U.S. Army Corps of Engineers, Jacksonville District Formerly Used Defense Site Program

PROPOSED PLAN FOR MUNITIONS RESPONSE ACTIONS

Former Camp Blanding Military Reservation, Clay and Bradford Counties, Florida Formerly Used Defense Site (FUDS) Project No. 104FL001504

Text in bold italics indicates that a word/phrase is included in the glossary at the end of this Proposed Plan.

INTRODUCTION

This *Proposed Plan* is presented by the U.S. Army Corps of Engineers (the Corps) to allow the public the opportunity to review and comment on the recommended action for the Former Camp Blanding Military Reservation Anti-Tank Rocket and Rifle Grenade Range *Formerly Used Defense Site*. The Corps is proposing "Subsurface Munitions Removal to 2 Feet" as the preferred action, designed to protect people from coming into contact with *munitions and explosives of concern*. The *Formerly Used Defense Site* is located within active Camp Blanding, and is one of 35 former range sites within active Camp Blanding, located in western Clay County, Florida, approximately 10 miles east of the city of Starke (Figure 1).



Figure 1: Anti-Tank Rocket and Rifle Grenade Range Location

forms the basis for the Proposed Plan recommendations. The investigation was conducted on the former Anti-Tank Rocket and Rifle Grenade Range (see Figure 2).

Dates to Remember: PLEASE MARK YOUR CALENDAR

PUBLIC COMMENT PERIOD: July 10, 2015 – August 10, 2015

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

USACE Jacksonville District Attn: PM-M William Spence 701 San Marco Boulevard Jacksonville, FL 32207-8175

PUBLIC MEETING:

A public meeting will be held on *July 9, 2015*, at 6:30 p.m., at the Middleburg Community Civic Center to explain the Proposed Plan and the alternatives presented in the Feasibility Study Report. Verbal and written comments will also be accepted at the meeting.

For more information, see the Administrative Record at the Middleburg-Clay Hill Branch Library, 2245 Aster Avenue, Middleburg, Florida.

This Proposed Plan fulfills the public participation requirements of the *Comprehensive Environmental Response, Compensation, and Liability Act* of 1980, as amended by the *Superfund Amendments and Reauthorization Act* of 1986 and the *National Oil and Hazardous Substances Pollution Contingency Plan*.

A *Remedial Investigation*, which was conducted on the project site from February 2013 to August 2013, The investigation was conducted on the former Anti-



PUBLIC INVOLVEMENT PROCESS

Local community members and other interested parties are encouraged to review this Proposed Plan and submit comments. Public comments on all alternatives are considered before any action is selected and approved. The Corps is the executing agent for the Formerly Used Defense Site program, which is responsible for environmental restoration of all properties that were formerly owned by, leased to, or otherwise possessed by the United States and under the jurisdiction of the Secretary of Defense, such as Former Camp Blanding. The Military Munitions Response Program was established in 2001 to address non-operational Department of Defense sites known or suspected to contain munitions and explosives of concern or munitions constituents contamination. Munitions constituents are the metals, explosives, and related products that comprise munitions.



Figure 2: Anti-Tank Rocket and Rifle Grenade Range

The Corps conducts environmental response activities at Formerly Used Defense Sites on behalf of the Department of Defense and is the lead agency for investigating, reporting, remedial decision-making, and implementation at the Former Camp Blanding. The Florida Department of Environmental Protection is the lead regulatory agency for this project. Representatives from the Florida Department of Environmental Protection reviewed the Remedial Investigation report and agreed with its conclusions and recommendations.

The Final Remedial Investigation Report (USA, 2014) and the Final Feasibility Study Report (USACE, 2015) are part of the former Camp Blanding **Administrative Record** file that contains all the documents used in making decisions on remedial projects at the Former Camp Blanding.

This Proposed Plan identifies remedial alternatives evaluated for the *Munitions Response Site*, and provides the rationale for the *Preferred Alternative* for each Munitions Response Site. The preferred alternative is in response to munitions and explosives of concern and/or munitions constituents present on the site. The purposes of this Proposed Plan are to:

- Provide basic background information.
- Describe remedial alternatives considered.
- Identify the Preferred Alternative for remedial action for the evaluated Munitions Response Site and explain the reasons for the preference.
- Solicit public review and comment on the alternatives described.
- Provide information on how the public can be involved in the remedy selection process.

The decision 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 in Figure 3, below, summarizes the various steps in the development and approval process for the Former Camp Blanding Decision Document.



Figure 3: Former Camp Blanding Decision Document Process

SITE BACKGROUND

Site History

The Anti-Tank Rocket and Rifle Grenade Range is a 53-acre area within the active Camp Blanding. This area is bounded on the north by Woodbury Road, to the south by State Road 16, Giddens Road on the west and Barker Road to the east. It was used during the period from 1941-1947 to train soldiers in the use of shoulder-fired rockets (aka bazookas) and rifle grenades. Munitions used in the area included live and practice 2.36 inch rockets and rifle grenades. Munitions debris indicative of this prior use have been confirmed during previous investigations and the Remedial Investigation.

Previous Investigations

Following the Comprehensive Environmental Response, Compensation, and Liability Act process, the Corps has completed a series of studies at the site as identified below.

Inventory Project Report – In 1998 the Corps conducted an Inventory Project Report of the Former Camp Blanding. Evidence of former training and munitions use activities was observed. The report concluded that the site is eligible for the Formerly Used Defense Sites program.

Archives Search Report Supplement – In 2004, the Corps completed the Archives Search Report Supplement. The Supplement summarized information for the Anti-Tank Rocket and Rifle Grenade Range including dates of military usage, current usage, ownership, types of munitions used, reported range incidents, site physical conditions, and current access limitations or restrictions.

Final Site Inspection Report – In 2007, the Corps completed a Site Inspection at Camp Blanding. The purpose of the inspection was to evaluate the potential presence of munitions and explosives of concern and munitions constituents, and to collect data needed to determine a priority for additional investigations, if necessary. Based on the findings related to the Anti-Tank Rocket and Rifle Grenade Range, the report recommended that further investigations be performed.

Remedial Investigation – The purpose of a remedial investigation is to determine what may be present and in what locations and amounts. This is known as characterizing the nature and extent of potential contamination.

Munitions and Explosives of Concern – Crews dug 1,532 metallic objects within the boundaries of the site during the Remedial Investigation to determine if they were munitions related. Of the 1,532 metallic objects, 1,420 were munitions-related items. They included components of 2.36 inch anti-tank rockets and rifle grenades.

Munitions Constituents – Teams also collected samples to determine if metals or explosives from munitions were present in the soil or water. Eight surface water, six sediment, and four groundwater samples were collected. An evaluation of the results of the sampling indicated that there is no risk to people or the environment at the Anti-Tank Rocket and Rifle Grenade Range site due to munitions constituents.

Results – Based on the munitions found during the investigation, there is a risk to people, and further action to reduce the risks is warranted. Remedial response alternatives to address the risks were evaluated in the Feasibility Study. The environmental sampling indicated that there is no risk to people or the environment from munitions constituents.

SITE CHARACTERISTICS

The former Camp Blanding Military Reservation is in western Clay County, east of Starke in north central Florida. The Department of the Army began construction of Camp Blanding in 1939 as a division-sized training camp and reception area, but it grew in size and significance during World War II. Upon completion, the reservation comprised an area of 160,964.85 acres, the equivalent of the fourth-largest city in Florida at the time. As one of the largest training centers in the United States, seven infantry divisions and three field artillery brigades received extended field training, while an additional two infantry divisions received their basic training at the post. Following the end of the war, the Army no longer needed the large training area, and thus it was deactivated in 1947.

Approximately 73,000 acres were transferred to the Armory Board of the State of Florida for the Florida National Guard. Camp Blanding, including the Anti-Tank Rocket and Rifle Grenade Range, is within the Camp Blanding Wildlife Management Area.

Land Use

The land area is currently undeveloped forest. During military training exercises, troops have access to the area for maneuvers and bivouacking; however, live ammunition is not currently fired within the Anti-Tank Rocket and Rifle Grenade Range. The area is also open to hunters by permit. Periodic fire break maintenance is required and involves intrusion below the surface by disking blades up to approximately 12 inches. No changes in land use are planned for the area, other than potential pine harvesting, which is limited to the ground surface and does not involve cutting into the ground or excavations.

Contamination Source

The potential source of contamination at the Anti-Tank Rocket and Rifle Grenade Range is the past use of military munitions. The potential munitions include 2.36 inch rockets and rifle grenades.

Contaminated Media

The field team encountered 2.36-inch practice and high explosive rockets, rifle grenades, and small arms ammunition on the surface and in subsurface soils. No other media (sediment, surface water, or groundwater) were found to be impacted by military-related activities.

SCOPE AND ROLE OF RESPONSE ACTIONS

The overall remedial strategy for the Anti-Tank Rocket and Rifle Grenade Range reflects the Corps' desire to eliminate the potential for munitions-related accidents. There is a high potential for munitions to be present.

This response action is designed to reduce munitions-related hazards within the Anti-Tank Rocket and Rifle Grenade Range through a combination of surface and subsurface munitions removal to two feet. The response action incorporates the interests of the Corps, the Florida Department of Environmental Protection, and the public in protecting the public and environment from the hazards related to munitions that have been identified at the site.

SUMMARY OF SITE RISKS

Risks were evaluated based on the potential for people and the environment to be exposed to munitions or munitions constituents that have been identified at the site. A munitions hazard assessment and a munitions constituent risk assessment were used to aid in the development, evaluation, and selection of appropriate response alternatives. The potentially exposed population includes all those who pass through, work in, or visit the area within the boundaries of the Anti-Tank Rocket and Rifle Grenade Range. The risk to the environment could include protected species; however, no known endangered or threatened species are present within this area.

It is the Corps' opinion that the preferred alternative identified in this Proposed Plan is necessary to protect public health and welfare from explosive hazards within the Anti-Tank Rocket and Rifle Grenade Range.

Munitions and Explosives of Concern

The potential to encounter munitions exists within the Anti-Tank Rocket and Rifle Grenade Range. The Corps evaluated the potential health effects, and the results of the assessment were used to aid in the development, evaluation, and selection of appropriate response alternatives.

Munitions Response Site	Potential for Encountering Munitions	Further Action Recommended
Anti-Tank Rocket and Rifle Grenade Range	YES (high probability)	Yes

REMEDIAL ACTION OBJECTIVES

Remedial Action Objectives will be achieved when measures have been established to protect people and the environment from munitions that may remain in this area. The overall Remedial Action Objective at the Anti-Tank Rocket and Rifle Grenade Range is to remove munitions such that the future exposure to receptors is negligible.

SUMMARY OF REMEDIAL ALTERNATIVES

The following alternatives were evaluated for the Anti-Tank Rocket and Rifle Grenade Range.

Alternative 1: No Further Action

The "No Action" alternative involves no active response or controls to locate, remove, dispose of, or limit the exposure to any potential munitions present within the site. In addition, the Corps would assume no responsibility for public awareness or education concerning the potential explosive hazards within the site. The "No Action" alternative, an alternative required by the Environmental Response, Compensation, and Liability Act, 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. It is important to note that the government will respond to any future discovery of munitions or explosives of concern at the site even if it has been designated for "No Action."

Alternative 2: Land Use Controls and Education: This alternative includes the placement of warning signs along the boundaries of the range to warn of potential hazards. The signs should warn site workers, soldiers, and permitted hunters of the potential to contact UXO on the surface; prohibit excavation; and provide the appropriate response and contact information in the event that suspect munitions are encountered. The Camp Blanding Joint Training Center requires and provides *Unexploded Ordnance* awareness training for all those entering range areas. The education program would be expanded to include brochures/fact sheets for distribution to all visitors to the range, including workers, soldiers, and hunters. The *Community Relations Plan* would also be updated. The plan provides the framework for public outreach activities that the Corps will use to communicate with the community and address their concerns and expectations. Updating the Plan will include revising the project summary, updating fact sheets, updating stakeholder lists, media contacts, and information on the community.

Alternative 3: Surface Munitions Removal and Education: This alternative provides for a surface clearance of munitions across the entire range and includes the same education and Community Relations Plan update components as Alternative 2. The alternative uses a combination of activities to reduce the munitions hazards and minimize personnel exposure to munitions on the surface. The activities consist of manual surveys using metal detectors combined with the removal of all surface munitions detected by the instruments. The area would first be prepared by clearing understory vegetation and brush to allow access by the survey teams. The survey and removal of surface munitions would be conducted by trained Unexploded Ordnance Technicians. All munitions discovered during the surveys are destroyed within the boundaries of the former range site. All munitions-related debris, verified to be free of any explosives residues, is removed from the site and shipped offsite for disposal. Since the alternative is limited to removal of only surface munitions, leaving subsurface munitions in place, education is still necessary.

Alternative 4 – Subsurface Munitions Removal to 2 Feet: This alternative includes a munitions surface and subsurface clearance to a 2-foot depth. Munitions used at the site (2.36 inch rockets and rifle grenades) were fired horizontally and have a tendency to skip across the surface as opposed to deep penetration into the ground. The deepest any muntions debris was found was at 19 inches and the deepest any material presenting an explosive hazard was discovered was at 8 inches. Based on these findings, removal of munitions in the top 2 feet will achieve *Unlimited Use/Unrestricted Exposure*, i.e., the remedy does not place any restrictions on the current or potential future use of the land.

The alternative uses a combination of activities to achieve this goal, including sophisticated digital geophysical mapping surveys to locate munitions. Using the mapped locations of suspect munitions, teams of Unexploded Ordnance Technicians investigate each location. As with Alternative 3, all munitions discovered during the surveys are destroyed within the boundaries of the former range site. All munitions-related debris, verified to be free of any explosives residue, is removed from the site and shipped offsite for disposal. Since the alternative is designed to achieve Unlimited Use/Unrestricted Exposure, continued education is not necessary under this alternative.

EVALUATION OF ALTERNATIVES

Seven criteria and two additional modifying criteria (nine total) were used to evaluate each alternative individually and against each other to select a remedy. The nine criteria fall into three groups: threshold criteria, primary balancing criteria, and modifying criteria.

- *Threshold criteria* are requirements that must be met in order for an alternative to be eligible for selection.
- Primary balancing criteria are used to weigh major trade-offs among alternatives.
- *Modifying criteria* are considered to the extent that information is available, but cannot be fully evaluated until after public comment is received on this Proposed Plan.

This section profiles the relative performance of each alternative against the nine criteria, noting how the alternative compares to the other options under consideration. The nine evaluation criteria are discussed below and listed in Table 1. The detailed "Comparative Screening of Response Alternatives" can be found in the Feasibility Study Report.

Threshold Criteria	Overall Protection of People and the Environment			
	Compliance with Applicable or Relevant and Appropriate Requirements			
Primary Balancing Criteria	Long-term Effectiveness and Permanence			
	Reduction of Toxicity, Mobility, or Volume through Treatment			
	Short-Term Effectiveness Implementability			
	Cost			
Modifying Criteria	State Acceptance			
	Community Acceptance			

Table 1: Evaluation Criteria for Remedial Alternatives

Overall Protection of People and the Environment determines whether an alternative eliminates, reduces, or controls threats to people and the environment through institutional controls, engineering controls, or treatment.

Compliance with Applicable or Relevant and Appropriate Requirements evaluates whether the alternative meets Federal and state environmental statutes, regulations, and other requirements that pertain to the site, or whether a waiver is justified.

Long-Term Effectiveness and Permanence considers the ability of an alternative to maintain protection of people and the environment over time.

Reduction of Toxicity, Mobility, or Volume through Treatment evaluates an alternative's use of treatment to reduce the harmful effects of principal 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.

Cost 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 may be considered to the extent that information is available during the Feasibility Study, but can be fully considered only after public comment is received on the Proposed Plan. In the final balancing of trade-offs among alternatives upon which the final remedy selection is based, modifying criteria are of equal importance to the balancing criteria.

Summary of Alternative Evaluation Results

The four alternatives were initially screened for effectiveness, cost and implementability to determine which alternatives should be carried forward to a detailed analysis. Each alternative was carried forward for detailed analysis. A summary of the detailed analysis is shown in Table 2.

Criteria		Alternative 1 No Further Action	Alternative 2 Land Use Controls and Education	Alternative 3 Surface Munitions Removal and Education	Alternative 4 Subsurface Munitions Removal to 2 ft
Threshold Factors	Protectiveness	Not Protective	Protective by modifying behavior	<u>Protective</u> by removing surface munitions across the entire Anti-Tank Rocket and Rifle Grenade Range, and by modifying behavior.	Protective by removing subsurface munitions.
	Compliance with ARARs	Not Applicable	Not Applicable	No potential ARARs are applicable.	No potential ARARs are applicable.
Balancing Factors	Reduction of Toxicity, Mobility, and Volume through Treatment	No Reduction	No Reduction	Provides moderate reduction in volume since only surface removal is implemented.	Provides the highest reduction in volume since both surface and subsurface munitions are removed.
	Short-Term Effectiveness	No impact	No impact	Explosives safety hazards to workers during munitions removal.	Explosives safety hazards to workers during munitions removal.
	Long-Term Effectiveness and Permanence	Not Effective	Effective	Effective	Effective
	Implementa- bility	Requires no implementation	Implementable	Implementable	Implementable
	Cost	\$0	\$318,000	\$1,405,000	\$1,551,970

Table 2: Detailed Analysis of Alternatives

The following conclusions were derived for the Anti-Tank Rocket and Rifle Grenade Range.

- <u>Alternative 1</u> is ineffective in reducing risk to people and the environment and has no long-term permanence.
- <u>Alternative 2</u> does not reduce the munitions hazard, but it does reduce the risk by informing people of the hazards associated with the potential presence of munitions. The estimated cost to implement Alternative 2 is higher than Alternative 1 but less than Alternatives 3 and 4.

- <u>Alternative 3</u> will reduce the risk of accidental exposure to munitions on the surface. It is more expensive than Alternatives 1 and 2 but less expensive than Alternative 4.
- <u>Alternative 4</u> will reduce the risk of exposure to munitions on the surface and below the surface down to 2 feet. It is the most expensive of the alternatives to implement. In addition, it would provide long-term protection for those doing intrusive activities associated with the fire break maintenance, and will achieve Unlimited Use/Unrestricted Exposure.

PREFERRED ALTERNATIVE

Alternative 4 Subsurface Munitions Removal to 2 Feet is the Preferred Alternative for the Anti-Tank Rocket and Rifle Grenade Range. Based on the information available at this time, the Corps believes that this alternative will satisfy the statutory requirements under the Comprehensive Environmental Response, Compensation, and Liability Act and be protective of people and the environment by removing munitions in the top 2 feet. No Applicable or Relevant and Appropriate Requirements have been identified. The Corps may modify the Preferred Alternative in response to public comments or new information.

COMMUNITY PARTICIPATION

The Corps is soliciting public comments on the Preferred Alternatives recommended. Written and verbal comments will be accepted at a public meeting scheduled for July 9, 2015 at 6:30 p.m. at the Middleburg Community Civic Center. Representatives of the Corps and the Florida Department of Environmental Protection will explain the Proposed Plan, listen to concerns, answer questions, and accept public comments. Written comments will also be accepted through August 10, 2015. Comments received during the public meeting and public comment period will be considered in the final decision concerning future action to be taken at the project site. This decision will be presented in a *Decision Document*. The Corps' responses to public comments on this Proposed Plan will be contained in a "Responsiveness Summary" section of the Decision Document.

The Final Remedial Investigation Report (USA, 2014) and the Final Feasibility Study Report (USA, 2015) provide a comprehensive description of the site history, the details of the Remedial Investigation, the associated risk assessments and their conclusions, and the alternatives evaluated and recommended for the site. All of the reports and other project documents are available in the Middleburg-Clay Hill Branch Library, Middleburg, Florida.

CONTACT INFORMATION

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INFORMATION REPOSITORY

Copies of the Final Remedial Investigation Report (USA, 2014) and the Final Feasibility Study Report (USA, 2015) and the Administrative Record for this site can be found at the following location.

Middleburg-Clay Hill Branch Library Clay County Public Library System 2245 Aster Avenue Middleburg, FL 32068 (904) 541-5828 / 541-5825

REFERENCES

- United States Army Corps of Engineers (USACE), 1998a. Jacksonville District (CESAJ). DERP-FUDS Inventory Project Report (INPR) for Camp Blanding Military Reservation, Site No. 104FL001500, February.
- USACE, 2004. Rock Island District (CEMVS). Archives Search Report Supplement for the Former Camp Blanding Clay and Bradford Counties, Florida, November.
- USACE, 2004. U.S. Army Corps of Engineers Engineer Regulation 200-3-1, Formerly Used Defense Site Program Policy.
- U.S. Environmental Protection Agency, 1999. A Guide to Preparing Superfund Proposed Plans, Records of Decision, and Other Remedy Selection Decision Documents. U.S. Environmental Protection Agency Office of Solid Waste and Emergency Response. EPA 540-R-98-031. July.
- Parsons, 2007. Site Inspection Report, Former Camp Blanding, FUDS Project No. I04FL0011502, Final, September.
- USA Environmental, Inc (USA), 2014. Final Remedial Investigation Report, Former Camp Blanding, Clay and Bradford Counties, FL, Project No. I04FL0015, Final, May.
- USA, 2015. Final Feasibility Study Report, Former Camp Blanding, Clay and Bradford Counties, FL, Project No. I04FL0015, Final, April.

GLOSSARY OF TERMS

Administrative Record – A compilation of all documents used to determine the appropriate remedial action at the project site.

Community Relations Plan – A plan developed specific to a project site under investigation and includes a strategy for public involvement.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, otherwise known as Superfund) – A federal law that addresses the funding for and remediation of abandoned or uncontrolled hazardous waste sites. This law also establishes criteria for the creation of key documents such as the Remedial Investigation Report, Proposed Plan and Decision Document.

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

Feasibility Study – The mechanism for the development, screening and detailed evaluation of alternative remedial actions.

Formerly Used Defense Site – Locations that were owned, leased, or otherwise used by the Department of Defense prior to October 17, 1986. Operational ranges, operating storage or manufacturing facilities, or facilities used for or permitted for the treatment or disposal of military munitions do not qualify as Formerly Used Defense Sites.

Munitions Constituents – Any materials originating from munitions, including explosive and non-explosive materials and emission, degradation, or breakdown elements of ordnance or munitions.

Munitions Debris – Remnants of munitions (e.g., penetrators, projectiles, shell casings, links, fins) remaining after munitions use, demilitarization or disposal. Munitions debris is confirmed inert and free of explosive hazards by technically-qualified personnel.

Munitions and Explosives of Concern – Munitions that may pose explosives safety risks, including unexploded ordnance (munitions); discarded military munitions; or munitions components (e.g., 2,4,6-

trinitrotoluene, Research Department Explosive 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).

National Oil and Hazardous Substances Pollution Contingency Plan – These CERCLA regulations, often referred to as the National Contingency Plan, provide the Federal government the authority to respond to the problems of abandoned or uncontrolled hazardous waste disposal sites, as well as to certain incidents involving hazardous wastes (e.g., spills).

Preferred Alternative – The alternative that, when compared to other potential alternatives, best meets the CERCLA 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 – Exploratory inspection conducted at a site to define the nature and extent of contamination present.

Superfund Amendments and Reauthorization Act – Congress enacted the Superfund Amendments and Reauthorization Act to modify CERCLA in 1986 and reauthorized it in 1990 to provide additional funding for the Superfund program.

Unexploded Ordnance – Military munitions that: (a) were primed, fuzed, armed, or otherwise prepared for action; (b) were fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installations, personnel, or material; and (c) remain unexploded either by malfunction, design, or any other cause.

Unlimited Use/Unrestricted Exposure – The remedy does not place any restrictions on the current or potential future use of the land.

ACRONYMS AND ABBREVIATIONS

- ARAR Applicable or Relevant and Appropriate Requirements
- CERCLA Comprehensive Environmental Response, Compensation, and Liability Act
- Corps United States Army Corps of Engineers
- FUDS Formerly Used Defense Site
- USACE U.S. Army Corps of Engineers

Follow the 3Rs



Recognize when you may have encountered a munition.

Recognizing when you may have encountered a munition is the most important step in reducing the risk of injury or death.

Munitions may be encountered on land or in the water. They may be easy or hard to identify.

To avoid risk of injury or death:

- Never move, touch, or disturb a munition or suspect munition.
- Be aware that munitions do not become safer with age, in fact, they may become more dangerous.
- Don't be tempted to take or keep a munition as a souvenir.

Munitions come in many sizes, shapes, and colors. Some may look like bullets or bombs while others look like pipes, small cans or even a car muffler. Whether whole or in parts, new or old, shiny or rusty, munitions can still explode.

AN-MK 23 Practice Bomb



Retreat

Do not touch, move, or disturb it; but carefully leave the area.

Avoid death or injury by recognizing that you may have encountered a munition and promptly retreating from the area.

If you encounter what you believe is a munition, do not touch, move, or disturb it. Instead, immediately and carefully leave the area by retracing your steps, leaving the same way you entered. Once safely away from the munition, mark the path (e.g., with a piece of clothing or global positioning system (GPS) coordinates) so response personnel can find the munition.



Call 911!

Report

Immediately notify the police.

Protect yourself, your family, your friends, and your community by immediately reporting munitions or suspected munitions to the police.

Help the police by providing as much information as possible about what you saw and where you saw it. This information will help the police and the military or civilian explosives ordnance disposal personnel find, evaluate, and address the situation.

If you believe you may have encountered a munition, call and report the following:

- The area where you encountered it.
- Its general description. Remember: do not approach, touch, move, or disturb it.
- When possible, provide:
 - Its estimated size
 Its shape
 - Any visible markings, including coloring