

Acronyms and Glossary

SOP: Standard Operating Procedures

SSP: Standard Sampling Protocol

Step-Out: The process whereby, once an area is investigated and contamination is discovered, the investigation "steps out" to the next closest area and continues to search until no further detectable contamination is found.

Superfund: The program operated under the legislative authority of CERCLA and SARA that funds and carries out the EPA solid waste emergency and long-term removal remedial activities. These activities include establishing the National Priorities List, investigating sites for inclusion on the list, determining their priority level on the list and conducting and/or supervising the cleanup and other remedial actions.

TAPP: Technical Assistance for Public Participation: Independent technical assistance to Restoration Advisory Boards based on community member requests for assistance in interpreting scientific and engineering issues related to FUDS property restoration activities.

TCL: Target Cleanup Levels

TCRA: Time Critical Removal Action

Time-Critical Removal Action (TCRA): A response to contamination that poses such a risk to public health (serious injury or death) or the environment, that clean up or stabilization actions must be initiated within 6 months.

TNT: Trinitrotoluene

Toxic: Relating to a harmful effect by a poisonous substance on the human body by physical contact, ingestion or inhalation.

Toxicology: The science that deals with poisons and their effects on plant, animal, and humans.

TPP: Technical Project Planning

Transect: A line of data collected over an area to assist in the characterization of the site.

Treatment: Any activity that alters the chemical or physical nature of a waste to reduce its toxicity or prepare it for disposal.

Trinitrotoluene (TNT): Flammable substance used either alone or as a bursting charge for shells, bombs, and grenades or as an ingredient in various explosives.

Unexploded Ordnance (UXO): Military munitions that: (a) have been primed, fuzed, armed or otherwise prepared for action; (b) have been 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.

USACE: United States Army Corps of Engineers

UXO: Unexploded Ordnance

WWII: World War II

Questions?

For media queries/ or general questions about the MMRP Program, contact CEPOH's Public Affairs Office at (808) 835-4002. For project technical questions, please contact CEPOH's Project Manager, Ms. Young Chong at (916) 557-7212 or email: young.s.chong@usace.army.mil



**US Army Corps
of Engineers®**

Corps Facts

SUBJECT: Acronyms and Glossary

This glossary has been prepared to familiarize the public with terms used in the Defense Environmental Restoration Program for Formerly Used Defense Sites. Not all of the terms are applicable to all sites.

Administrative Record: A file of relevant documents that forms the basis of decisions made regarding response actions at a site.

Anomaly: An irregularity in an electromagnetic field as measured by a geophysical instrument (metal detector).

Applicable or Relevant and Appropriate Requirements (ARAR): Laws and regulations that guide the selection of remedial activity at a particular site.

AR: Administrative Record

ARAR: Applicable or Relevant and Appropriate Requirements

Archives Search Report (ASR): A detailed investigation to report on past OE activities conducted on an installation. The purpose of the Archives Search is to assemble historical records and available field data, assess potential ordnance presence, and recommend follow-up actions at a DERP-FUDS.

BIP: Blow in Place

Blow in Place (BIP): Detonating ordnance where it is discovered

CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980

Characterization: Facility or site sampling, monitoring, and analysis to determine the nature and extent of a release. Characterization provides the basis for acquiring the necessary technical information to develop, screen, analyze, and select appropriate remedial actions.

Comment Period: Time provided for the public to review and comment formally on a proposed action or decision.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA): The federal law (also known as Superfund) that guides cleanup of hazardous waste sites. This is the law that governs remediation at FUDS.

Contaminant: Any solid, liquid or gaseous matter; any odor; or any form of energy which exceeds some established environmental or human health risk standard.

Contamination: The presence of foreign materials, chemicals or radioactive substances in the environment in significant concentrations.

Cultural Debris: Debris that is not related to munitions or range operations such as rebar, construction materials, household trash, tools, pieces of vehicles and farm equipment, etc.

Decision Document: The documentation of remedial action decisions at non-National Priorities List FUDS properties. It addresses the following: purpose, site risk, remedial alternatives, public/community involvement, declaration, approval, and signature and is drafted following the completion of the Remedial Investigation/Feasibility Study phase.

Decontamination: The removal of unwanted material from facilities, soil or equipment by washing, chemical action, mechanical cleaning or other techniques.

DERP: Defense Environmental Restoration Program

DERP-FUDS: Defense Environmental Restoration Program for Formerly Used Defense Sites

Detection: The ability of an instrument to sense a specific amount or quantity, of the presence or past presence of a liquid, gas, or element in the local air, ground, or water. (see also non-detect)

DGM: Digital Geophysical Mapping

Digital Geophysical Mapping: A method of geophysical exploration in which the magnetic and/or electrical fields associated with the subsurface are measured. This is a method to locate subsurface munitions. Using DGM methods, the ground is "mapped" and data points are recorded with GPS coordinates. The survey data is processed and analyzed, and anomalies within the data are selected for excavation.)

Discarded Military Munitions (DMM): Military munitions that have been abandoned without proper disposal or removed from storage in a military magazine or other storage area for the purpose of disposal.

DMM: Discarded Military Munitions

DoD: U.S. Department of Defense

Ecological Receptor: The organisms that could potentially come into contact with contamination.

EM 61: A high-powered time domain metal detector that can record data and detect both ferrous and non-ferrous metal. The system is typically pulled on a wheeled platform. (see digital geophysical mapping).

Environmental Restoration: The process of environmental cleanup designed to ensure that risks to the environment and to human health and safety from waste sites either are eliminated or reduced to prescribed, safe levels.

EOD: Explosive Ordnance Disposal

EPA: U.S. Environmental Protection Agency

Explosive Hazard: A condition where danger exists because explosives are present that may react (e.g., detonate, deflagrate) in a mishap with potential unacceptable effects (e.g., death, injury, damage) to people, property, operational capability or the environment.

Explosive Ordnance Disposal (EOD): The detection, identification, field evaluation, rendering safe, recovery, and final disposal of unexploded ordnance or munitions. **Exposure Pathway:** An exposure pathway is the physical course a chemical takes from the source to the receptor exposed.

FDE: Findings and Determination of Eligibility

Feasibility Study: The study following a remedial investigation which identifies, develops, evaluates, and selects remedial action alternatives.

Ferrous Metal: Metal containing iron

Acronyms and Glossary

Final Disposition: Methods for permanent disposal of waste or contaminated media residuals following excavation/treatment.

Findings and Determination of Eligibility (FDE): The determination of eligibility of a property and project are under the FUDS Program.

Five-Year Reviews: Reviews that are conducted to ensure that remedial actions are still protective of human health, safety, and the environment.

Formerly Used Defense Sites: Real property that was formerly owned by, leased by, possessed by, or otherwise under the jurisdiction of the Secretary of Defense or the components, including organizations that predate DoD.

FS: Feasibility Study

FUDS: Formerly Used Defense Sites

GIS: Geographical Information System

Groundwater: Water beneath the earth's surface that fills pores between materials such as sand, soil or gravel and flows along a gradient.

Hazardous, Toxic and Radioactive Waste (HTRW): A category of environmental restoration programs used by USACE for the cleanup and removal of hazardous substances including storage tanks, drums, and electrical transformers.

Hazardous Waste: A solid waste that may cause or contribute to an increase in mortality or illness or pose a substantial hazard to human health or the environment when improperly treated, stored, transported, disposed or otherwise managed. Heavy Metals: Dense metals, examples include mercury, lead, silver, gold, and uranium.

Heavy Metals: Dense metals, examples include mercury, lead, silver, gold, and uranium

HTRW: Hazardous, Toxic, and Radioactive Waste

Hydrogeologic: Pertaining to groundwater and its movements through the geologic environment.

Hydrogeology: The science of how geology and groundwater interact

Inert Munitions: Munitions in which all energetic material such as primer, fuze, and explosive or incendiary fill have been removed or rendered harmless.

Information Repository (IR): Where information relating to the Defense Environmental Restoration Program may be found.

Inventory Project Report (INPR): The report resulting from the determination of FUDS eligibility. The INPR includes data as well as a recommendation for further action and guides investigators through further site studies.

INPR: Inventory Project Report

IR: Information Repository

Leachability: The potential for contaminants to seep or leach, from soil into groundwater.

Long-Term Surveillance and Maintenance (LTSM): Activities to ensure protection of human health and the environment including methods to contain or prevent exposure to residual contamination, inspections, groundwater monitoring, pump and treat activities, cap repair, maintenance of entombed buildings or facilities, maintenance of other barriers and contained structures, access control, and signage.

LTSM: Long-Term Surveillance and Maintenance

Mag and Dig: Using a magnetometer to locate anomalies underground and then immediately excavate them.

Mag and Flag: Using a magnetometer to locate anomalies underground and flag them for further investigation.

Magnetometer: An instrument that measures the earth's magnetic field and is frequently used as a means of detecting buried ferrous metal.

Maximum Contaminant Level (MCL): The regulatory limit for various constituents; there are different levels for different media, such as air, soil, and water.

MC: Munitions Constituents

MCL: Maximum Contaminant Level

MD: Munitions Debris

MDL: Method Detection Limit

MEC: Munitions and Explosives of Concern

Method Detection Limit (MDL): The minimum concentration of a substance that can be measured as reported with 99% confidence that the true value is greater than zero, pursuant to appropriate federal or state regulatory standards.

Military Munitions Response Program (MMRP): As part of DERP, this program addresses the potential explosives safety, health and environmental issues caused by past Department of Defense (DoD) munitions related activities.

MMRP: Military Munitions Response Program

Mobility: The ability of a contaminant to move through a medium in the environment.

Monitoring Well: A well specifically designed for the collection of groundwater samples.

MRA: Munitions Response Area

MRS: Munitions Response Site

MRSPP: Munitions Response Site Prioritization Protocol

Munitions Constituents (MC): Any materials originating from military munitions, including explosive and non-explosive materials as well as associated degradation products.

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

Munitions and Explosives of Concern (MEC): Specific categories of military munitions that may pose unique explosives safety risks such as Unexploded Ordnance (UXO), Discarded Military Munitions (DMM), or munitions constituents (MC) (such as TNT, RDX) that are present in high enough concentrations to pose an explosive hazard.

Munitions Response Site (MRS): A discrete location within a munitions response area that is known to require a munitions response.

Munitions Response Site Prioritization Protocol (MRSPP): A methodology for prioritizing response actions at sites known or suspected to contain unexploded ordnance (UXO), discarded military munitions (DMM), and/or munitions constituents (MC).

NDAI: No DoD Action Indicated

Acronyms and Glossary

No DoD Action Indicated (NDAI): Applied to a FUDS where USACE has made a programmatic decision that the property or project conforms to the following: (1) it is not eligible under FUDS; (2) it is categorically excluded from the FUDS program; (3) the hazards found were not the result of DoD actions on or before 17 October 1986; or (4) pose no threat to human health or safety or the environment and no additional environmental restoration activities are required

Non-Detect: The testing method is unable to measure an amount below the instrument's detection limit; it does not mean a zero concentration.

OE: Ordnance and Explosives

OEW: Ordnance and Explosive Waste

PA: Preliminary Assessment

Pathways: The means by which contaminants move. Possible pathways include air, soil, surface water, groundwater, plants, and animals.

Potable: Water that is generally not for human consumption in accordance with accepted water supply principles and practices.

PP: Proposed Plan

Practice Bomb: Used to simulate the same ballistic properties of service-type bombs, they were manufactured either as solid cast metal bodies or thin sheet metal containers. They contain a relatively small signal charge, but some large practice bombs may contain an explosive filler. Practice munitions containing no explosive or spotter charges are some-times referred to as "inert."

Preliminary Assessment: The review of existing information and/or an off-site reconnaissance, if appropriate, to determine if a release may require additional investigation or action. This is the first phase of the CERCLA process.

Preferred Alternative: The alternative that, when compared to other potential alternatives, was determined to best meet the CERCLA evaluation criteria and is proposed for implementation at a site.

Proposed Plan (PP): The Proposed Plan supplements the R1/FS and provide the public with an opportunity to comment on the preferred alternative for remedial action, as well as alternative plans under consideration, and to participate in the selection of remedial action at a site.

PWS: Performance Work Statement

RA: Risk Assessment

RAB: Restoration Advisory Board

RAC: Risk Assessment Code

RDX: Royal Dutch Explosive: A brand name blasting compound

Receptor: The people or organisms that could potentially come into contact with contamination.

Remedial Action (RA): Actions taken to permanently reduce or remove environmental hazards.

Remedial Design (RD): A phase of Remedial Action that follows the Remedial Investigation/Feasibility Study and includes development of engineering drawings and specifications for a site cleanup.

Remedial Investigation (RI): The process undertaken to determine the nature and extent of the problem presented by a release which emphasizes data collection and site characterization. The remedial investigation is generally performed concurrently and in an interdependent fashion with the feasibility study.

Remedial Investigation/Feasibility Study (RI/FS): Two distinct but related studies. Together, they characterize the nature and extent of the environmental problems and outline remedial actions to solve those problems. This is the third phase of the CERCLA process.

Remediation: Those activities performed to remove or treat hazardous waste sites or to relieve their effects.

Removal Action: The cleanup or removal of released hazardous substances from the environment.

Responsiveness Summary: Contained within the Decision Document, it presents comments received during the public comment period and the responses to them.

Restoration Advisory Board (RAB): A group of community and government representatives who work collaboratively to inform and involve the public in the environmental restoration process.

RI: Remedial Investigation

RI/FS: Remedial Investigation/Feasibility Study

Risk Assessment: The study and estimation of risk from a current or proposed activity. It involves estimates of the probability and consequence of an action.

Risk Assessment Code (RAC): An expression of the risk associated with a hazard. The RAC combines the hazard severity and accident probability into a single Arabic number on a scale from 1 to 5, with 1 being the greatest risk and 5 the lowest risk. A RAC is only assigned to areas where there may be concerns related to ordnance and explosives. RAC scores are now obsolete and have been replaced with a MRSPP score.

Risk Management: The process of evaluating alternative responses to risk and selecting among them. The selection process necessarily requires the consideration of legal, economic and social factors.

ROE: Right-of-Entry

SAP: Sampling and Analysis Plan

SARA: Superfund Amendments and Reauthorization Act of 1986

Schonstedt: A brand-name hand-held magnetometer used to detect subsurface ferrous metal.

SI: Site Inspection

Site: Any location, place, tract of land or facilities, including but not limited to, buildings and improvements used for the purposes subject to regulation or control.

Site Inspection (SI): A Site Inspection determines the presence or absence of contamination or the potential for contamination and the nature of the associated threats. This is the second phase of work in the CERCLA process.

Small Arms: Non-explosive ammunition that is .50 caliber or smaller

Solubility: A measure of how much of a given substance will dissolve in a liquid. It is usually measured in weight per unit volume.