U.S. Army Corps of Engineers, Honolulu District and Sacramento District

Formerly Used Defense Sites (FUDS) Program



# PROPOSED PLAN FOR SECTOR 16B' MUNITIONS RESPONSE SITE

Former Waikoloa Maneuver Area, Island of Hawaii, Hawaii Formerly Used Defense Sites Project No. H09HI035909

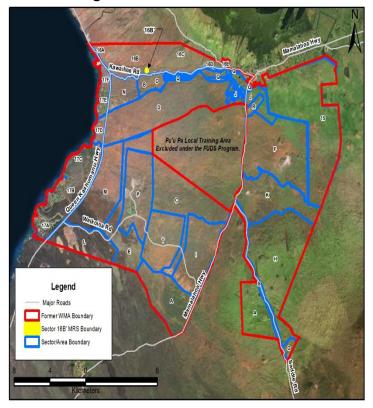
**July 2015** 

### INTRODUCTION

This Proposed Plan is presented by the United States Army Corps of Engineers (the Corps) to allow the public the opportunity to review and comment on the **Preferred Alternative** for Sector 16B', a **Munitions Response Site** located within the former Waikoloa Maneuver Area. Sector 16B' is also known as Project 09.

The Sector 16B' is located on the northwest side of the Big Island of Hawaii, in the County of Hawaii, approximately 30 miles north of Kailua-Kona in the South Kohala District. Sector 16B' is situated north of Kawaihae Road (State Route 19). Figure 1 shows the location of Sector 16B'.

Figure 1: Sector 16B' Site Location



# Dates to Remember: PLEASE MARK YOUR CALENDAR

#### **PUBLIC COMMENT PERIOD:**

### July 15, 2015 - August 14, 2015

The Corps will accept verbal and written comments on the Proposed Plan during the public comment period. Written comments may be sent to:

USACE Honolulu District Attn: Walter Nagai Building 230 Fort Shafter, Hawaii 96858-5440 (808) 835-4089

### **PUBLIC MEETING:**

July 15, 2015

A public meeting will be held at Waimea Elementary School, 1225 Mamalahoa Hwy, Kamuela, HI 96743 to explain the Proposed Plan and the alternatives presented in the Feasibility Report. Verbal and written comments will be accepted at the meeting.

### FOR MORE INFORMATION:

Project documents are available for review at the information repository located at the Thelma Parker Memorial Library, 67-1209 Mamalahoa Hwy, Kamuela, HI 96743.

Although there are numerous Munitions Response Sites within the former Waikoloa Maneuver Area, this Proposed Plan provides the rationale for the Preferred Alternative for Sector 16B'. This Proposed Plan will present a summary of background information for Sector 16B'; describe the remedial alternatives evaluated in the **Feasibility Study**; identify the Preferred Alternative; and provide information on the public participation process for the selection of the final remedy for Sector 16B'.

The Corps is the executing agent for the Formerly Used Defense Sites (FUDS) Program, which is responsible for environmental restoration of real property that was owned by, leased to, or otherwise possessed by the United States and under the jurisdiction of the Secretary that was transferred from Department of Defense control prior to October 17, 1986. In executing the FUDS program, the Corps carries out response actions to address releases of hazardous substances and **Munitions and Explosives of Concern** or **Munitions Constituents** contamination. The Corps conducts environmental response activities at FUDS on behalf of the Department of Defense.

The Corps is the lead agency for investigating, reporting, deciding and implementing remedial action at Sector 16B'. Representatives from the Hawaii Department of Health, the lead regulatory agency for this project, reviewed the Remedial Investigation Report and agreed with its conclusions and recommendations.

A Remedial Investigation was conducted in 2014 to determine the nature and extent of potential munitions and munitions constituents within Sector 16B'. The Remedial Investigation determined that there was an explosive hazard previously present within Sector 16B; therefore, a Feasibility Study was conducted to evaluate remedial alternatives for Sector 16B'. The Feasibility Study presented two alternatives: No Further Action and Land Use Controls. This Proposed Plan provides brief descriptions of these two alternatives and discusses the rationale for supporting the Preferred Alternative, the implementation of Land Use Controls at Sector 16B'.

### PUBLIC INVOLVEMENT PROCESS

The Corps is required under the **Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)** to issue this Proposed Plan and seek public comment and participation under Section 300.430(f)(2) of the National Oil and Hazardous Substances Pollution Contingency Plan. This Proposed Plan summarizes information that can be found in greater detail in the Feasibility Study (United States Army Corps of Engineers, 2014) and other documents contained in the **Administrative Record** file. The Administration Record file is found in the site information repository located at the Thelma Parker Memorial Library, 67-1209 Mamalahoa Hwy, Kamuela, HI 96743.

Following presentation of the Proposed Plan at the public meeting, verbal and written comments will be accepted during the public comment period, which begins at the public meeting. All comments received are carefully considered and documented before an alternative is chosen. The location, date and time of the public meeting and the address are presented on the first page of this document.

The Proposed Plan, Remedial Investigation Report and the Feasibility Study Report are a part of the Sector 16B' Administrative Record file that contains all the documents used in making decisions on remedial projects at the site.

The decision on the Preferred Alternative for Sector 16B' will be presented in a Decision Document. The Corps' responses to public comments on this Proposed Plan will appear in the "Responsiveness Summary" section of the Decision Document. The flow chart shown below in Figure 2 summarizes the various steps in the development and approval process for the Sector 16B' Decision Document.

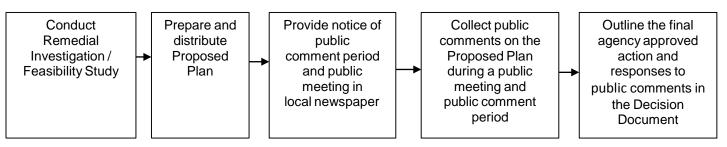


Figure 2: Sector 16B' Decision Document Process

### SITE BACKGROUND

#### SITE HISTORY

Sector 16B' is located within the former Waikoloa Maneuver Area, as illustrated in Figure 1. The former Waikoloa Maneuver Area (also known as Camp Tarawa) was acquired by the United States Navy in 1943 through a licensing agreement with Parker Ranch, for use of 91,000 acres as a World War II Era Military Training Camp. Approximately 467 acres of the former Waikoloa Maneuver Area was used for tents and Quonset huts, most of the remaining acreage was used for maneuvers and military training exercises. Additional acreage was acquired and the former Waikoloa Maneuver Area was expanded to 123,000 acres. In September 1946, the original 91,000 acres of the former Waikoloa Maneuver Area, including the land occupied by the Sector 16B', was transferred back to the Parker Ranch. The remaining acreage was transferred at later dates.

#### SITE DESCRIPTION

Sector 16B' covers 3.7 acres of the former Waikoloa Maneuver Area. Munitions found in Sector 16B' indicate its historical use as a hand grenade training area. Today, Sector 16B' is composed of an agricultural area where ranching is conducted, with residences located to the southeast.

Sector 16B' is comprised of soils derived from basaltic lava flows. Soils in the area are largely shallow, dry, and/or stony and are subject to windy conditions that leave a thin veneer of topsoil. Only minimal soil is present within Sector 16B'. A site map of Sector 16B' is shown in Figure 3.



Figure 3: Site Map, Sector 16B' located within the Former Waikoloa Maneuver Area

#### PREVIOUS INVESTIGATIONS AND MUNITIONS REMOVAL ACTIONS

A number of investigations have been performed within the former Waikoloa Maneuver Area. This section summarizes the investigations which have occurred within the boundaries of Sector 16B'. While other investigations provide additional background information and framework for the site, they are excluded from this summary (additional information is included in the Remedial Investigation Report and the Administrative Record file).

#### **ENGINEERING EVALUATION / COST ANALYSIS**

The Engineering Evaluation/Cost Analysis evaluated the former Waikoloa Maneuver Area in three phases: Phase I, Phase II, and Phase III. Sector 16B' was evaluated in Phase II, where the boundaries of Sector 16B' were created based on land uses and estimated explosive hazard present.

During fieldwork for the Engineering Evaluation/Cost Analysis, two hand grenades were found within Sector 16B'. The recovered hand grenades had had not fully exploded and contained an explosive hazard. As a result of the encountered explosive hazard and the full public access to the area, Sector 16B' was given a high explosive hazard rating.

#### **SECTOR 16B' MUNITIONS REMOVAL ACTION**

Based on the recommendations of the Engineering Evaluation/Cost Analysis, a surface and subsurface munitions removal action was performed in 2013 over the entire 3.7 acre site. The removal action was performed to immediately address the need to protect the public from the munitions suspected to be present that could contain an explosive hazard. During the removal action, no additional munitions were recovered; however, munitions debris (grenade fragments) resulting from previous military training were found.

#### REMEDIAL INVESTIGATION

The purpose of a Remedial Investigation is to determine what contamination may still be present at a site, at what locations, and in what amounts. This is known as characterizing the nature and extent of contamination. During the Remedial Investigation of Sector 16B', the contamination resulting from military use was evaluated. The Remedial Investigation summarized and evaluated the available data from the Engineering Evaluation/Cost Analysis and the 2013 removal action to make a recommendation regarding the potential explosive hazard that could be present within Sector 16B' and to provide a recommendation about the extent of the potential explosive hazard remaining within Sector 16B'.

The Remedial Investigation confirmed that two hand grenades containing high explosive as well as 80 pounds of munitions debris were removed from Sector 16B'. The Remedial Investigation Report recommended that Sector 16B' proceed to Feasibility Study. No further munitions removal was recommended since a surface and subsurface munitions removal action had been performed over the entirety of Sector 16B'.

#### **CURRENT AND FUTURE LAND USE**

According to the South Kohala Community Development Plan for the Kawaihae Area, which includes area within Sector 16B', the land use is extensive agriculture. Sector 16B' is in the vicinity of land classified as rural. Potential people present in Sector 16B' are ranchers and occasional recreational users (e.g. hikers, bicyclists).

Currently, the land within Sector 16B' is undeveloped and owned by the Queen Emma Foundation. Dirt roads run nearby and are used mostly by ranchers. Residential development is located approximately 1,000 feet to the southeast along Kawaihae Road. Although no known plans are in place, development along Kawaihae Road to the southwest is expected to continue.

#### **CONTAMINATION SOURCES**

The potential sources of contamination at Sector 16B' are munitions that remain from the military use of the site. The type of munition recovered from Sector 16B' is a hand grenade.

### **CONTAMINATED MEDIA**

Media that may be potentially contaminated with munitions in Sector 16B' are surface soil and subsurface soil. The Remedial Investigation determined no evidence that groundwater contamination is present. There is no surface water or sediment present in Sector 16B'.

### SCOPE AND ROLE OF RESPONSE ACTION

The proposed remedial strategy to address any potential remaining munitions within Sector 16B' reflects the community interest and the Corps' desire to effectively reduce the potential for munitions-related accidents. Sector 16B' is accessible with no significant obstacles; however, land owner maintains locked gates around parcel that includes Sector 16B' and the terrain is fairly rugged. The pathways for exposure to an explosive hazard within Sector 16B' are surface and subsurface activities from ranchers and occasional recreational users. The risks of receptor exposure to an explosive hazard in Sector 16B' is dependent upon the use of the site and anticipated depth of intrusive activity. Due to the very shallow nature of the soil and physical properties of hand grenades, which cause them to explode on the surface, any residual potential explosive hazard is suspected to be limited to the subsurface.

### SUMMARY OF SITE RISKS

Based on the findings of the Remedial Investigation and previous investigations within Sector 16B', the following summary of site risk presented:

- Munitions and Explosives of Concern Two hand grenades with an explosive hazard were found within six feet of each other in the center of Sector 16B' during the fieldwork for the Engineering Evaluation/Cost Analysis. No additional munitions were found during the surface and subsurface removal action, which was performed over the entire acreage of Sector 16B'. Only fragments from former training that no longer contained a hazard were found during the removal action. No discarded military munitions or chemical warfare material were found. No further munitions removal is recommended for the site.
- Munitions Constituents Environmental samples were collected from Sector 16B' to determine
  if metals or explosives in the soil were above the Hawaii Department of Health's screening levels.
  The concentrations of metals detected did not pose unacceptable risk to humans or ecological
  receptors. The analysis determined that no explosives were present in the soil and consequently,
  there was no unacceptable risk to humans or the environment from munitions constituents at Sector
  16B'. Therefore, munitions constituents are not addressed in this Proposed Plan.

Although Sector 16B' has undergone a surface and subsurface munitions removal action, there is still a residual risk that an explosive hazard remains within Sector 16B'. Due to limitations of current technology, the high iron content of the soil, and the irregular interface between the relatively young lava and the overlying soil, there is no way of totally eliminating unacceptable risk with a munitions removal. A Feasibility Study was conducted.

### REMEDIAL ACTION OBJECTIVES

To address the munitions hazard that remains within Sector 16B', a remedial action objective has been established. The remedial action objective is to reduce the explosive hazard to human health and the environment due to the presence of munitions that may remain within Sector 16B' (i.e., hand grenades) such that future exposures of receptors (ranchers and recreational users) to the explosive hazard can be determined as negligible.

### **SUMMARY OF REMEDIAL ALTERNATIVES**

The following remedial alternatives were evaluated for the Sector 16B'.

#### **ALTERNATIVE 1 – NO ACTION**

"No Action" involves no active response or controls to locate, remove, dispose of or limit the exposure to any munitions present within the site. The Corps would assume no responsibility for public awareness or education concerning the potential for the presence of munitions within the site. This alternative is used in the evaluation of other alternatives to provide a baseline for comparison.

The "No Action" alternative assumes continued use of the site in its present state. If the potential exposure hazards associated with the site are compatible with current and future developments in the area, then "No Action" may be warranted. No action would be taken to reduce the known munitions hazard.

The No Action alternative would not inform future land owners or users of the hazard present on site.

#### **ALTERNATIVE 2 – LAND USE CONTROLS**

Land Use Controls are physical, legal, administrative and other mechanisms restricting access and property use. They also use public awareness to inform land owners and users of hazards present. Land Use Controls are coordinated with landowners, regulatory agencies and local authorities. For FUDS sites, where a land use restriction is part of restoration activities, the Land Use Controls must be clearly defined, designed, planned and coordinated with the state and county.

Physical Land Use Controls appropriate for Sector 16B' would primarily consist of signage. Signs would be of a simple design. Signs would serve as public awareness of the previous explosive hazard present and procedures to follow should munitions be encountered. Signage would also support the educational strategy for the site. Fencing would not be considered, because the entire Sector 16B' has undergone a munitions removal action.

This alternative would also include educational controls. The proposed educational controls include the following:

- An annual letter and fact sheets notifying employers of site workers of the potential explosive hazard present in the area, along with steps to take in the unlikely event munitions are found.
- Warning/information signage on-site that notifies of potential munition hazards and procedures to follow in the unlikely event munitions are found.
- Continue deed notification for property owners with information on former site use as grenade training area within a live-fire maneuver area.

A Land Use Control Implementation Plan would provide specific details on the Land Use Controls recommended for Sector 16B'. Some of the Land Use Controls mentioned above would require the cooperation of the County and community to implement. The County and schools have shown a willingness to participate in Land Use Control program.

Although not considered part of the alternative, Five-Year Reviews are required by the National Contingency Plan when a remedial action is selected that results in hazards remaining at the site above levels that allow for unlimited use and unrestricted exposure, 40 CFR 300.430(f)(4)(ii), and their purpose is to ensure that the remedy implemented continues to minimize explosives safety risks and remains protective of human health, safety, and the environment. It is possible the reviews may occur at shorter intervals if changes occur that significantly affect the current plans.

### **EVALUATION OF ALTERNATIVES**

Seven criteria and two additional modifying criteria (nine total) were used to evaluate each of the munitions response alternatives, individually and against each other, to select a remedy. Evaluation by these nine criteria are required by the National Contingency Plan. This section profiles the relative performance of each alternative against the seven criteria, noting how it compares to the other options under consideration. The nine evaluation criteria are discussed below. The detailed "Comparative Screening of Response Alternatives" can be found in the Feasibility Study Report. Table 1 provides a summary of the evaluation criteria which are also described below.

**Table 1: Nine Criteria for Detailed Analysis of Alternatives** 

Group	Criteria				
Threshold Criteria (requirements that each alternative must meet to be eligible for selection as the preferred alternative)	<ol> <li>Overall Protection of Human Health and the Environment</li> <li>Compliance with Applicable or Relevant and Appropriate Requirements (ARARs)</li> </ol>				
Balancing Criteria (used to form the basis for comparison among alternatives that meet the threshold criteria)	<ol> <li>Long-Term Effectiveness and Permanence</li> <li>Reduction of Mobility, Toxicity, or Volume through Treatment</li> <li>Short-Term Effectiveness</li> <li>Implementability</li> <li>Cost</li> </ol>				
Modifying Criteria (used to modify aspects of the preferred alternative when preparing the Decision Document)	State Acceptance     Community Acceptance				

**Overall Protection of Human Health and the Environment** determines whether an alternative eliminates or sufficiently reduces and controls threats to humans and the environment.

Compliance with Applicable or Relevant and Appropriate Requirements determines if the alternatives meet the criteria, standards, or other requirements from the federal environmental statutes that have been determined to be applicable or relevant and appropriate to this site and the proposed alternatives, or whether a waiver is justified.

**Long-Term Effectiveness and Permanence** considers the ability of an alternative to protect humans and the environment over time.

Reduction of Toxicity, Mobility, or Volume through Treatment evaluates if an alternative reduces the harmful effects of contaminants, their ability to move in the environment, and the amount of contamination present.

**Short-Term Effectiveness** considers the length of time needed to implement an alternative and the risks the alternative poses to workers, residents and the environment during implementation.

**Implementability** considers the technical and administrative feasibility of implementing the alternative, including factors such as the relative availability of goods and services.

**Costs** includes estimated capital and annual operations and maintenance costs, as well as present worth cost. Present worth cost is the total cost of an alternative over time in terms of today's dollar value. Cost estimates are expected to be accurate within a range of +50 to -30 percent.

**Modifying Criteria (State / Community Acceptance)** The public comment period ensures the public has an opportunity to express opinions about the preferred alternatives. Their comments are considered when selecting the best alternative. In the final selection process, these modifying criteria (what state officials and the public think about the alternative) are of equal importance as the balancing criteria. No evaluation or prediction of acceptability by the public or the state is evaluated until comments are received.

#### SUMMARY OF THE ALTERNATIVE EVALUATION RESULTS

For a hand grenade range where munitions detonate on the surface and minimal soil is present, no explosive hazard is anticipated to remain subsurface. The team concluded the following for Sector 16B':

**Alternative 1, No Action**, requires no change to Sector 16B'. This alternative is not protective and has no long-term permanence. No ARARs would apply to this alternative. This alternative has no cost.

**Alternative 2, Land Use Controls**, is protective of human health by reducing risk by informing the site users of the hazards of munitions and what to do if they are encountered. No ARARs would apply to this alternative. It balances the factors of long-term effectiveness and permanence with short term effectiveness and implementability. The estimated cost to implement Alternative 2 is \$993,000 over a 30-year period.

Although not considered part of an alternative, since none of the alternatives would remediate the site to allow for unlimited use/unlimited exposure, Five-Year Reviews will be conducted to monitor whether the chosen alternative remains protective of human health and the environment. The cost of the five-year reviews is included in the cost presented above for Alternative 2. A summary of the detailed analysis is shown in Table 2.

Table 2: Summary Comparison of Remedial Alternatives with CERCLA Criteria

Alternatives	Overall Protection of Human Health and the Environment	Compliance with ARARs	Long-Term Effectiveness and Permanence	Reduction of Mobility, Toxicity, or Volume through Treatment	Short-Term Effectiveness	Implement- ability	Cost	Overall Rating
Alternative 1: No Action	Not Protective	No ARARs Would Apply	Р	Р	Р	E	Е	Р
Alternative 2: Land Use Controls (Educational Awareness) for Sector 16B'	Protective	No ARARs Would Apply	G	Р	E	E	Ш	G

Notes:

ARARs = applicable or relevant and appropriate requirements

E = excellent

G = good

N/A = not applicable

P = poor

VG = very good

### PREFERRED ALTERNATIVE

Based on evaluation against the above criteria, Alternative 2, Land Use Controls (educational awareness), was determined to be most favorable and would best satisfy the Remedial Action Objective for Sector 16B'.

Alternative 2 presents a remedy that would keep the public informed that the area was a FUDS and that munitions with an explosive potential were previously present. The Corps, with concurrence from the Hawaii Department of Health, believes that this alternative would be protective of humans and the environment and would achieve the Remedial Action Objective of minimizing risk from munitions to humans. The Corps may modify the Preferred Alternative in response to public comments or new information.

The Corps believes the Preferred Alternative meets the threshold criteria and provides the best balance of tradeoffs among the other alternatives with respect to the balancing and modifying criteria. The Preferred Alternative satisfies the following statutory requirements of CERCLA §121 (b):

- 1. Protects humans and the environment.
- 2. Complies with Applicable or Relevant and Appropriate Requirements.
- 3. Is cost-effective.
- 4. Utilizes permanent solutions and alternative treatment technologies *or* resource recovery technologies to the maximum extent practicable.
- 5. Satisfies the preference for treatment as a principal element (For Sector 16B', the treatment which included removal of munitions has already been performed).

### **COMMUNITY PARTICIPATION**

The Corps is requesting public comments on the **Preferred Alternative** presented in this Proposed Plan for Sector 16B'. Written and verbal comments will be accepted at a **public meeting scheduled for** *July 15, 2015* **at 1225 Mamalahoa Hwy, Kamuela, HI 96743**. Written and verbal comments will also be accepted throughout the comment period which ends *August 14, 2015*. The Proposed Plan is available in the Thelma Parker Memorial Library throughout the comment period, *July 15 through August 14, 2015*. Comments received during the public meeting and comment period will be considered in the final decision. This decision will be presented in a Decision Document signed by the Corps. The Corps' responses to public comments will be documented in the "Responsiveness Summary" section of the Decision Document.

The Remedial Investigation Report for Sector 16B' Waikoloa Maneuver Area provides a comprehensive description of the site history, the details of the Remedial Investigation, the associated risk assessments and their conclusions. The Feasibility Study Report outlines and provides a comparative analysis of the possible alternatives. These reports, including this Proposed Plan and other project documents, are available at the reference desk in the Thelma Parker Memorial Library located at 67-1209 Mamalahoa Hwy, Kamuela, HI 96743.

### **Contact information**

General Information: http://www.poh.usace.army.mil/Missions/Environmental/FUDS.aspx

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### **Information Repository**

Copies of the Remedial Investigation Report, Feasibility Study Report, this Proposed Plan, and other project documents that comprise the Administrative Record file for this site can be found at the following location. The documents will be available from July 15, 2015 to August 14, 2015:

Thelma Parker Memorial Library 67-1209 Mamalahoa Hwy. Kamuela, HI 96743-8429 Telephone: 808-887-6067

### References

Earth Tech Inc., 2002. Final Phase II Engineering Evaluation/Cost Analysis, Former Waikoloa Maneuver Area and Nansay Sites, Island of Hawaii, Hawaii. Report prepared for the US Army Corps of Engineers. January.

Environet, Inc. 2013. Sector 16B' Letter Report. August.

Native Hawaiian Veterans (NHV), 2014a. Final Remedial Investigation Report, Former Waikoloa Maneuver Area, Sector 16B', November.

NHV, 2014b. Draft Final Feasibility Study Report, Former Waikoloa Maneuver Area, Sector 16B'. December.

The South Kohala Community, 2008. South Kohala Development Plan. Final, 2008.

## **Glossary of Terms**

**Administrative Record** – The documents that form the basis for the selection of a response action compiled and maintained by the lead agency. (For this site the lead agency is the Corps)

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, otherwise known as Superfund) of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986. The federal law that provides the government with the authority to compel or perform remediation of sites contaminated with hazardous substances that may endanger public health or the environment.

**Decision Document** – The documentation of remedial response decisions at Formerly Used Defense Sites. Concurrence on the Decision Document by U.S. Environmental Protection Agency or the state regulatory agency is sought and the Army approves the document.

**Feasibility Study** – A study undertaken by the lead agency to develop and evaluate options for remedial action. The RI data are used to define the objectives of the response action, to develop remedial action alternatives, and to undertake an initial screening and detailed analysis of the alternatives. The term also refers to a report that describes the results of the study.

**Formerly Used Defense Site** – A facility or site which 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, for which the Secretary of Defense shall carry out all response actions with respect to releases of hazardous substance from that facility or site. The FUDS program is limited to those real properties that were transferred from Department of Defense control prior to October 17, 1986.

**Munitions Constituents** – Any materials originating from unexploded ordnance, discarded military munitions, or other military munitions, including explosive and non-explosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions.

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

**Munitions and Explosives of Concern** – specific categories of military munitions that may pose unique explosives safety risks, specifically composed of (a) unexploded ordnance, (b) discarded military munitions, or (c) munitions constituents (e.g., TNT, RDX) present in high enough concentrations to pose an explosive hazard.

**Munitions Response Site** – An area that is known to require a munitions response (investigation, removal action and/or remedial actions).

**Preferred Alternative** – The alternative that, when compared to other alternatives, best meets the Comprehensive Environmental Response, Compensation, and Liability Act evaluation criteria and is proposed for implementation at a site.

**Proposed Plan** – A plan that identifies the preferred remedial alternative for a site and is made available to the public for comment.

Remedial Investigation – A process undertaken by the lead agency to determine the nature and extent of the problem presented by the release. The Remedial Investigation emphasizes data collection and site characterization, and is generally performed concurrently and in an interactive fashion with the feasibility study. The Remedial Investigation 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.

### **ACRONYMS AND ABBREVIATIONS**

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

Corps United States Army Corps of Engineers

FUDS Formerly Used Defense Site



Remember the "R's" of Explosives Safety:

Because of how the military used the site, munitions may remain on site. Munitions may be dangerous and may not be easily recognizable. Never touch, move or disturb something you think may be a munition. Remember the 3Rs of explosives safety.

Recognize - The item you found may be munitions, and munitions may be dangerous.

Retreat - Leave the area without touching or moving the object.

Report - Call 911 immediately.