## Appendix B Explanation of Abbreviations and Terms

## B-1. Acronyms

AEC Army Environmental Center APP Accident Prevention Plan ASR Archive Search Report

BRAC Base Realignment and Closure BWM Biological Warfare Materiel

CACM Chemical Agent Contaminated Media

CDR Commander

CESO Chief, Safety and Occupational Health Office

CRZ Contamination Reduction Zone
CSS Chemical Safety Submission
CWM Chemical Warfare Materiel

CX Center of Expertise

DDESB Department of Defense Explosives Safety Board
DERP Defense Environmental Restoration Program

DOD Department of Defense

DOT Department of Transportation

EE/CA Engineering Evaluation/Cost Analysis

EOD Explosives Ordnance Disposal

EP Engineering Pamphlet

ESS Explosives Safety Submission

EZ Exclusion zone

FUDS Formerly Used Defense Sites HQDA Headquarters Department of Army

HTRW Hazardous, Toxic, and Radioactive Waste

IAW in accordance with

ICM Improved Conventional Munitions

INPR Inventory Project Report

IRP Installation Restoration Program

LUC Land Use Controls MACOM Major Command

MCE Maximum Credible Event (Chemical)

MSC Major Subordinate Command MSD Minimum Separation Distance NDAI No DOD action indicated

NOFA No further action

ODASAF Office of the Deputy Assistant to the Secretary of the AirForce

OE Ordnance and Explosives
PM USACE Project Manager
PPE Personal Protective Equipment

QA Quality Assurance QC Quality Control

RCWM Recovered Chemical Warfare Materiel

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RDTE Research, Development, Test, and Evaluation RI/FS Remedial Investigation/Feasibility Study

SFO Support for Others

SOP Standing Standard Operating Procedures

SSHO Site Safety and Health Officer SSHP Site Safety and Health Plan TCRA Time Critical Removal Actions

TEU Technical Escort Unit

USACE U. S. Army Corps of Engineers

USAESCH U.S Army Engineering and Support Center, Huntsville USATCES U.S. Army Technical Center for Explosives Safety

UXO Unexploded Ordnance
UXOSO UXO Safety Officer
WFO Work for Others
WP Work Plan

## **B-2.** Definitions

a. Accident Prevention Plan/Site Safety and Health Plan (APP/SSHP). Reference ER 385-1-92, paragraph 9a(1).

- b. Administrative Record. The body of documents that "forms the basis" for the selection of a particular response at the site. These are relevant documents that were relied upon in selecting the response action as well as relevant documents that were considered but ultimately rejected.
- c. Anomaly Avoidance. Techniques employed by qualified UXO personnel at sites with known or suspected OE to avoid any potential surface OE and subsurface anomalies. For example, creating safe travel lanes and work areas at a mixed site when HTRW investigations must occur prior to execution of an OE removal action.
- d. Archives Search Report. A detailed investigation to report on past OE activities conducted on an installation; includes an OE-specific site inspection and historical records searches.
- e. Biological Warfare Materiel (BWM). An item configured as a munition containing an etiologic agent that is intended to kill, seriously injure, or incapacitate a person through its physiological effects. BWM can also include etiologic agents that are designed to damage or destroy crops that are intended for human consumption.
- f. Chemical Agent. A chemical substance that is intended for use in military operations to kill, seriously injure, or incapacitate a person through its physiological effects. Excluded are research, development, test, and evaluation (RDTE) solutions, industrial chemicals, riot control agents, chemical defoliants and herbicides, smoke flame, and incendiaries.
- g. Chemical Agent Contaminated Media (CACM). Any mixture of detectable concentrations of chemical agents with soil, water, debris, or other solid or liquid media.

- h. Chemical Safety Submission (CSS). A document that serves as the instrument to describe planned chemical and explosives safety actions to the appropriate approval authority.
- i. Chemical Warfare Materiel (CWM). An item configured as a munition containing a chemical substance to kill, seriously injure, or incapacitate a person through its physiological effects. Also includes V- and G- series nerve agent, H- series blister agent, and lewisite in other than munition configurations. Owing to their hazards, prevalence, and military-unique application, chemical agent identification sets (CAIS) are also considered CWM. CWM does not include: riot control agents; chemical herbicides; smoke and flame producing items; or soil, water, debris or other media contaminated with chemical agent (DA Memorandum 1997).
- *j. Conventional Ordnance and Explosives (Conventional OE).* Ordnance and explosives (see definition below) excluding RCWM, BWM, and nuclear ordnance.
- k. Engineering Controls. Any process or device designed to reduce blast fragmentation, or to contain vapor releases from RCWM and their effects.
- *l. Exclusion Zone (EZ).* A safety zone established around an OE work area. Only project personnel and authorized, escorted visitors are allowed within the exclusion zone. Examples of EZs are safety zones around OE intrusive activities and safety zones where OE is intentionally detonated. For RCWM project sites, it is the area within the No Significant Effects (NOSE) zone.
- m. Explosives Safety Submission (ESS). A document that serves as the instrument to describe planned explosives safety actions to the appropriate approval authority.
- n. Explosive Media. Mixtures of explosives in soil, sand, clay, or other solid media at concentrations such that the mixture itself is explosive.
- o. Formerly Used Defense Sites (FUDS). A Defense Environmental Restoration Program (DERP) at 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 DOD but were operated by contractors (government owned-contractor operated) and later legally disposed of.
- p. Geophysical Techniques. Techniques for the detection and measurement of buried anomalies (e.g., ferromagnetic indicators and ground penetrating radar) to investigate the presence of munitions.
- *q. Hazardous, Toxic, and Radioactive Waste (HTRW) Activities.* See definition in ER 385-1-92.
- r. Improved Conventional Munitions (ICM). Munitions characterized by the delivery of two or more anti-personnel, anti-material, or anti-armor submunitions by a parent munition.

- s. Industrial Chemical. A chemical developed or manufactured for use in industrial operations or research, by industry, government, or academia. Previously identified as chemical warfare agents: hydrogen cyanide (AC), cyanogen chloride (CK), phosgene (CG), methylphosphonic difluoride (DF), O-ethyl (2-isopropyl aminoethyl) methylphosphonite (QL), and chloropicrin (PS) are now considered industrial chemicals.
- t. Land Use Controls (LUC). LUC include any type of physical, legal, or administrative mechanism that restricts the use of, or limits access to, contaminated property in order to prevent or reduce risks to human health, safety, and the environment. Physical mechanisms encompass a variety of engineered remedies to contain or reduce contamination or physical barriers to limit access to property, such as fences or signs, or both.
- u. Intrusive Activity. An activity, which involves, or results in, the penetration of the ground surface at an area known or suspected to contain OE. Intrusive activities can be of an investigative or removal action nature.
- v. Maximum Credible Event (Chemical). An MCE is analogous to a worst-case analysis. The best credible information is applied to estimate the results. Assumptions are those that yield the potential for more severe consequences as opposed to assumptions that administrative or operational controls will always perform as intended. There should be a reasonable probability of occurrence.
- w. Military Munitions. Military munitions means all ammunition products and components produced for or used by the armed forces for national defense and security, including ammunition products or components under the control of the Department of Defense, the Coast Guard, the Department of Energy, and the National Guard. The term includes confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries, including bulk explosives and chemical warfare agents, chemical munitions, rockets, guided and ballistic missiles, bombs, warheads, mortar rounds, artillery ammunition, small arms ammunition, grenades, mines, torpedoes, depth charges, cluster munitions and dispensers, demolition charges, and devices and components thereof. The term does not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components, except that the term does include non-nuclear components of nuclear devices that are managed under the nuclear weapons program of the Department of Energy after all required sanitization operations under the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.) have been completed. (10 U.S.C. 2710).
- x. Mixed Site. A project site that contains or is suspected to contain, both OE and HTRW contamination.
- y. No Significant Effects (NOSE) Zone. The zone at which the general population (to include more susceptible subpopulations) would not experience any significant effects from exposure of chemical agents.
- z. OE Safety Specialist. A USACE employee who is qualified through experience and completion of the U.S. Army Bomb Disposal School, Aberdeen Proving Ground, Maryland, or U.S.

Naval EOD School, Indian Head, Maryland, or Elgin AFB, Florida, and is classified in the GS-0018 job series (CP-12 career series). Performs safety and occupational health support and oversight of projects involving OE.

- aa. Ordnance and Explosives (OE). Consists of (1) military munitions that have been abandoned, expelled from demolition pits or burning pads, lost, discarded, or buried, (2) UXO, (3) soil presenting explosion hazards, and (4) buildings with explosives residues that present explosion hazards.
- *bb. OE Operations.* All field work performed in support of response action, anomaly avoidance, RDTE, construction, and other activities at a site to address known or suspected OE hazards.
- cc. RCWM Pre-operational Survey. An exercise by the MACOM or designee performed at the beginning of chemical cleanup operations to determine the readiness of personnel and ensure compliance with all provisions of the site plan and safety submission and Army regulations.
- *dd. Real Property.* Land, buildings, and bodies of water. Examples of such property include pads, pits, basins, ponds, streams, impact areas, maneuver areas, training areas, burial sites, and buildings used for ammunition or explosives operations.
- cc. Recovered Chemical Warfare Materiel (RCWM). Non-stockpile CWM that was previously discarded, buried, or fired and discovered either unexpectedly or during planned environmental restoration operations.
- *dd. Removal Action.* The cleanup or removal of OE from the environment, including the disposal of removed materiel, or the taking of other actions, such installing as security fencing, that may be necessary to prevent, minimize, or mitigate damage to the public health or welfare or to the environment.
- ee. Response Action. Action taken to prevent or minimize the release of OE so that it does not cause substantial danger to present or future public health and safety, welfare, or the environment (e.g., site investigation, intrusive sampling, removal action, ASR, inventory project report (INPR), EE/CA investigation, site visit)
- ff. Site Investigation. Activities undertaken to determine the presence, type, distribution, density, and location of OE. Includes physical detection as well as chemical sampling and monitoring.
- gg. Site Visit. Any visit to an OE, or suspected OE contaminated, site prior to any OE operation.
- *hh. Stakeholder.* Federal, state and local officials; community organizations; property owners and others having a personal interest or involvement, or having a monetary or commercial involvement in the property, which is to undergo OE operations/activities.

- *ii. Time Critical Removal Action.* Removal actions where, based on the site evaluation, a determination is made that a removal is appropriate, and that less than 6 months exists before onsite removal activity must begin.
- *jj. Unexploded Ordnance (UXO)*. Military munitions that have been primed, fuzed, armed, or otherwise prepared for action, and have been fired, dropped, launched, projected or placed in such a manner as to constitute a hazard to operations, installation, properties (FUDS sites), personnel, or material and remain unexploded either by malfunction, design, or any other cause (10 U.S.C. 2710).
- *kk. UXO Personnel.* Personnel who have been trained to accomplish any or all of the following tasks involving military munitions: detection, identification, evaluation, rendering safe, recovery, and final disposition.
- *ll. UXO Technician*. Personnel who are qualified for (as define by DOD) and filling Department of Labor, Service Contract Act, Directory of Occupations contractor positions of UXO Technician I, UXO Technician II and UXO Technician III. Refer to EP 1110-1-18 for detailed information for approved contract titles and qualifications.
- *mm. UXO Qualified Personnel.* Personnel who meet the training requirements for UXO personnel and have performed successfully in military EOD positions or are qualified to perform in the following service contract act contractor positions: UXO Technician II, UXO Technician III, UXO Safety Officer, UXO Quality Control Specialist, and Senior UXO Supervisor.
- nn. Work Plan. Describes procedures, goals, methods, and personnel used for OE field activities, see EM 1110-1-4009, Chapter 4.