Acronyms and Glossary

Taken from Final Draft of Army's RI/FS Guidance, May 2009 with the addition of the following:

1. MD (to acronym list)
2. MDAS (to both)
3. MDEH (to both)

Acronyms

Acronym	Description
3D	Three Dimensional
ACSIM	Assistant Chief of Staff for Installation Management
AM	Action Memorandum
AP	Ammonium Picrate
APP	Accident Prevention Plan
AR	Army Regulation
ARAR	Applicable or Relevant and Appropriate Requirement
ARNG	Army National Guard
ASA (I&E)	Assistant Secretary of the Army (Installations and Environment)
BIP	Blow-In-Place
BRAC	Base Realignment and Closure
BRACD	Base Realignment and Closure Division
CA	Cooperative Agreement
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CAIS	Chemical Agent Identification Sets
CFR	Code of Federal Regulations
cm	Centimeter
CRP	Community Relations Plan
CRREL	Cold Regions Research Engineering Laboratory
CSM	Conceptual Site Model
CSP	Chemical Site Plan
CSS	Chemical Safety Submission
CWM	Chemical Warfare Material
DA	Department of the Army
DASA-ESOH	Deputy Assistant Secretary of the Army for Environment, Safety, and Occupational Health
DD	Decision Document
DDESB	Department of Defense Explosives Safety Board
DERP	Defense Environmental Restoration Program
DGM	Digital Geophysical Mapping
DGPS	Differential Global Positioning System
DID	Data Item Descriptor
DMM	Discarded Military Munitions
DNB	Dinitrobenzene
DNT	Dinitrotoluene
DNX	Hexahydro-1,3-dinitroso-5-nitro-1,3,5-triazine
DoD	Department of Defense
DQO	Data Quality Objective
DRU	Direct Reporting Unit
DSMOA	Defense and State Memorandum of Agreement
DU	Depleted Uranium
DUSD(I&E)	Deputy Under Secretary of Defense for Installations and Environment
EC	Engineering Control
EDMS	Environmental Data Management System

Acronym	Description
EE/CA	Engineering Evaluation / Cost Analysis
EM	Engineer Manual
EM CX	Environmental and Munitions Center of Expertise
EMI	Electromagnetic Induction
EO	Executive Order
EOD	Explosive Ordnance Disposal
EP	Engineer Pamphlet
EPA	United States Environmental Protection Agency
EPP	Environmental Protection Plan
ER	Engineer Regulation
ERDC	Engineering Research and Development Center
ERM	Environmental Restoration Manager
ESP	Explosive Site Plan
ESS	Explosives Safety Submission
EZ	Exclusion Zone
FDEMI	Frequency-Domain Electromagnetic Induction
FFA	Federal Facility Agreement
FS	Feasibility Study
FSP	Field Sampling Plan
FUDS	Formerly Used Defense Sites
FY	Fiscal Year
g	Gram
GC	Garrison Commander or Gas Chromatography
GPO	Geophysical Prove-Out
GPR	Ground Penetrating Radar
GPS	Global Positioning System
HMX	Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine
HPLC	High Performance Liquid Chromotography
HQUSACE	Headquarters, United States Army Corps of Engineers
HRR	Historical Records Review
HRS	Hazard Ranking System
HTRW	Hazardous, Toxic, and Radioactive Waste
IAG	Interagency Agreement
IC	Institutional Control
ICM	Improved Conventional Munition
IMCOM	Installation Management Command
IR	Infrared
IRP	Installation Restoration Program
ISE	Installation Services Directorate, Environmental Division
ITRC	Interstate Technology and Regulatory Council
LAW	Light Anti-Armor Weapon
lb	Pound
LTM	Long-Term Management
LUC	Land Use Control
m^2	Square Meter
m	Meter
MC	Munitions Constituents

Acronym	Description
MD	Munitions Debris
MDAS	Material Documented as Safe
MDEH	Material Documented as an Explosive Hazard
MEC	Munitions and Explosives of Concern
MEC HA	Munitions and Explosives of Concern Hazard Assessment
MFR	Memorandum for Record
MGFD	Munition with the Greatest Fragmentation Distance
MI	Multi-Increment
mm	Millimeter
MMRP	Military Munitions Response Program
MNX	Hexahydro-1-nitroso-3,5-dinitro-1,3,5-triazine
MPPEH	Material Potentially Presenting an Explosive Hazard
MR	Munitions Response
MRA	Munitions Response Area
MR Project Team	Munitions Response Project Team
MRS	Munitions Response Site
MRSPP	Munitions Response Site Prioritization Protocol
MS	Mass Spectrometry
NAA	No Action Alternative
N/A	Not Applicable
NAS	National Academy of Science
NB	Nitrobenzene
NC	Nitrocellulose
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NDAA	National Defense Authorization Act
NDAI	No Department of Defense Action Indicated
NELAP	National Environmental Laboratory Accreditation Program
NEW	Net Explosives Weight
NG	Nitroglycerin
NGB	National Guard Bureau
NPL	National Priorities List
NQ	Nitroguanidine
NRC	Nuclear Regulatory Commission
NTCRA	Non-Time-Critical Removal Action
O&M	Operation and Maintenance
OB	Open Burn
OD	Open Detonation
OERIA	Ordnance and Explosives Risk Impact Assessment
OSD	Office of the Secretary of Defense
OSWER	Office of Solid Waste and Emergency Response
PA	Preliminary Assessment
PA (picric)	Picric Acid
PAH	Polycyclic Aromatic Hydrocarbons
PAM	Pamphlet
PETN	Pentaerythritol tetranitrate
PPE	Personal Protection Equipment
ppm	Parts Per Million

Acronym	Description
PRG	Preliminary Remediation Goal
QA	Quality Assurance
QAPP	Quality Assurance Project Plan
QC	Quality Control
R&D	Research and Development
RAB	Restoration Advisory Board
RCRA	Resource Conservation and Recovery Act
RCWM	Recovered Chemical Warfare Materiel
RDX	Royal Demolition Explosive
RI	Remedial Investigation
ROD	Record of Decision
ROE	Right of Entry
RPM	Remedial Project Manager
RSP	Render Safe Procedure
RTS	Robotic Total Station
SAA	Small Arms Ammunition
SAM	Sub Audio Magnetics
SAP	Sampling and Analysis Plan
SAR	Synthetic Aperture Radar
SARA	Superfund Amendments and Reauthorization Act
SI	Site Inspection
SOP	Standard Operating Procedure
SSHP	Site Safety and Health Plan
TAL	Total Analyte List
TBC	To Be Considered
TBN	Trinitrobenzene
TCRA	Time-Critical Removal Action
TDEMI	Time-Domian Electromagnetic Induction
TM	Technical Manual
TNT	Trinitrotoluene
TNX	Hexahydro-1,3,5-trinitroso-1,3,5-triazine
TP	Technical Paper
TPP	Technical Project Planning
TRC	Technical Review Committee
UFP	Uniform Federal Policy
U.S.	United States
USACE	United States Army Corps of Engineers
USACHPPM	United States Army Center for Health Promotion and Preventive Medicine
USAEC	United States Army Environmental Command
USAESCH	United States Army Engineering and Support Center, Huntsville
USATCES	United States Army Technical Center for Explosives Safety
U.S.C.	United States Code
UXO	Unexploded Ordnance
VSP	Visual Sampling Plan
WAA	Wide Area Assessment

Glossary

Active Installation
An active installation is an installation under the custody and control of the Department of Defense (DoD), to include operating installations, installations in a standby or layaway status, and installations awaiting closure. Examples include, but are not limited to, posts, camps (including National Guard camps), forts, depots, activities, ports, ammunition supply points, basic load ammunition storage areas, and ammunition plants.

Anomaly
An anomaly is any item that is seen as a subsurface irregularity after geophysical investigation. This irregularity should deviate from the expected subsurface ferrous and nonferrous material at a site (pipes, power lines, etc.).

Anomaly Avoidance
This is a technique employed on property known or suspected to contain unexploded ordnance (UXO), other munitions that may have experienced abnormal environments (e.g., discarded military munitions [DMM]), munitions constituents (MC) in high enough concentrations to pose an explosive hazard, or chemical agents, regardless of configuration, to avoid contact with potential surface or subsurface explosive or chemical agent hazards, to allow entry to the area for the performance of required operations.

Archives Search Report (ASR)
An ASR is a detailed investigation report on past munitions activities conducted on an installation. The principal 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 Defense Environmental Restoration Program (DERP) Formerly Used Defense Site (FUDS). There are four general steps in an archives search: records search phase, Site Safety and Health Plan, site survey, and ASR, including risk assessment (USAEC, 2004a). The ASR has since been replaced in the Military Munitions Response Program process by the Historical Records Review.

Base Realignment and Closure (BRAC)
BRAC is a program governing the scheduled closing of DoD sites (Base Closure and Realignment Act of 1988, Public Law 100-526, 02 Stat. 2623, the Defense Base Closure and Realignment Act of 1990, Public Law 101-510, 104 Stat. 1808, etc.).

Building Demolition / Debris Removal Program
The Building Demolition / Debris Removal Program provides funds for the demolition and removal of unsafe buildings or structures at installations and formerly owned or used properties.

Chemical Warfare Materiel (CWM)
CWM is an item generally configured as a munition containing a chemical compound that is intended to kill, seriously injure, or incapacitate a person through its physiological effects. CWM includes V- and G-series nerve agents or H-series (mustard) and L-series (lewisite) blister agents in other-than-munition configurations and certain industrial chemicals (e.g., hydrogen cyanide [AC], cyanogens chloride [CK], or carbonyl dichloride [called phosgene or CG]) configured as a military munition.

Due to their hazards, prevalence, and military-unique application, chemical agent identification sets are also considered CWM. CWM does not include riot control devices, chemical defoliants, and herbicides; industrial chemicals (e.g., AC, CK, CG) not configured as a munition; smoke and other obscuration producing items; flame and incendiary producing items; or soil, water, debris, or other media contaminated with low concentrations of chemical agents where no chemical agent hazards exist.

Chemical Warfare Materiel (CWM) Response
CWM response includes munitions responses and other responses to address the chemical safety; explosives safety, when applicable; human health; or environmental risks presented by CWM regardless of configuration.

Chemical Warfare Materiel Site Plan (CSP)
A CSP is required when an area is known or suspected to contain CWM to address requirements for an interim holding facility and, when the use of on-site CWM destruction technology is planned, for the site at which those destruction activities will occur.

Closed Range
A closed range is a military range that has been taken out of service as a range and that either has been put to new uses that are incompatible with range activities or is not considered by the military to be a potential range area. A closed range is still under the control of a DoD component. Closed ranges cannot occupy an area that has been identified as an active/inactive range. Closed ranges are those areas of land that used to be operational and are still owned by the United States (U.S.) Army, but are now used for nonrange purposes.

Community Relations Plan (CRP)
The CRP serves as the framework for establishing a successful information exchange with the public for munitions responses. The CRP follows guidelines set forth under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) and Superfund Amendments and Reauthorization Act (SARA). Each CRP must be tailored to fit the individual site and situation and should also accommodate any site-specific agreements between the U.S. Army and U.S. Environmental Protection Agency or state

environmental agencies. The CRP is not a static document and should be revised to reflect the project's development/progress.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)
CERCLA authorizes federal action to respond to the release or threatened release of hazardous substances into the environment or a release or threat of release of a pollutant or contaminant into the environment that may present an imminent or substantial danger to public health or welfare.

Cost to Complete (CTC)
The DoD requires that all services develop a comprehensive estimate, by site, of the total cost for completing environmental cleanup under the Installation Restoration Program (IRP)/BRAC. The Army effort, the CTC Study and Analysis, was completed for all Army installations with ongoing or planned restoration activities (HQDA ACISM, 2004).

Data Quality Objective (DQO)
DQOs are project-specific statements that clarify the study objective, define the most appropriate type of data to collect, determine the most appropriate conditions from which to collect the data, and specify tolerable limits on decision errors (used in establishing the quantity and quality of data needed).

Decision Document (DD)
DDs serve to provide the reasoning for the choice of or changes to a Superfund site cleanup plan. DDs include Proposed Plans (PPs), Records of Decision (RODs), ROD Amendments, and Explanations of Significant Differences, along with other associated memoranda and files. DDs are required by Section 117 of CERCLA, as amended by SARA, for remedial actions taken pursuant to Sections 104, 106, 120, and 122. Sections 300.430(f)(2), 300.430(f)(4), and 300.435(c)(2) of the National Contingency Plan (NCP) establish the regulatory requirements for these DDs.

Defense Environmental Restoration Program (DERP)
Established in 1984, DERP promotes and coordinates efforts for the evaluation and cleanup of contamination at DoD installations.

Defense Site
Any locations that is or was owned by, leased to, or otherwise possessed or used by the DoD. The term does not include any operational range, operating storage or manufacturing facility, or facility that is used for or was permitted for the treatment or disposal of military munitions. [10 USC 2710(e)(1)] (DoD refers to such sites as Munitions Response Site or MRS).

Department of Defense Explosives Safety Board (DDESB)
The DDESB is the DoD organization charged with promulgating ammunition and explosives safety policy and standards and reporting on the effectiveness of the implementation of such policy and standards.

Discarded Military Munitions (DMM)
DMM includes 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. The term does not include UXO, military munitions that are being held for future use or planned disposal, or military munitions that have been properly disposed of consistent with applicable environmental laws and regulations (DoD, 2000; 10 USC 2710(e)(2)).

Engineering Evaluation / Cost Analysis (EE/CA)
An EE/CA is prepared for all non-time-critical removal actions (NTCRAs) as required by the NCP. The goals of the EE/CA are to identify the extent of a hazard, identify the objectives of the removal action, and 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.

Explosive Ordnance Disposal (EOD) Personnel
Military personnel who have graduated from the Naval School, Explosive Ordnance Disposal; are assigned to a military unit with a service-defined EOD mission; and meet service and assigned unit requirements to perform EOD duties. EOD personnel have received specialized training to address explosive and certain chemical agent hazards during both peacetime and wartime. EOD personnel are trained and equipped to perform render safe procedures on nuclear, biological, chemical, and conventional munitions and on improvised explosive devices.

Explosive Ordnance Disposal (EOD) Unit
A military organization constituted by proper authority; manned with EOD personnel; outfitted with equipment required to perform EOD functions; and assigned an EOD mission.

Explosive Soil
Explosive soil refers to mixtures of explosives MC in soil, sand, clay, or other solid media at concentrations such that the mixture itself presents an explosive hazard.

Explosives or Munitions Emergency Response
Explosives or munitions emergency response includes all immediate response activities by an explosives and munitions emergency response specialist to control, mitigate, or eliminate the actual or potential threat encountered during an explosives or munitions emergency. An explosives or munitions emergency response may include in-place render safe procedures, treatment or destruction of the explosives or munitions, and/or transporting those items to another location to be rendered safe, treated, or destroyed. Any reasonable delay in the completion of an explosives or munitions emergency response caused by a necessary, unforeseen, or uncontrollable circumstance will not terminate the explosives or munitions emergency. Explosives and munitions emergency responses can occur on either public or private lands and are not limited to responses at Resource Conservation and Recovery Act (RCRA) facilities (Military Munitions Rule).

Federal Facilities Compliance Act (FFCA)
The FFCA (Public Law 102-386 [106 Stat. 1505]) provides for a waiver of sovereign immunity with respect to federal, state, and local procedural and substantive requirements relating to RCRA solid and hazardous waste laws and regulations at federal facilities. Additionally, it defines hazardous waste in relation to public vessels, expands the definition of mixed waste, and discusses waste discharges to federally owned treatment works (FFCA, 1992).

Former Ranges (Closed, Transferred, or Transferring [CTT] Ranges)
Former ranges are ranges for which a formal decision has been made to close the range or that have been put to a use that is incompatible with continued use as a military range. Former ranges include closed ranges, transferred ranges, and transferring ranges.

Formerly Used Defense Sites (FUDS)
FUDS include those properties previously owned, leased, or otherwise possessed by the United States and under the jurisdiction of the Secretary of Defense, or manufacturing facilities for which real property accountability rested with the DoD but were operated by contractors (government owned, contractor operated) and that were later legally disposed of. FUDS is a subprogram of the DERP.

Geographic Information System (GIS)
GIS combines layers of information about a place to provide a better understanding of that place. What layers of information are combined depend on the purpose—finding the best location for a new store, analyzing environmental damage, viewing similar crimes in a city to detect a pattern, and so on (www.gis.com/whatisgis/).

Installation Restoration Program (IRP)
The IRP for active (nonclosing) Army installations is authorized by the DERP, codified in 10 United States Code (USC) 2701–2708 and 2810. It is implemented subject to and in a manner consistent with CERCLA, as amended by SARA, and CERCLA's implementing regulation, the NCP, codified in 40 Code of Federal Regulations (CFR) 300. Although CERCLA drives the IRP, RCRA is applicable to numerous IRP projects.

Institutional Control (IC)
See Land Use Control.

Land Use Control (LUC)
LUCs are legal, physical, or administrative mechanisms that restrict the use of, or limit access to, real property to manage risks to human health and the environment. Physical mechanisms encompass a variety of engineered remedies to contain or reduce contamination and/or physical barriers to limit access to real property, such as fences or signs.

Material Documented as Safe (MDAS) MPPEH that has been assessed and documented as not presenting an explosive hazard and for which the chain of custody has been established and maintained. This material is no longer considered to be MPPEH.

Material Documented as an Explosive Hazard (MDEH) (Formerly referred to as material documented as hazardous, or MDAH.) MPPEH that cannot be documented as MDAS, that has been assessed and documented as to the maximum explosive hazards the material is known or suspected to present, and for which the chain of custody has been established and maintained. This material is no longer considered to be MPPEH. (The MDEH characterization only addresses the explosives safety status of the material.)

Material Potentially Presenting an Explosive Hazard (MPPEH)
Material owned or controlled by the Department of Defense that, prior to determination of its explosives safety status, potentially contains explosives or munitions (e.g., munitions containers and packaging material; munitions debris remaining after munitions use, demilitarization, or disposal; range-related debris) or potentially contains a high enough concentration of explosives that the material presents an explosive hazard (e.g., equipment, drainage systems, holding tanks, piping, or ventilation ducts that were associated with munitions production, demilitarization, or disposal operations). Excluded from MPPEH are munitions within the DoD-established munitions management system and other items that may present explosion hazards (e.g., gasoline cans and compressed gas cylinders) that are not munitions and are not intended for use as munitions.

Military Munitions
Military munitions are all ammunition products and components produced for or used by armed forces for national defense and security, including ammunition products or components under the control of the DoD, the U.S. Coast Guard, the U.S. Department of Energy, and the National Guard. The term military munitions 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 of the above.

The term does not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear 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 USC 2011 et seq.), as amended, have been completed. (10 USC 101(e)(4)(A) through (C))

Military Range (or "Range")
A military range, as used in the Military Munitions Rule (40 CFR 266.201), is "Designated land and water areas set aside, managed, and used to conduct research on, develop, test, and evaluate military munitions and explosives, other ordnance or weapons systems, or to train military personnel in their use and handling. Ranges include firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, and buffer zones with restricted access and exclusionary areas."

Munitions and Explosives of Concern (MEC)
This term, which distinguishes specific categories of military munitions that may pose unique explosives safety risks, means UXO, as defined in 10 USC 101(e)(5)(A) through (C); DMM, as defined in 10 USC 2710(e)(2); or MC (e.g., TNT, RDX), as defined in 10 USC 2710(e)(3), present in high enough concentrations to pose an explosive hazard.

Munitions Constituents (MC)
MC include any material originating from UXO, DMM, or other military munitions, including explosive and nonexplosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions. (10 USC 2710(e)(3))

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

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

Munitions Response Area (MRA)
Any area on a defense site that is known or suspected to contain UXO, DMM, or MC. Examples include former ranges and munitions burial areas. An MRA is composed of one or more munitions response sites (MRSs).

Munitions Response Chemical Safety Submission (MRCSS)
A CSS provides specifications for conducting work activities during a chemical warfare materiel (CWM) response. It details the scope of the project, planned work activities, potential site hazards, and methods of controlling the hazards. A CSS is required when removal activities (e.g., surface removal of recovered CWM [RCWM] or excavations when the intent is to uncover, characterize, and remove geophysical anomalies that have the potential to be RCWM items) will be performed (USACE, 2002a).

Munitions Response Explosives Safety Submission (MRESS)
An ESS is a document that serves as the specification for conducting munitions response activities involving munitions and explosives of concern (MEC). The ESS details the scope of the project, planned response activities, potential hazards (including the maximum credible event), and methods for their control.

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

National Oil and Hazardous Substance Pollution Contingency Plan (NCP)
Revised in 1990, the NCP provides the regulatory framework for responses under CERCLA. The NCP designates the DoD as the removal response authority for explosive hazards associated with military munitions.

Non-Time-Critical Removal Action (NTCRA)
NTCRAs are actions initiated in response to a release or threat of a release that poses a risk to human health, welfare, or the environment. Initiation of removal cleanup actions may be delayed for 6 months or more (USACE, 2000b).

Office of Solid Waste and Emergency Response (OSWER)
OSWER provides policy, guidance and direction for:

- safely managing waste;
- preparing for and preventing chemical and oil spills, accidents, and emergencies; and
- cleaning up and reusing contaminated property.

Operational Range
An operational range is a range that is under the jurisdiction, custody, or control of the Secretary of Defense and that is used for range activities or, although not currently being used for range activities, is still considered by the Secretary to be a range and has not been put to a new use that is incompatible with range activities. (10 USC 101(e)(3)(A) and (B)) Also includes "military range," "active range," and "inactive range" as those terms are defined in 40 CFR 266.20.

Ordnance and Explosives
See Munitions and Explosives of Concern.

Other Debris
Debris found on operational ranges or MRSs, which may be removed to facilitate a range clearance or munitions response that is not related to munitions or range operations. Such debris includes, but is not limited to, rebar, household items (refrigerators, washing machines, etc.), automobile parts and automobiles that were not associated with range targets, fence posts, and fence wire.

Preliminary Assessment (PA)
A PA is an assessment of information about a site and its surrounding area. A PA is designed to determine whether a site poses little or no threat to human health and the environment or, if it does pose a threat, whether the threat requires further investigation. PA investigations collect readily available information about a site and its surrounding area. The PA is designed to distinguish, based on limited data, between sites that pose little or no threat to human health and the environment and sites that may pose a threat and require further investigation. The PA also identifies sites requiring assessment for possible emergency response actions. If the PA results in a recommendation for further investigation, a Site Inspection (SI) is performed.

Proposed Plan (PP)
PPs document the preferred alternative. The PP briefly summarizes the alternatives studied in the detailed analysis phase of the remedial investigation / feasibility study (RI/FS), highlighting the key factors that led to identifying the preferred alternative. The PP, as well as the RI/FS and the other information that forms the basis for the lead agency's response selection, is made available for public comment in the Administrative Record file.

Qualified Receiver
A qualified receiver includes entities that have personnel who are (or individuals who are) trained and experienced in the identification and safe handling of used and unused military munitions and any known or potential explosive hazards that may be associated with the MPPEH they receive and are licensed and permitted or otherwise qualified to receive, manage, and process MPPEH.

Quantity-Distance
Quantity-distance is defined as the quantity of explosives material and distance separation relationships that provide defined types of protection. These relationships are based on levels of risk considered acceptable for the stipulated exposures and are tabulated in the appropriate quantity-distance tables provided in DoD 6055.09, *DoD Explosives Safety Board (DDESB) and DoD Component Explosives Safety Responsibilities*. Separation distances are not absolute safe distances but are relative protective safe distances. Greater distances than those shown in the quantity-distance tables should be used whenever possible.

Range
A range is a designated land or water area that is set aside, managed, and used for range activities of the DoD. The term includes firing lines and positions, maneuver areas, firing lanes, test pads, detonation pads, impact areas, electronic scoring sites, buffer zones with restricted access, and exclusionary areas. The term also includes airspace areas designated for military use in accordance with regulations and procedures prescribed by the Administrator of the Federal Aviation Administration. (10 USC 101(e)(1)(A) and (B))

Range-Related Debris
Range-related debris is debris, other than munitions debris, collected from operational ranges or from former ranges (e.g., targets, target debris, military munitions packaging and crating material).

Real Property
Real property consists of land, bodies of water, and improvements on the land (such as access roads, buildings, and other structures). Equipment or fixtures (such as plumbing, electrical work, and elevators) installed in a permanent manner or essential for the purpose of an improvement are part of the real property.

Record of Decision (ROD)
RODs are used to select and document the remedy selection decision. The ROD documents the remedial action plan for a site or operable unit and serves the following three basic functions: (1) certifies that the remedy selection process was carried out in accordance with CERCLA and, to the extent practicable, with the NCP; (2) describes the technical parameters of the remedy, specifying the methods selected to protect human health and the environment, including treatment, engineering, and IC components, as well as cleanup levels; and (3) provides the public with a consolidated summary of information about the site and the chosen remedy, including the rationale behind the selection (EPA, 1999).

Recovered Chemical Warfare Materiel (RCWM)
CWM used for its intended purpose or previously disposed of as waste, which has been discovered during a CWM response or by chance (e.g., accidental discovery by a member of the public), that the Department of Defense has either

secured in place or placed under DoD control, normally in a DDESB-approved storage location or interim holding facility, pending final disposition (DoD, 2005a).

Recovered Chemical Warfare Materiel (RCWM) Conceptual Site Plan
This plan describes the background and proposed general approach and procedures to address the scope of a CWM response.

Remedial Action Cost Engineering and Requirements (RACER)
RACER is the primary tool for preparing programming cost estimates for environmental remediation.

Remedial Investigation / Feasibility Study (RI/FS)
An RI/FS is performed to collect data to characterize site conditions, assess risk/hazard to human health and the environment, and conduct interim/treatability testing to evaluate the potential performance and cost of the treatment technologies that are being considered. The FS is the mechanism for the development, screening, and detailed evaluation of alternative remedial actions.

The RI/FS process includes scoping, site characterization, screening of remedial alternatives, interim/treatability studies, and detailed analysis. The RI and FS are conducted concurrently—data collected in the RI influence the development of remedial alternatives in the FS, which in turn affect the data needs and scope of interim/treatability studies and additional field investigations. This phased approach encourages the continual scoping of the site characterization effort, which minimizes the collection of unnecessary data and maximizes data quality (EPA, 1989).

Remedial Project Manager (RPM)
An RPM is the official designated by the lead agency to coordinate, monitor, and direct remedial or other response actions (DoD, 2000).

Removal Action
A removal action is the cleanup or removal of released hazardous substances from the environment; such actions as may be taken in the event of a threat of release of hazardous substances into the environment; such actions as may be necessary to monitor, assess, and evaluate the release or threat of release of hazardous substances; the disposal of removed material; or the taking of such other actions as may be necessary to prevent, minimize, or mitigate damage to the public health or welfare of the United States or to the environment, which may otherwise result from a release or threat of release. The term includes, in addition, without being limited to, security fencing or other measures to limit access, provision of alternative water supplies, temporary evacuation and housing of threatened individuals not otherwise provided for, action taken under Section 104(b) of CERCLA, post-removal site control, where appropriate, and any emergency assistance that may be provided under the Disaster Relief Act of

1974. For the purpose of the NCP, the term also includes enforcement activities related thereto.

Resource Conservation and Recovery Act (RCRA)
RCRA is the federal statute that governs the management of all hazardous waste from cradle to grave. RCRA covers requirements regarding identification, management, and cleanup of waste, including (1) identification of when a waste is solid or hazardous; (2) management of waste—transportation, storage, treatment, and disposal; and (3) corrective action, including investigation and cleanup, of old solid waste management units (DoD, 2000).

Response Action
Respond or response, as defined by Section 101(25) of CERCLA, means remove, removal, remedy, or remedial action, including enforcement activities related thereto.

Site Inspection (SI)
An SI identifies sites that enter the National Priorities List Site Listing Process and provides the data needed for Hazard Ranking System (HRS) scoring (Introduction to the HRS) and documentation. SI investigators typically collect environmental and waste samples to determine what hazardous substances are present at a site. They determine if these substances are being released to the environment and assess if they have reached nearby targets. The SI can be conducted in one stage or two. The first stage, or focused SI, tests hypotheses developed during the PA and can yield information sufficient to prepare an HRS scoring package. If further information is necessary to document an HRS score, an expanded SI is conducted.

Small Arms Ammunition
Small arms ammunition includes ammunition, without projectiles that contain explosives (other than tracers), that is .50-caliber or smaller or for shotguns.

Stakeholders
Stakeholders include federal, state, and local elected or appointed officials, community organizations, property owners, and others directly or indirectly impacted by the potential hazards present, munitions response activities, or the sufficiency and/or protectiveness of the response.

Superfund Amendments and Reauthorization Act (SARA)
Enacted in 1986, this legislation establishes standards for cleanup activities, requires federal facility compliance with CERCLA, and clarifies public involvement requirements.

Technical Escort Unit (TEU)
The TEU is a DoD organization manned with specially trained personnel that provide verification, sampling, detection, mitigation, render safe,

decontamination, packaging, escort, and remediation of chemical, biological, and industrial devices or hazardous material.

Time-Critical Removal Action (TCRA)
TCRA is a removal action where, based on the site evaluation, a determination is made that removal is appropriate and that less than 6 months exist before on-site removal activity must begin. (40 CFR 300.5)

Transferred Range
A transferred range is a military range that is no longer under military control and has been leased by the DoD, transferred, or returned by the DoD to another entity, including federal entities. This includes a military range that is no longer under military control, but that was once used by the U.S. Army. This includes use under the terms of an executive order, special use permit or authorization, right-of-way, public land order, or other instrument issued by the federal land manager.

Transferring Range
A transferring range is a military range that is proposed to be leased, transferred, or returned by the DoD to another entity, including federal entities. This includes a military range that was used under the terms of a withdrawal, executive order, special use permit or authorization, right-of-way, public land order, or other instrument issued by the federal land manager or property owner. An active range is not be considered a “transferring range” until the transfer is imminent.

Unexploded Ordnance (UXO)
UXO includes military munitions that have been primed, fuzed, armed, or otherwise prepared for action; have been fired, dropped, launched, projected, or placed in such a manner as to constitute a hazard to operations, installation, personnel, or material; and remain unexploded either by malfunction, design, or any other cause. (10 USC 101(e)(5)(A) through (C) and 40 CFR 266.201)

Unexploded Ordnance (UXO)-Qualified Personnel
UXO-qualified personnel have performed successfully in military EOD positions or are qualified to perform in the following Department of Labor, Service Contract Act, Directory of Occupations, and contractor positions: UXO Technician II, UXO Technician III, UXO Safety Officer, UXO Quality Control Specialist, or Senior UXO Supervisor.

Unexploded Ordnance (UXO) Technicians
UXO technicians are qualified for filling Department of Labor, Service Contract Act, Directory of Occupations, and contractor positions of UXO Technician I, UXO Technician II, and UXO Technician III.

Waste Military Munitions (WMM)

A military munition is a WMM if it has been identified as (1) solid waste per the Military Munitions Rule (as described in the RCRA regulations at 40 CFR 266.202 Subpart M) or (2) hazardous waste per the RCRA regulations at 40 CFR 261 Subpart C or D (i.e., either listed as hazardous or fulfilling the criteria for one or more of the hazardous characteristics—ignitability, corrosivity, reactivity, or toxicity).