoa Highway
  Kamuela, Hawai'i 96743-8429
  Telephone: 808-887-6067

2 Site Background

Site Location

Sector 15 is an 11,200.2-acre irregularly shaped parcel of land located in the northeast portion of the former WMA encompassing the areas known as Pu'u Kapu and Kuhio Village (***Figure 1***).

Site History

The WMA FUDS consists of approximately 185,309.012 acres in South Kohala and Hämäkua on the Island of Hawai'i. The U.S. Marine Corps acquired the land by Temporary Right-of-Entry and License from Mr. Richard Smart, the owner of Parker Ranch, and developed a training area for the 2nd and 5th Marine Divisions during World War II beginning in December 1943. Approximately 467 acres of the former WMA near Waimea was used for tents and Quonset huts and most of the remaining acreage was used for maneuvers and military training exercises. In 1945, additional acreage was acquired, and the former WMA was expanded to 123,000 acres. In September 1946, the original 91,000

acres of the former WMA, including the land occupied by Sector 15, was transferred back to Parker Ranch. The remaining acreage was transferred at later dates, with military use in some areas until 1953.

As depicted in ***Figure 2***, a 5th Marine Division land use map *circa* 1945, Sector 15 is located within the Maneuver Range of WMA**.** Documents for the proposed training area by the 2nd Marine Division state that "***No Firing to be Allowed in Maneuver Area***". This historical designation is supported by the recent investigative results, which found no evidence that indicated training took place there. In 1954, a team of 50 men **from Explosives Ordnance Disposal (EOD)** units based at Fort Shafter and Hickam Air Force Base surveyed and removed numerous MEC items (primarily on the surface) from 54,270 acres of the former firing and maneuver area. This surface search of Sector 15 (shown as green triangles in ***Figure 3***) did not find any MEC within this MRS.

All historical information reviewed indicates that the Sector 15 MRS is within the historical Non-Live Fire Maneuver Area and no documentation has been found describing specific munitions training or munitions use within the MRS. Several investigations at Sector 15 have been conducted since the former WMA was determined to be eligible as a **Defense Environmental Restoration Program (DERP)** – FUDS and none uncovered any evidence of munitions use. The results of these investigations are summarized in Section 4 of this Proposed Plan.

Figure 2. Sector 15, 5th Marine Division Land Use Circa 1945

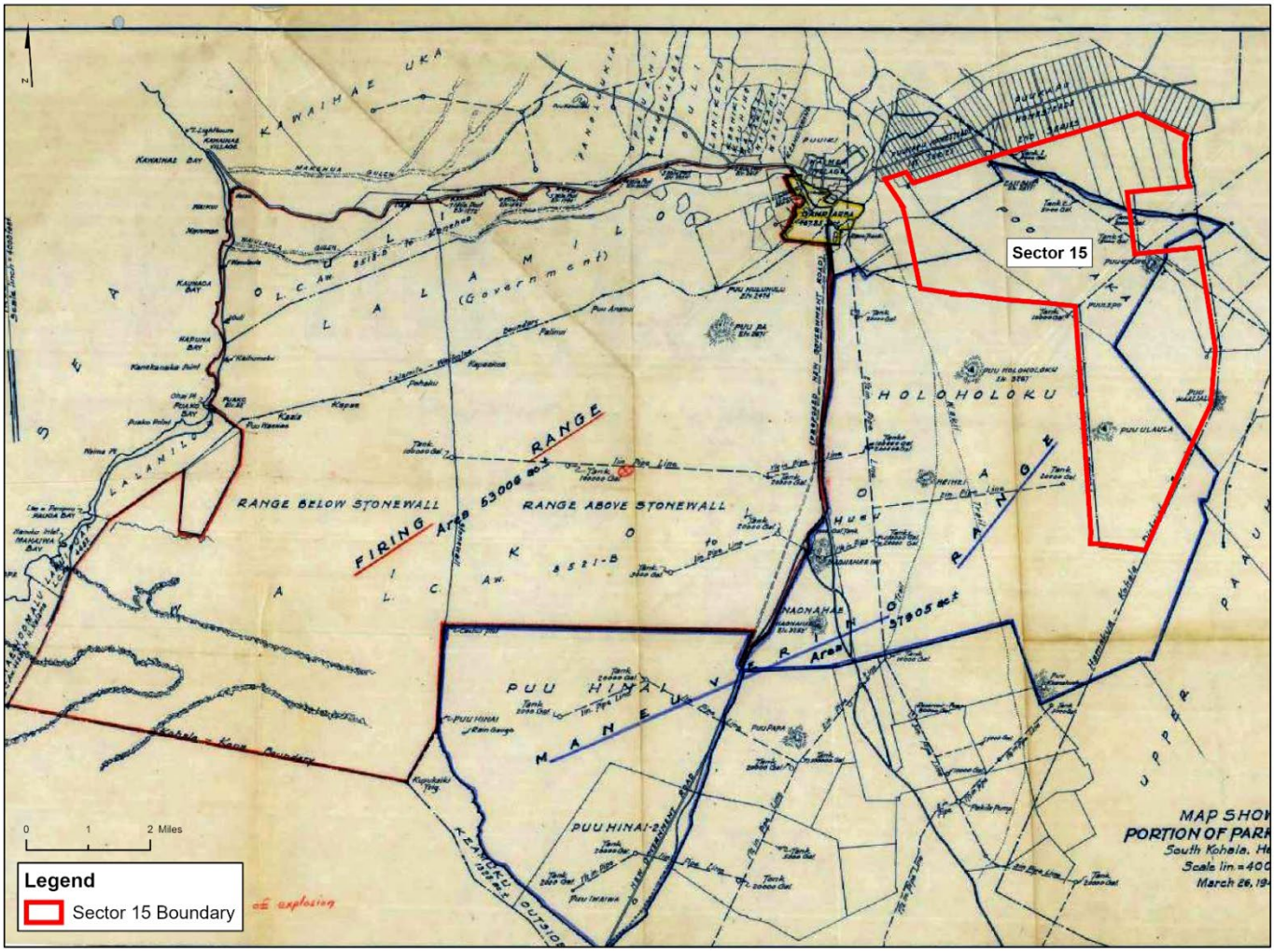
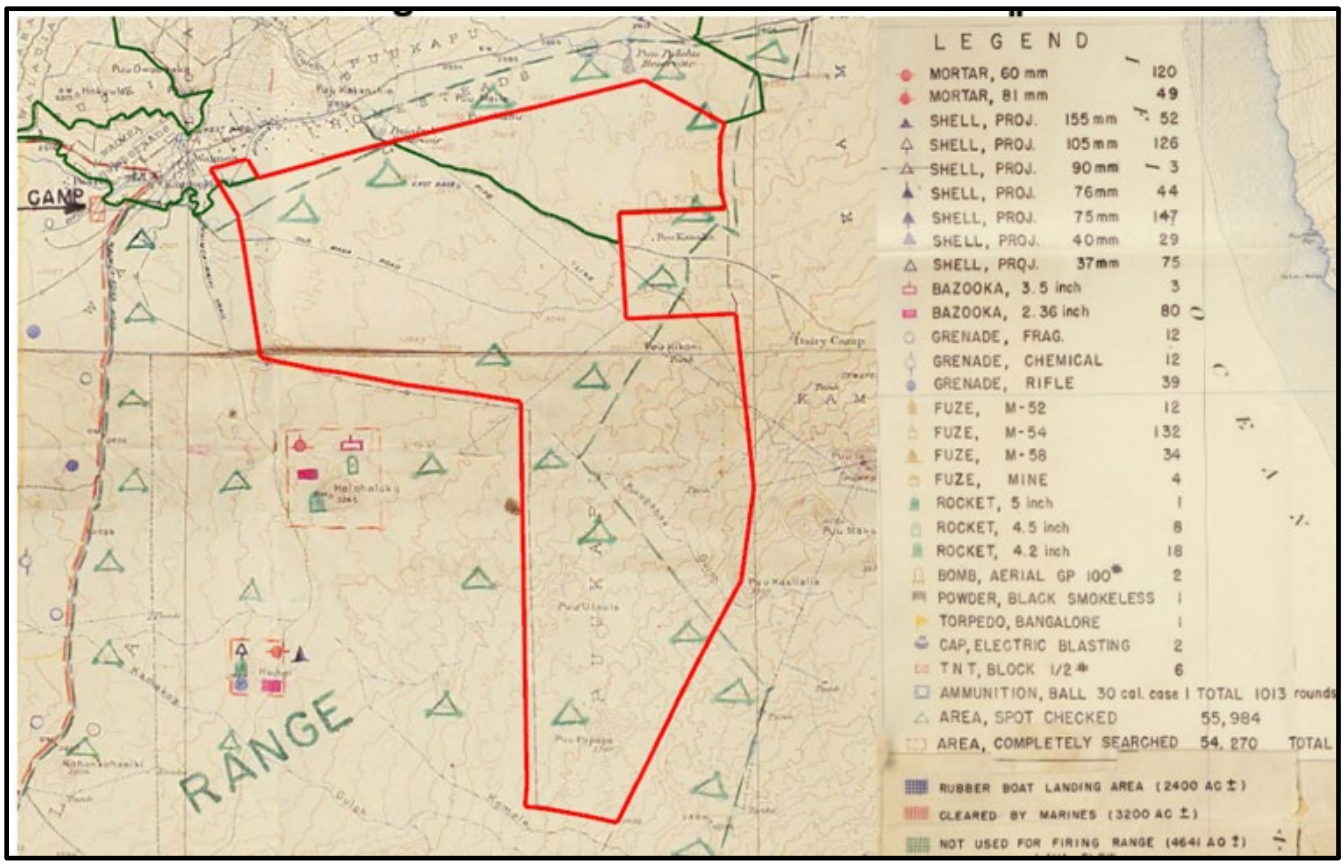


Figure 3. Sector 15 1954 EOD Clearance



3 Site Characteristics

Topography and Vegetation

The elevation across Sector 15 ranges from approximately 2,700 to 3,700 feet (ft) above sea level. The northern half of the MRS is relatively less hilly than the southern half of the MRS, which features more sloping and a few ridge lines. There is one peak (pu'u) near the southern border and another pu'u on the eastern border. Across the MRS, vegetation is mostly of shallow grasslands used for agricultural needs. A variety of trees are used to outline private property parcels. Approximately 2,700 acres of the southern portion of the MRS is covered with sparsely vegetated ancient basaltic rock outcroppings.

Soils

The northern portion of the MRS is comprised mostly of very fertile productive soils, developed from volcanic residues including ash, pumice, and cinder. They are light soils that have a low bulk density; and can therefore, have a large water-holding capacity with good drainage. The southern half of the MRS is a mixture of both fertile productive soils and shallow desert soils. Shallow desert soils tend to accumulate salts because there is not enough water to leach them through the profile.

Surface Water, and Wetlands

There are no surface water bodies within Sector 15. Geographic information system data from the State of Hawai'i depict small, non-perennial streams along the western boundary and in the southern half of the MRS. There are no perennial rivers that run through the project area, though the tiny streams may saturate and/or flood after large rain events.

Groundwater

Sector 15 is in the east and west Mauna Kea Sectors of the Island of Hawai`i. This system comprises three separately defined aquifers that are all considered irreplaceable, fresh drinking water sources (Mink and Lau 1993). Depth to **groundwater** is approximately 1,250 to 1,300 ft below ground surface.

Natural and Cultural Resources

Threatened and Endangered species that may potentially be located within the project site were determined by conducting a biological survey prior to and during field activities. No current or proposed designated critical habitat for endangered animals are present at or near Sector 15. In general, the survey concluded that the potential presence of rare, threatened, or endangered plant species is low in over 90% of the survey area because of substrate, topography,

elevation, and history of grazing. Aside from common migratory birds, nēnē, and the Blackburn's sphinx moth, the potential presence of rare, threatened or endangered animal species is low.

Cultural resource sites potentially located within the project site were determined by archaeological surveys prior to and during field activities. Archaeological sites identified during the archaeological reconnaissance surveys and monitoring work include possible burial markers, habitation features, agricultural enclosures, rock mounds/alignments, terraces, and ranch walls (USACE, 2023). No cultural debris as evidence of historic military use was identified by the archeologist during the reconnaissance.

Current and Future Land Use

Sector 15 is currently leased for residential, agricultural, and grazing purposes. Residential/agricultural lots dominate the northern portion of the sector, and the grazing lots encompass the remainder of the MRS. Anticipated future land use is consistent with current land use under Department of Hawaiian Home Lands ownership.

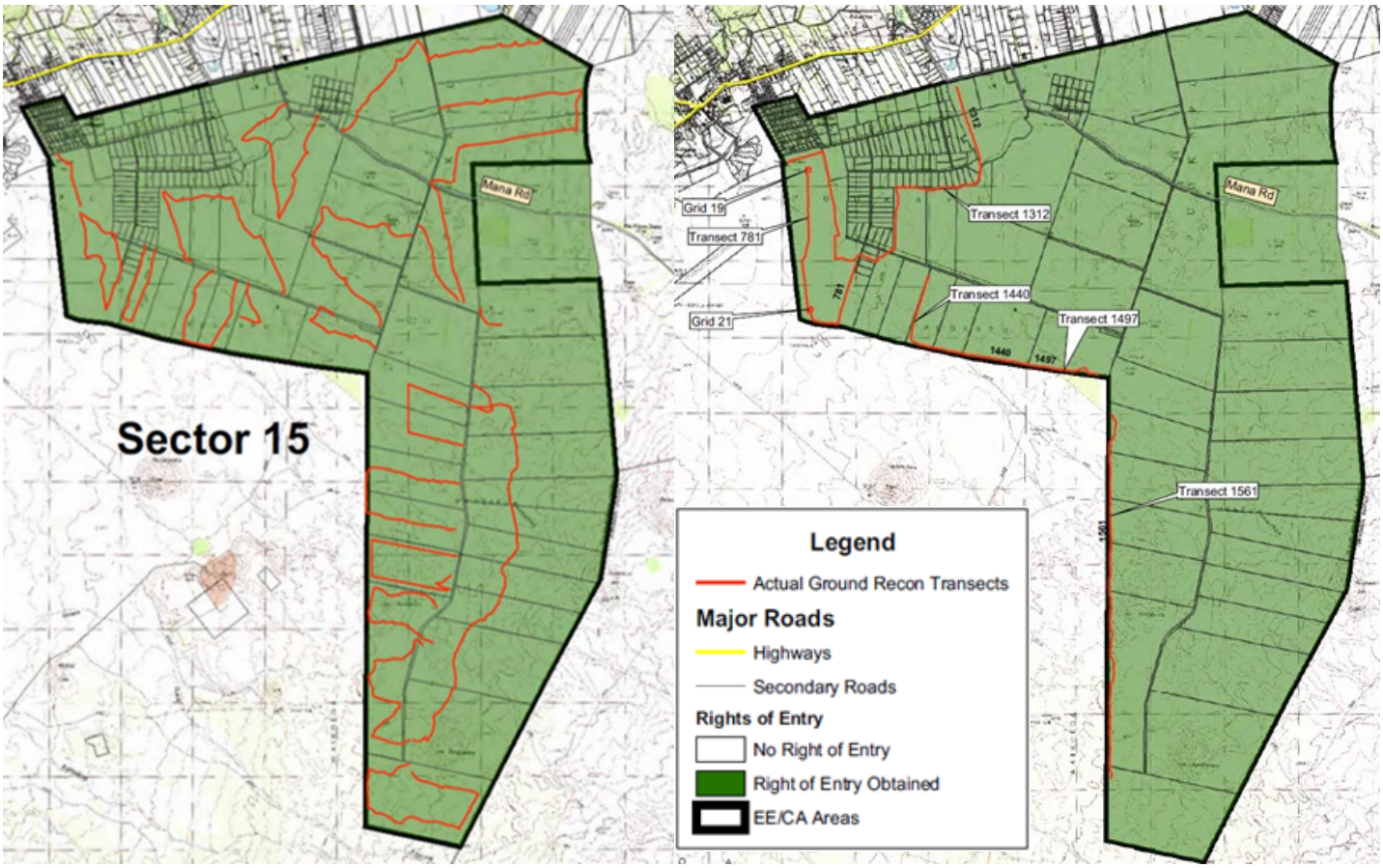
4 Previous Investigations and RI Findings and Conclusions

Several MEC investigations have been conducted by USACE in the 22 MRSs that make up the 100,200.2-acre WMA FUDS project boundary since the former WMA was determined to be eligible as a DERP – FUDS. Those investigations relevant to Sector 15 are discussed below. Additional information is included in the RI Report and the Administrative Record file.

2006 Phase III Engineering Evaluation and Cost Analysis (EE/CA)

As part of the Phase III EE/CA for the WMA, USACE evaluated the risks from munitions-related items at Sector 15 (USACE, 2006). The review of the Phase III EE/CA was performed to support conclusions made about munitions use within Sector 15 ***(Figure 4)***. ***Figure 4*** shows the coverage of the instrument-aided visual survey on the left and the **digital geophysical survey** completed on the right to identify any MEC or **munitions debris (MD)**. No MEC or MD were found on

Figure 4. Sector 15 Phase III EE/CA Results Instrument Aided Visual Survey (left) versus Geophysical Survey (right)



the surface and the 865 subsurface anomalies that were investigated were unrelated to munitions. Accordingly, USACE designated the MRS as a low hazard area (USACE, 2006).

2009 and 2010 NTCRAs

In 2009, **Non Time Critical Removal Actions (NTCRAs)** were conducted over several hundred acres covering the majority of the area adjacent to Sector 15. The nearest munitions items were discovered approximately 0.5 miles west (in Area J) and farther west in Areas R and Q ***(Figure 5)*** (USACE, 2009). There were no munitions found in the adjacent areas that indicate munitions use (e.g., target areas) extended into Sector 15.

In 2010, a NTCRA was conducted on 491.9 acres within Sector 15 (USACE, 2010). During the removal action, 4,746 anomalies were investigated, and no MEC or MD items were found.

2016–2018 RI Field Investigation

The 2016–2018 RI field effort focused on Sector 15, excluding only the 491.9-acre area where the NTCRA was performed in 2010. A primary objective of the RI was to establish the presence or absence of munitions, and if determined to be present, the type and distribution of the items. Munitions by design break into many smaller fragments when expended, which results a high density of metallic items where they were used. Areas with high densities of MD are also likely places to find munitions. As such, the field team looks for high density areas of MD, which may be indicated by a high number of detections called anomalies. All anomalies in high **anomaly** density areas in Sector 15 were intrusively investigated to determine if they were MEC or MD, which would indicate that the area was used for training or munitions disposal. In addition, a selected number of anomalies along transects in low anomaly density areas were dug up to visually confirm that the anomaly was not MEC or MD (***Figure 6)***.

In total, 12,143 anomalies were dug to visually confirm the presence or absence of MEC. All dug anomalies were confirmed to be iron-rich rock or iron-rich soil, and non-munitions related debris like horseshoes, nails, and pieces of scrap metal. The exception was a single MEC item, a partial warhead of a 2.36-inch rocket, that appears to have been accidentally or intentionally buried as it was in an area without any surrounding metallic fragments, such as motor, fins and body parts, which would indicate it was intentionally fired. There was no indication that the rocket was used in the area or transported there by the military (USACE, 2023 RI Report, Section 3.2.3).

Figure 5. MEC and MD Found in Adjacent MRSs

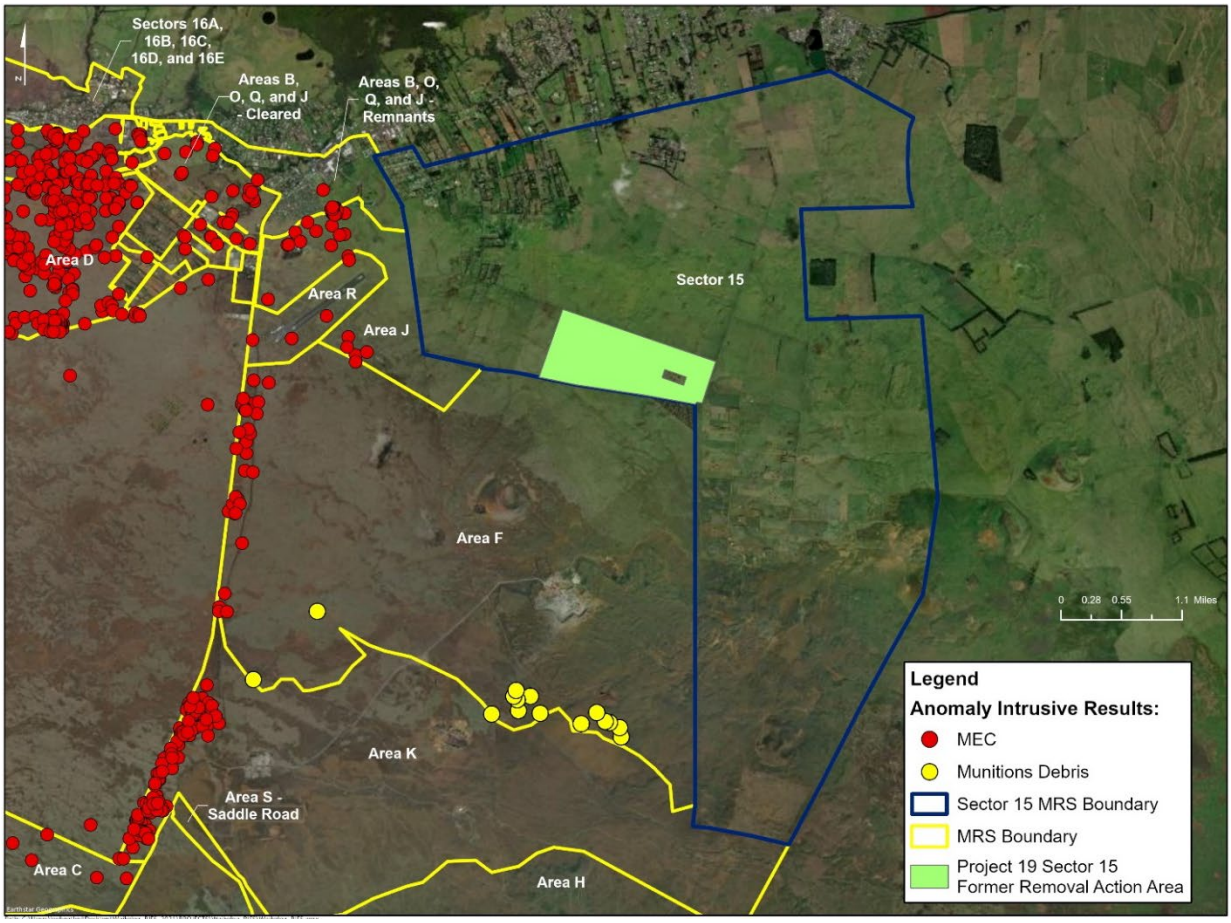
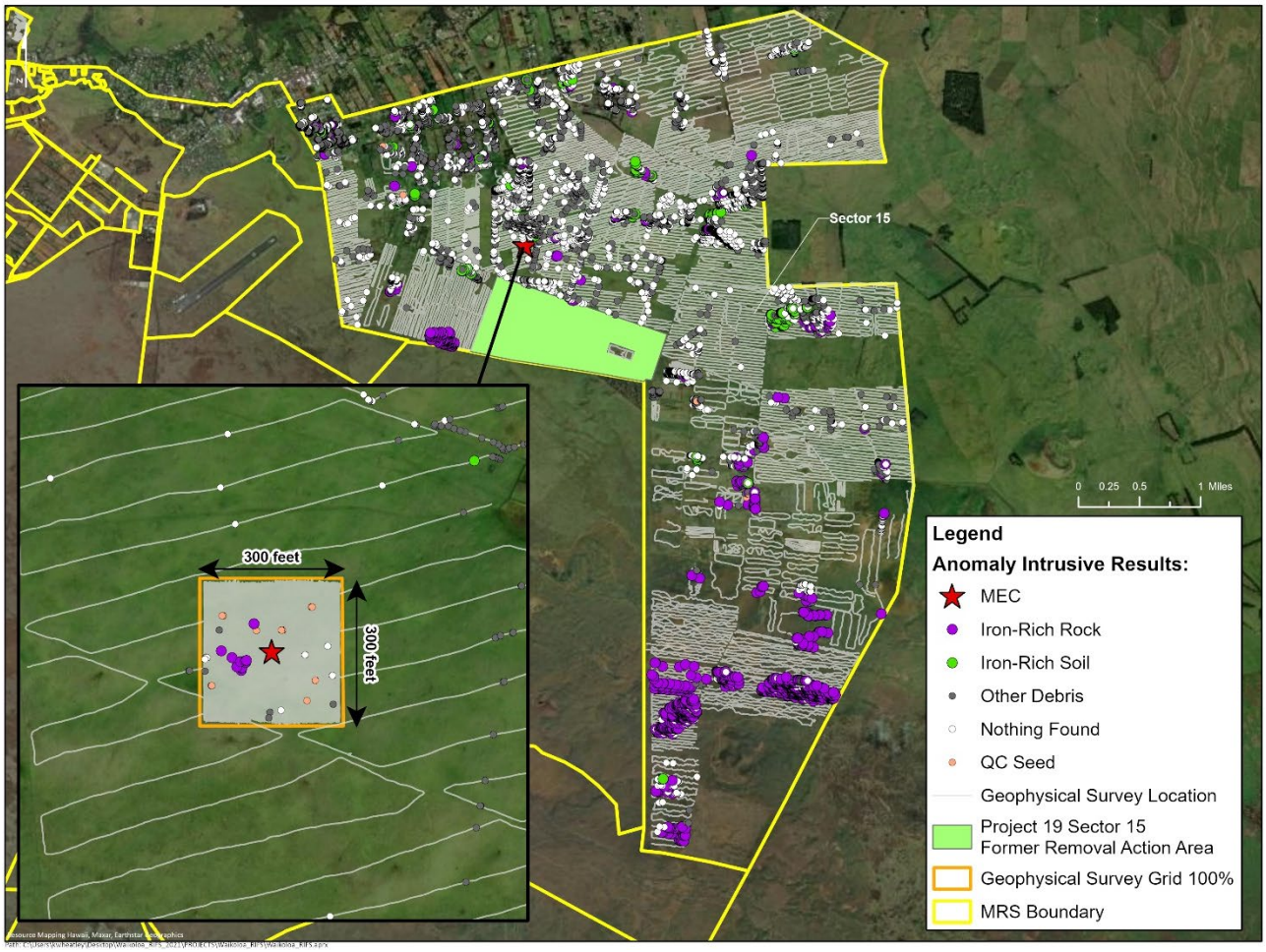


Figure 6. Sector 15 RI Results



A 300-ft x 300-ft area around where the item was located was 100% investigated, 37 anomalies were identified and investigated, and no additional MEC, MD, or range-related debris (RRD) was found. The absence of additional parts or pieces of the MEC item or any additional MEC or MD indicates not only that it was not a target area, but that the item was not fired or detonated at that location. While the release mechanism for the 2.36-inch rocket is unknown, it is highly unlikely to be the result of a traditional release mechanism (e.g., target area or disposal) based on the absence of any other evidence of munitions use in the immediate vicinity or elsewhere in the MRS. It is more likely that the item was accidentally or intentionally relocated.

Project 23 (Area F) was investigated during 2018 RI efforts. A portion of Area F shares its boundary with Sector 15. No MEC or MD were found on or near the shared boundary, and the closest MD was over 0.5 miles to the west of the border of Sector 15 (***Figure 5***).

Since only one MEC item and no MD were found, there is no viable source of MC at Sector 15; and therefore, sampling for MC was not necessary.

2021 Historical Photographic Analysis

The Army Geospatial Center finalized a Historical Photographic Analysis of the WMA on April 5, 2021 (Army Geospatial Center, 2021). This report analyzed aerial photography to identify evidence of previous military and other historically significant activities across the WMA. This report was reviewed to provide lines-of-evidence about the potential presence of MEC within Sector 15. Discussing Sector 15 on page 72, the Historical Photographic Analysis states: ***"Tracks and trails are observed within the southern part of the sector. The upper sector appears to be used primarily for agriculture and grazing lands and is or was subdivided into separate areas by fencing or walls."*** This is consistent with use of the area for farming. None of the historical photographs showed any evidence of munitions use in Sector 15.

2022 Final Preliminary Assessment for the Waikoloa Maneuver Area

Records reviewed to prepare the 2022 Preliminary Assessment indicate that the site is within the ***"Non-Firing Maneuver Area"*** or in the ***"Not Included in Request"*** area and is not within an identified target area (USACE, 2022). No records were found that any

munitions-related activities were conducted within the site. The Preliminary Assessment referenced documents that stated firing was not allowed on grazing land that included Sector 15 and that weapons training was prohibited near permanent structures (water tanks, pipelines, troughs) and cattle or livestock was not to be disturbed (5th Marine Division range regulations). U.S. Army Garrison Hawai'i and Hawai`i County Fire and Police incident reports were reviewed, and no MEC incidents have been reported within the site.

2023 RI Findings and Conclusions

As part of the 2023 RI, a Data Gap Analysis was conducted to further analyze the Draft Final RI data along with previous investigations and removals (USACE, 2018) and to confirm that the conclusions for the MEC characterization were accurate and complete. Findings from the review were used to support the conclusion that the MRS is not MEC contaminated. The data collected during the 2016–2017 RI field effort were of sufficient quality and quantity to characterize the site. These lines-of-evidence support the site characterization concluding that no MEC hazard were identified and confirms that **military munitions** operations were not conducted in the area. Therefore, Sector 15 is confirmed to be an NEU area.

5 Scope and Role of Response

This Proposed Plan describes the scope and role of the response at Sector 15 MRS of the WMA, which has been divided into 22 MRSs as shown in *Figure 1* due to its size and complexity.

Based on the results of the RI and the review of multiple lines-of-evidence, the Sector 15 MRS has been determined to be a NEU area and No Further action related to MEC or MC is required.

6 Summary of Site Risks

Risk assessments are MRS-specific evaluations, which consider current and future land use and activities, and may vary in both detail and extent to which qualitative and quantitative inputs are used. In order for a risk to be present, there must be a source, exposure pathway, and receptor. If one of these factors is not present, then there is no potential for a complete exposure pathway, and there is no unacceptable risk.

MEC Risk Assessment

The RI concluded the area was not used for training with munitions with no source area identified or suspected. Because no source of MEC was found within Sector 15, a risk evaluation was not required.

MC Human Health Risk Assessment and Ecological Risk Assessment

The RI concluded the area was not used for training with munitions with no source area identified or suspected. Because no source of MC was found within Sector 15, a risk evaluation was not required.

7 Preferred Alternative

Based on the data collected and multiple lines of evidence reviewed, Sector 15 does not have a MEC or MC hazard. The entirety of the site is confirmed to be an NEU area. Therefore, the recommended Proposed Plan for the MRS is No Further Action for MEC and MC.

8 Community Participation

One of the purposes of this Proposed Plan is to solicit comments from members of the public. USACE encourages the public to gain a more comprehensive understanding of the site and the activities that have been conducted there. USACE maintains the information repository (current information, technical reports, etc.) and administrative record file (information directly related to remedial action decisions) for Sector 15. Detailed information about the previous studies and restoration activities can be found in the reports and documents at USACE–Honolulu District Office and the Information Repository located at:

- USACE–Honolulu District
  Building 230 Room 104
  Fort Shafter, Hawai'i 96858-5440
  Telephone: 808-835-4089

- Information Repository
  Thelma Parker Memorial Library
  67-1209 Mamalahoa Highway
  Kamuela, Hawai'i 96743-8429
  Telephone: 808-887-6067

This Proposed Plan fulfills the public participation requirements of CERCLA Section 117(a), which specifies that the lead agency (i.e., USACE) must publish a plan outlining any remedial alternatives evaluated for the site and identifying the proposed decision.

The **public comment period** for this Proposed Plan is an opportunity to provide input regarding the proposed No Further Action recommendation for Sector 15. Details on the public comment period and the public meeting are provided below. All interested parties are encouraged to attend the meeting to learn more about the site from the project team members. The public meeting will also provide an additional

opportunity to submit comments to USACE on the Proposed Plan.

The insert page may be used to provide comments to USACE, although the use of this form is not required. On the basis of comments or new information, USACE may modify the proposed selected alternative, if appropriate. USACE will summarize and respond to comments in a responsiveness summary, which will become part of the official **Record of Decision (ROD)**.

After the public comment period, USACE will determine whether the Proposed Plan should be modified on the basis of comments received. If modifications based on comments do not change the current Proposed Plan for No Further Action, then a ROD will be written, signed by USACE, and placed in the Administrative Record to document the decision that no remedial action is necessary.

Mark Your Calendar for the Public Comment Period

Public Comment Period

July 24, 2023, through August 25, 2023

Submit Written Comments

USACE will accept written comments on the Proposed Plan during the public comment period. To submit comments or obtain further information, please refer to the insert page.

Attend the Public Meeting

USACE will hold a public meeting to explain the Proposed Plan. Written comments will be accepted during the public comment period, including at the meeting.

August 12, 2023 at 2:00 p.m.

Location:
Waimea Elementary School
67-1225 Mamalahoa Highway
Kamuela, Hawai'i 96743

For further information on this Proposed Plan for Sector 15, please contact:

WMAUXOInfo@usace.army.mil

U.S. Army Corps of Engineers,
Honolulu District
ATTN: CEPOH-PPE
230 Otake St., Room 104
Fort Shafter, Hawaii 96858-5440

Please Provide Your Comments Below

Your input on the Proposed Plan for the WMA Sector 15 MRS is important to USACE. Comments provided by the public are valuable in helping USACE select a final remedy for the site.

You may use the space below to write your comments, then fold and mail to the **U.S. Army Corps of Engineers, Honolulu District ATTN: CEPOH-PPE 230 Otake Street Room 104, Fort Shafter, Hawai'i 96858-5440**. Comments must be postmarked by **August 25, 2023**.

Comments may also be emailed to WMAUXOInfo@usace.army.mil
Email must be sent by **August 25, 2023**.

Glossary

Administrative Record: The body of documents that "forms the basis" for the selection of a particular response at a site that is compiled and maintained by the lead agency. Documents that are included are relevant documents that were relied upon in selecting the response action as well as relevant documents that were considered but were ultimately rejected. Until the Administrative Record is certified, it will be referred to as the "Administrative Record file."

Anomaly: Any item that is seen as a subsurface irregularity after geophysical investigation. This irregularity will deviate from the expected subsurface ferrous and non-ferrous material at a site (e.g., pipes, power lines). As it relates to this document, an anomaly is a suspected metallic object that is identified using digital and analog metal detectors.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): A Federal law enacted in 1980 and amended in 1986 by the Superfund Amendments and Reauthorization Act, which concerns investigation and response actions regarding hazardous substances, pollutants, and contaminants.

Defense Environmental Restoration Program (DERP): Under the DERP, Department of Defense (DoD) conducts cleanup at active installations, Formerly Used Defense Sites (FUDS), and Base Realignment and Closure locations. The Army, Navy, Air Force, and Defense Logistics Agency manage the cleanup programs at their active installations and Base Realignment and Closure BRAC locations. The Army oversees the U.S. Army Corps of Engineers' execution of the FUDS cleanup program. The Office of the Secretary of Defense, through the Deputy Under Secretary of Defense for Installations and Environment, Environment, Safety, and Occupational Health Directorate, manages and oversees the DERP and provides program guidance.

Digital Geophysical Survey: The use of specialized digital instruments on the ground surface to detect metallic items such as munitions or munitions debris below the ground. The instruments used are known as sensors.

Ecological Risk Assessment: An evaluation of the risk posed to the environment should remedial activities not be implemented.

Engineering Evaluation/ Cost Analysis (EE/CA): An The EE/CA is prepared for all NTCR actions as required by Section 300.415(b)(4)(i) of the National Contingency Plan. The goals of the EE/CA Analysis are to identify the extent of a hazard, to identify the objectives of the removal action, and to analyze the various alternatives that may be used to satisfy these objectives for cost, effectiveness, and implementability.

Explosive Ordnance Disposal (EOD): The detection, identification, on-site evaluation, rendering safe, recovery, and final disposal of unexploded ordnance and of other munitions that have become an imposing danger, for example, by damage or deterioration.

Formerly Used Defense Site (FUDS): A FUDS is defined as a facility or site (property) that was under the jurisdiction of the Secretary of Defense and owned by, leased to, or otherwise possessed by the United States at the time of actions leading to contamination by hazardous substances or pollutants and contaminants for which the Secretary of Defense shall carry out all response actions with respect to releases of hazardous substance from that facility or site. By the DERP policy, the FUDS program is limited to those real properties that were transferred from DoD control prior to 17 October 1986. FUDS properties can be located within the 50 States, District of Columbia, Territories, Commonwealths, and possessions of the United States.

Groundwater: Subsurface water that occurs in soils and geologic formations that are fully saturated.

Human Health Risk Assessment: An evaluation of the risk posed to human health should remedial activities not be implemented.

Military Munitions: All ammunition products and components produced for or used by the armed forces for national defense and security, including ammunition products or components under the control of the DoD, U.S. Coast Guard, U.S. Department of Energy, and National Guard. The term includes confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries, including bulk explosives, and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof.

The term does not include wholly inert items, improvised explosive devices, and nuclear weapons, devices, and nuclear components, other than nonnuclear components of nuclear devices that are managed under the nuclear weapons program of the Department of Energy after all required sanitization operations under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.) have been completed.

Military Munitions Response Program (MMRP): The DoD developed the Military Munitions Response Program (MMRP) in 2001 to addresses munitions-related concerns, including explosive safety, environmental, and health hazards from releases of unexploded ordnance (UXO), discarded military munitions (DDM), and munitions constituents found at locations other than operational ranges on active and Base Realignment and Closure installations and FUDS properties. The MMRP addresses non-operational range lands with suspected or known hazards from m munitions and explosives of concern (MEC) which occurred prior to September 2002 but are not already included with an Installation Response Program site cleanup activity.

Munitions and Explosives of Concern (MEC): This term, which distinguishes specific categories of military munitions that may pose unique explosives safety risks means:

(A) UXO, as defined in 10 U.S.C. 101(e)(5);
(B) DMM, as defined in 10 U.S.C. 2710(e)(2); or
(C) Munitions constituents (e.g., TNT, RDX), as defined in 10 U.S. Code 2710(e)(3), present in high enough concentrations to pose an explosive hazard.

Munitions Constituents (MC): Any materials originating from UXO, DMM, or other military munitions, including explosive and non-explosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions.

Munitions Debris (MD): Remnants of munitions (e.g., fragments, penetrators, projectiles, shell casings, links, fins) remaining after munitions use, demilitarization or disposal.

Munitions Response Site (MRS): A specific area on a defense site that is known or suspected to contain unexploded ordnance, discarded military munitions, or munitions constituents and is known to require a munitions response. Examples include former ranges and munitions burial areas.

No Evidence of Use (NEU): An area within a MRS where the weight of evidence indicates that no munitions were used or disposed of. All available and relevant lines of evidence supporting this delineation (e.g., historical records review, historical photo interpretation, visual observations, interviews, and field investigations) must be documented in the conceptual site model and considered.

No Further Action: The lead agency has determined that No Further Action is necessary to protect public health or welfare or the environment because the site poses no unacceptable risks to human health or the environment.

Non Time Critical Removal Action (NTCRA). Non-time-critical removal actions are conducted at Superfund sites when the lead Agency determines, based on the site evaluation, that a removal action is appropriate, and a planning period of at least six months is available before on-site activities must begin.

Proposed Plan: In the first step in the remedy selection process, the lead agency identifies the alternative that best meets the requirements in CERCLA 300.430(f)(1) and presents that alternative to the public in a proposed plan. The purpose of the Proposed Plan is to supplement the RI and provide the public with a reasonable opportunity to comment on the proposed remedial action, and to participate in the selection of remedial action at a site.

Public Comment Period: The time allowed for the members of an affected community to express views and concerns regarding an action proposed to be taken by USACE.

Remedial Action: Action of the lead remedial agent that addresses a contaminant, hazard, receptor, or the connection between the receptor and the hazard, which is taken to produce site conditions that present no significant risk to human health and the environment.

Remedial Investigation (RI): A process undertaken by the lead agency to determine the nature and extent of the problem presented by the release. The RI emphasizes data collection and site characterization and is generally performed concurrently and in an interactive fashion with the feasibility study. The RI includes sampling and monitoring, as necessary, and includes the gathering of sufficient information to determine the necessity for remedial action and to support the evaluation of remedial alternatives.

Record of Decision (ROD): The Record of Decision (ROD) documents the remedial action decisions at non-National Priorities List FUDS Properties. The ROD shall address the following: Purpose, Site Risk, Remedial Alternatives, Public/Community Involvement, Declaration, and Approval and Signature. A ROD for sites not covered by an interagency agreement or Federal facility agreement is still required to follow a CERCLA response. All RODs will be maintained in the FUDs Property/Project Administrative Record file.

Risk Assessment: Risk Assessment establishes whether a risk is present and, if so, the range or magnitude of that risk. In order for a risk to occur a pathway must be completed. There must be a source (or hazard), a population (receptor), and an exposure activity by which the receptor is comes into contact with the source (or hazard). If one of these components is missing the exposure pathway is incomplete and there is no risks.

U.S. Army Corps of Engineers (USACE): A branch of the DoD with special expertise in carrying out CERCLA/NCP investigations and response actions at former DoD sites.

U.S. Department of Defense (DoD): an executive branch department of the federal government of the United States charged with coordinating and supervising all agencies and functions of the government concerned directly with national security and the United States Armed Forces.

Waikoloa Maneuver Area (WMA): Waikoloa Maneuver Area is a Formerly Used Defense located on the bid Island of Hawai'i that was used for training troop during the World War II era.

Acronyms

CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
DoD	U.S. Department of Defense
EE/CA	Engineering Evaluation and Cost Analysis
EOD	Explosive Ordnance Disposal
ft	Feet/foot
FUDS	Formerly Used Defense Site
MC	Munitions constituents
MD	Munitions debris
MEC	Munitions and explosives of concern
MMRP	Military Munitions Response Program
MRS	Munitions Response Site
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NEU	No Evidence of Use
NTCRA	Non Time Critical Removal Actions
RI	Remedial Investigation
ROD	Record of Decision
RRD	Range-related debris
USACE	U.S. Army Corps of Engineers
WMA	Waikoloa Maneuver Area

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