

GLOSSARY

SECTION I ACRONYMS

3 Rs.....	Recognize, Retreat, Report
AAR.....	After-Action Reports
AC.....	Hydrogen Cyanide
ACOM.....	Army Command
AE.....	Ammunition and Explosives
AFM.....	Air Force Manual
AFSC.....	Air Force Safety Center
AGM.....	Above-Ground Magazine
AHA.....	Activity Hazard Analysis
AKO.....	Army Knowledge On-line
AM.....	Action Memorandum
AMRDEC.....	Aviation and Missile Research Development Engineering Center
ANSI.....	American National Standards Institute
APP.....	Accident Prevention Plan
AR.....	Army Regulation
ASCC.....	Army Service Component Command
ASP.....	Ammunition Supply Point
ASSE.....	American Society of Safety Engineers
ASSHP.....	Abbreviated Site Safety and Health Plan
ASTM.....	American Society for Testing and Materials
ATF.....	Bureau of Alcohol, Tobacco, and Firearms
BATF.....	Bureau of Alcohol, Tobacco, and Firearms
BEM.....	Buried Explosion Module
BIP.....	Blown-In-Place
BRAC.....	Base Realignment and Closure
BWM.....	Biological Warfare Materiel
CA.....	Chemical Agent
CACM.....	Chemical Agent Contaminated Media
CAFS.....	Chemical Agent Filtration System
CAIS.....	Chemical Agent Identification Set
CAR.....	Corrective Action Request
CD.....	Compact Disc

EM.....	Engineer Manual
EM CX.....	Environmental and Munitions Center of Expertise, Military Munitions Division
EMM.....	Earth-Moving Machinery
EMR	Electromagnetic Radiation
EOD	Explosive Ordnance Disposal
EP	Engineer Pamphlet
ER.....	Engineer Regulation
ERDC	USACE Engineer Research and Development Center
ES	Exposed Site
ESAV	Explosives Safety Assistance Visit
ESP	Explosives Site Plan
ES-QD.....	Explosive Safety Quantity Distance
ESS.....	Explosive Safety Submission
ESSP	Explosives Safety Site Plan
ESSS	Explosives Safety Siting Software Program
EZ	Exclusion Zone
FHA.....	Facility Hazard Assessment
FRAG	Fragmentation
FS	Feasibility Study
ftp.....	file transfer point
FUDS	Formerly Used Defense Sites
GDA	Government Designated Authority
GIS.....	Geospatial Information System
GS.....	General Schedule
H & HD & HS.....	Mustard (CWA)
HAZWOPER	Hazardous Waste Operations and Emergency Response
HD.....	Hazard Distance/Classification
HE	High Explosives
HEAT	High Explosives Anti-Tank
HFD.....	Hazardous Fragment Distance
HMX	High-Molecular-Weight-RDX
HTRW	Hazardous, Toxic, and Radioactive Waste
IAW	In Accordance With
IBD	Inhabited Building Distance
ICM	Improved Conventional Munition
IDS	Intrusion Detection System

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IED Improvised Explosive Device
IGD Interim Guidance Document
IHF Interim Holding Facility
ILD Intra-Line Distance
IMCOM Installation Management Command
IMD Intra-Magazine Distance
IMP Installation Master Plan
in Inch
ISEA International Safety Equipment Association
K-11 Unbarricaded Above-Ground Intra-Magazine
Distance (IMD)
K-18 Unbarricaded Intra-Line Distance (ILD)
K-24 Public Traffic Route (PTR) Distance < 100,000 lbs
K-40 IBD < 100,000 lbs, also TSD during MEC activities
for essential personnel
K-328 Distance non-essential personnel must be for
intentional detonations for protection from blast
only
L Lewisite
lbs Pounds
LPS Lightning Protection System
MACOM Major Army Command
MC Munitions Constituents
MCA Major Construction Army
MCE Maximum Credible Event
MD Munitions Debris
MEC Munitions and Explosives of Concern
MFD Maximum Fragment Distance
MFR-H Maximum Fragment Range – Horizontal
MFR-V Maximum Fragment Range – Vertical
MGFD Munition with the Greatest Fragmentation
Distance
MM Military Munitions
mm millimeters
MMRP Military Munitions Response Project(s)
MOOTW Military Operations Other Than War
MPPEH Material Potentially Possessing an Explosive
Hazard
MRA Munitions Response Area

MRS	Munitions Response Site
MSC	Major Subordinate Command
MSD	Minimum Separation Distance
MSDS	Material Safety Data Sheets
M ² S ²	Military Munitions Support Services
NAVSEA OP	Naval Sea Systems Command Ordnance Pamphlet
NDAI	No Department of Defense Action Indicated
NEQ	Net Explosive Quantity
NEW	Net Explosive Weight
NEWQD	Net Explosive Weight Quantity Distance
NFPA	National Fire Protection Association
NOFA	No Further Action
NOSSA	Naval Ordnance Safety and Security Activity
NTCRA	Non-Time Critical Removal Action
NTP	Notice to Proceed
OB/OD	Open Burning/Open Detonation
OCONUS	Outside the Continental United States
OE	Ordnance and Explosives
OESS	OE Safety Specialist
OSHA	Occupational Safety and Health Administration
OTM	Other than Munitions
PA	Preliminary Assessments
PAED	Public Access Exclusion Distances
PAM	Pamphlet
PAO	Public Affairs Officer
Pdf	Portable document format
PDT	Project Delivery Team
PES	Potential Explosion Site
PHA	Position Hazard Analysis
PM	Project Manager
PMECW	Program Manager for the Elimination of Chemical Weapons
POC	Point of Contact
PPE	Personal Protective Equipment
PS	Chloropicrin
PTR	Public Traffic Route
PTRD	Public Traffic Route Distance
PWS	Performance Work Statement

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PZ Piezoelectric
QAI..... Quality Assurance Inspections
QAR Quality Assurance Representative
QASAS..... Quality Assurance Specialist, Ammunition
Surveillance
QASP Quality Assurance Surveillance Plan
QC..... Quality Control
QCI..... Quality Control Inspection
QCP Quality Control Plan
QCS Quality Control Supervisor
QD..... Quantity-Distance
QL Methylphosphonite
RA Remedial Action
RBC Regional Business Centers
RCWM..... Recovered Chemical Warfare Materiel
R&D Research and Development
RDTE Research, Development, Test, and Evaluation
RDX Cyclotrimethylenetrinitramine
RI Remedial Investigation
RI/FS..... Remedial Investigation/Feasibility Study
RPMP..... Real Property Master Plan
RSP..... Render Safe Procedures
SAA..... Small Arms Ammunition
SAFER Safety Assessment for Explosives Siting Program
SDD Sustainable Design and Development
SDW..... Substantial Dividing Wall
SHM Safety and Health Manager
SOFA Status of Forces Agreements
SOHO Safety and Occupational Health Office
SSHP Site Safety and Health Plan
STD..... Standard
SUXOS..... Senior UXO Supervisor
TB Technical Bulletin
TCRA Time Critical Removal Action
TE/TEU U.S. Army Technical Escort Unit
TM..... Technical Manual
TNT Trinitrotoluene
TP Technical Paper
TSD..... Team Separation Distance

TWA Time Weighted Average
US United States
USACE..... U.S. Army Corps of Engineers
USACHPPM..... U.S. Army Center for Health Promotion and
Preventive Medicine
USAESCH..... U.S. Army Engineering and Support Center,
Huntsville, Alabama
USATCES United States Army Technical Center for
Explosives Safety
USC United States Code
UXO Unexploded Ordnance
UXOQCS..... UXO Quality Control Specialist
UXOSO UXO Safety Officer
UXOSP..... UXO Sweep Personnel
UXOTI UXO Technician I
UXOTII UXO Technician II
UXOTIII UXO Technician III
V & G Series of Chemical Nerve Agents
WFO..... Work for Others
WP White Phosphorous
WP Work Plan
WZ Work Zone

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SECTION II TERMS

3 Rs

Refer to encountering or suspecting to have encountered MEC or MPPEH, **DON'T TOUCH IT**, leave it in place and keep people away
- Remember the 3Rs: **RECOGNIZE, RETREAT, REPORT.**

Aboveground Magazine (AGM)

Any open area or any structure used for explosives storage that does not meet the requirements of an ECM.

Accident Prevention Plan (APP)

A document that outlines occupational safety and health policy, responsibilities, and program requirements.

Active Installations

Installations under the custody and control of the Army; includes operating installations, installations in a standby or layaway status, and installations awaiting realignment or closure under BRAC.

Administration Area

The area in which administrative buildings that function for the garrison or installation as a whole, excluding those offices located near and directly serving components of explosives storage and operating areas, are located.

Administrative Record

The body of documents that “forms the basis” for the selection of a particular response at the project. These are relevant documents that were relied upon in selecting the response action as well as relevant documents that were considered but ultimately rejected.

Ammunition

Generic term related mainly to articles of military application consisting of all kinds of bombs, grenades, rockets, mines, projectiles and other similar devices or contrivances.

Anomaly Avoidance

Techniques employed on property known or suspected to contain 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 agent (CA), regardless of configuration, to avoid contact with potential surface or subsurface explosives or CA hazards, to allow entry into the area for the performance of the required operations.

Archives Search Report (ASR)

A detailed investigation to report on past MEC activities conducted on an installation; includes an MEC-specific project inspection and historical records searches.

Army Commands (ACOMs)

U.S. Army Forces Command (FORSCOM), U.S. Army Training and Doctrine Command (TRADOC), and U.S. Army Materiel Command (AMC).

Army Service Component Commands (ASCC)

Army Europe, Army Central, Army North, Army South, Army Pacific, United States Army Special Operations Command (USASOC), Surface Deployment and Distribution Command (SDDC), Space and Missile Defense command (SMDC) and Eighth United States Army (EUSA).

Authorized Visitors

DoD, DA, USACE, or other personnel (EM CX, Department of Defense Explosives Safety Board , HQ Safety, etc.) conducting project or mission related functions, e.g., Quality Assurance Representatives (QAR's), safety and quality inspectors (including geophysicists performing quality assurance functions), and project management. Authorized visitors must be escorted while in the EZ and be approved for entry into the EZ in accordance with this guidance. No more than 2 authorized visitors will be permitted in the EZ at any given time.

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Barricade

An intervening barrier, natural or artificial, of such type, size, and construction as to limit in a prescribed manner the effect of an explosion on nearby buildings or exposures.

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.

Certificate of Risk Acceptance (CRA)

Permanent written documentation of command's acceptance of the risk associated with an event that those not meet regulatory requirements and/or exposes soldiers, civilian, and contractor personnel, the public, or real property to a risk at greater than a de-minimis threshold. An informal risk acceptance process may be substituted for a CRA for one-time event of one week or less duration. CRA is highly recommended since it will replace all waivers and exemptions by 1 October 2011.

Chemical Agent (CA)

A chemical compound (to include experimental compounds) that, through its chemical properties, produces lethal or other damaging effects on human beings, is intended for use in military operations to kill, seriously injure, or incapacitate persons through its physiological effects. Excluded are research, development, testing, and evaluation (RDTE) solutions; riot control agents; chemical defoliants and herbicides; smoke and other obscuration materials; flame and incendiary materials; and industrial chemicals.

Chemical Agent Contaminated Media (CACM)

Any mixture of detectable concentrations of chemical agents with soil, water, debris, or other solid or liquid media.

Chemical Agent (CA) Hazard

A condition where danger exists because CA is present in a concentration high enough to present potential unacceptable effects (such as death, injury, or damage) to people, operational capability, or the environment.

Chemical Agent (CA) Safety

A condition where operational capability and readiness, people, property, and the environment are protected from the unacceptable effects or risks of a mishap involving chemical warfare material (CWM) and CA in other than munitions configurations.

Chemical Event Report

A report that documents chemical accidents, incidents, and other circumstances where there is a confirmed or likely release to the environment, exposure of personnel, threat to the security of chemical agent materiel, or any incident of concern to the local commander (AR 50-6). Additional notification procedures for USACE RCWM projects are identified in CEMP-CE Memorandum Interim Guidance – Notification Procedures for Discovery of Recovered Chemical Warfare Materiel (RCWM) During USACE Projects.

Chemical Safety Submission (CSS)

A document that serves as the instrument to describe planned chemical and explosives safety actions to the appropriate approval authority.

Chemical Warfare Materiel (CWM)

Items 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), cyanogen chloride (CK), or carbonyl dichloride (called phosgene or CG)) configured as a military munition. Due to their hazards, prevalence, and military-unique application, non-dilute chemical agent identification sets (CAIS) are also considered CWM. CWM

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does not include: riot control devices; chemical herbicides; industrial chemicals (e.g., AC, CK, or CG) not configured as a munition; smoke and flame producing items; or soil, water, debris or other media contaminated with low concentrations of chemical warfare agents where no CA hazards exist.

Construction Support

Assistance provided by DoD EOD or UXO-qualified personnel and/or by personnel trained and qualified for operations involving CA, regardless of configuration, during intrusive construction activities on property known or suspected to contain UXO, other munitions that may have experienced abnormal environments (e.g., DMM), munitions constituents in high enough concentrations to pose an explosive hazard, or CA, regardless of configuration, to ensure the safety of personnel or resources from any potential explosive or CA hazards.

Demilitarization

Destruction of MM, or having key components removed or destroyed. To mutilate, disarm, neutralize, and accomplish any other action required to render ammunition, explosives, and chemical agents innocuous or ineffectual for military use.

Demolition

Refers to activities requiring the use of explosives to demolish a structure (e.g., infrastructure, embankment) or perform excavation (e.g., soil, quarry). Other terms used to describe this operation include: blasting, implosion, or detonation.

Detonation

A violent chemical reaction within a chemical compound or mechanical mixture involving heat and pressure. A detonation is a reaction which proceeds through the reacted material toward the non-reacted material at a supersonic velocity. A detonation, when the material is located on or near the surface of the ground, is normally characterized by a crater.

Direct Reporting Units (DRU)

Network Enterprise Technology Command (NETCOM), Medical Command (MEDCOM), Intelligence and Security Command (INSCOM), Criminal Investigation Division Command (CIDC), United States Army Corps of Engineers (USACE), Military District of Washington (MDW), Army Test and Evaluation Command (ATEC), United States Military Academy (USMA), United States Army Reserve Command (USARC), Acquisition Support Command (ASC), and Installation Management Agency (IMA).

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. The term does not include unexploded ordnance (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. [10 U.S.C. 2710(e)(2)]

Disposal

End of life tasks or actions for residual materials resulting from demilitarization or disposition operations.

Disposition

Reusing, recycling, converting, redistributing, transferring, donating, selling, demilitarizing, treating, destroying, or fulfilling other life-cycle guidance, for DoD property subject to these standards.

Electrical lines

See transmission lines, distribution lines, or service lines.

Energetic Liquid

A liquid, slurry, or gel consisting of or containing an explosive, oxidizer, fuel, or their combination that may undergo, contribute to, or cause rapid exothermic decomposition, deflagration, or detonation.

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Engineering Controls

Any process or device designed to mitigate explosion effects (such as, blast overpressure, fragmentation, fire) or to contain vapor releases from RCWM; regulation of facility operations through the use of prudent engineering principles, such as facility design, operation sequencing, equipment selection, and process limitations.

Essential Personnel

USACE and contractor project personnel necessary for the safe and efficient completion of field operations conducted in an EZ. This is limited to: contractor work team members including the Unexploded Ordnance (UXO) Safety Officer (UXOSO), UXO Quality Control Specialist, Senior UXO Supervisor, and a USACE Ordnance and Explosives (OE) Safety Specialist.

Exclusion Zone (EZ)

A safety zone established around a MEC-related operation work area. Only essential project personnel and authorized, escorted visitors are allowed within the exclusion zone. Examples of EZs are safety zones around MEC intrusive activities and safety zones where MEC is intentionally contacted or detonated. For RCWM project sites, it is the area within the No Significant Effects (NOSE) zone.

Exemption

A written authority that permits long-term noncompliance with mandatory requirement of U.S. Army AE safety standards. Existing exemptions will be replaced at their next scheduled review date and all exemptions will be replaced not later than 1 October 2011.

Explosion

A chemical reaction of any chemical compound or mechanical mixture that, when initiated, undergoes a very rapid combustion or decomposition, releasing large volumes of highly heated gases that exert pressure on the surrounding medium. Depending on the rate of energy release, an explosion can be categorized as a deflagration or a detonation.

Explosive

A substance or a mixture of substances that is capable by chemical reaction of producing gas at such temperature, pressure, and speed as to cause damage to the surroundings. The term “explosive” includes all substances variously known as high explosives and propellants, together with igniters, primers, initiators, and pyrotechnics (e.g., illuminant, smoke, delay, decoy, flare, and incendiary compositions).

Explosive Media

Mixtures of explosives in soil, sand, clay, or other solid media at concentrations such that the mixture itself is explosive.

Explosive Ordnance Disposal (EOD)

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 CA hazards during both peacetime and wartime. EOD personnel are trained and equipped to perform render safe procedures (RSP) on nuclear, biological, chemical, and conventional munitions, and on improvised explosive devices (IED).

Explosives Hazards

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.

Explosives Safety

A condition where operational capability and readiness, people, property, or the environment is protected from the unacceptable effects or risks of potential mishaps involving DoD military munitions or other encumbering explosives or munitions.

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Explosives Site Plan (ESP)

An explosives site plan is required for munitions response site (MRS) investigations or characterizations of an MRS that involve intentional physical contact with MEC (for example, surface and intrusive sampling during an EE/CA or RI/FS). The explosives site plan will be used to provide explosives safety criteria for planning the siting of explosives operations for Munitions Response or other MEC-related projects (such as on-site construction support involving a MEC removal). Such site plans will address areas (magazines, for example) used for the storage of commercial and/or military demolition explosives or MEC, planned or established demolition or disposal areas for MEC found during the investigation; and the boundary of the munitions response area to be investigated. The explosives site plan will address the explosives safety quantity-distances for each of the potential explosion sites (including magazines, demolition areas, munitions response areas, collection points), the location of exposed sites (such as inhabited buildings, public traffic routes), and engineering controls to be used.

Explosives Safety Submission (ESS)

The Explosives Safety Submission (ESS) will be used to provide munitions response action explosives safety criteria for approval by DDESB. The ESS for TCRA will provide the information required in the explosives site plan plus a short introduction concerning site history and any other pertinent details, the reason why MEC exists on the MRS, the amount and type of MEC expected, the selected munitions response action (for example, surface removal, removal to depth of detection), the start date for the munitions response action. The ESS for NTCRA will include all of the above plus the following: possible MEC migration mechanisms, the techniques to be used to detect, recover, and destroy MEC, alternate MEC disposal techniques (if any) to be used either on-site or off-site, technical support (such as, contractor, USACE, EOD, TEU), land use restrictions, public involvement, recurring reviews, MEC education, and any contingencies.

Field Office

An office required by operational supervision; for example, foremen and line supervisors, in direct support of AE operations.

Fire Hazard Area

A location in which the primary, but not necessarily the only, hazard is that of fire, including explosions of gas or vapor and air mixtures.

Firewall

A wall of fire-resistive construction designed to prevent the spread of fire from one side to the other. A firewall may also be termed a "fire division wall."

Formerly Used Defense Sites (FUDS)

A facility or project (property) that was under the jurisdiction of the Secretary of Defense and owned by, leased to, or otherwise possessed by the United States at the time of actions leading to contamination by hazardous substances. By the Defense Environmental Restoration Program (DERP) policy, the FUDS program is limited to those properties that were transferred from DoD control prior to 17 Oct 1986. FUDS properties can be located within the 50 States, District of Columbia, Territories, Commonwealths and possessions of the US.

Fragment

A piece of an exploding or exploded munition. Primary fragments may be complete items, subassemblies, pieces thereof, or pieces of equipment that are in immediate contact with explosives. Secondary fragments are from pieces of equipment or buildings containing the items.

Fragment Distance

The limiting range, based on a specific density of hazardous fragments, expected from the type and quantity of explosives involved. Used in establishing certain Q-D criteria. A hazardous fragment is a fragment having an impact energy of 58 foot-pound or greater. Hazardous fragment density is a density of hazardous fragments exceeding one per 600 square feet.

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Garrison

A permanent military post for stationing of Soldiers.

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.

Hazard

Any existing or potential condition that can cause injury, illness, or death of personnel, or damage to or loss of equipment or property.

Hazard Analysis

The logical, systematic examination of an item, process, condition, facility, or system to identify and analyze the probability, causes, and consequences of potential or real hazards.

Hazard Class

The United Nations Organization hazardous classification system, which contains 9 hazard classes, is used by the DOD for dangerous materials to identify the hazardous characteristics of A&E. Hazard class 1 (A&E) is further divided into 7 division designators that indicate the primary characteristics and associated hazards.

Hazardous Fragment

A fragment having an impact energy of 58 foot-pound or greater and/or a weight greater than 2,700 grains (6.17 ounces or 175.5 grams).

Hazardous Fragment Density

A density of hazardous fragments exceeding one hazardous fragment per 600 square feet.

Hazardous Fragment Distance (HFD)

Also known as the 1-in-600 distance. This is the calculated distance at which a fragment impacts at 58 foot pounds, or more, of energy. This is also the distance at which non-essential personnel must be kept from MEC activities for unintentional detonations for fragmenting munitions.

Hazardous, Toxic, and Radioactive Waste (HTRW) Activities

HTRW activities include those activities undertaken for the Environmental Protection Agency's Superfund program, the Defense Environmental Restoration Program (DERP), including Formerly Used Defense Sites (FUDSs), and Installation Restoration Program (IRP) sites at active DoD facilities, HTRW actions associated with Civil Works projects, and any other mission or non-mission work performed for others at HTRW sites.

Holding Yard

A location for groups of railcars, trucks, or trailers used to hold ammunition, explosives, and dangerous materials for interim periods before storage or shipment.

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.

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. If these chemicals are weaponized, consider them to be RCWM. Weaponized means these chemicals were placed into ammunition containers; e.g., projectiles, mines, bombs, etc.

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Inhabited Buildings

Buildings or structures, other than operating buildings occupied in whole or in part by human beings, both within and outside DOD installations. They include but are not limited to schools, churches, residences (quarters), Service clubs, aircraft passenger terminals, stores, shops, factories, hospitals, theaters, mess halls, post offices, and post exchanges.

Inhabited Building Distance (IBD)

The minimum distance permitted between an inhabited building and an ammunition or explosives location for the protection of administration, quarters, industrial and other similar areas within a garrison or installation; the distance required to be maintained between a potential explosion site (PES) and an inhabited building.

Installation

Services installations are defined as establishments used for military purposes but not primarily for the stationing of Soldiers. They include such locations as depots, activities, ports, ASPs, basic load ammunition storage areas, and ammunition plants. Installations also refer to DOD establishments in an inactive, standby, or layaway status; facilities awaiting closure under BRAC, other legislation, or under normal procedures for excess property; and other closed facilities not yet transferred from a Service control. Examples of inactive, standby, or layaway installations include but are not limited to posts, camps (including National Guard camps), forts, depots, activities, ports, ASPs, basic load ammunition storage areas, and ammunition plants.

Intermagazine Distance (IMD)

The minimum distance permitted between any 2 magazines depending on the type of magazine and the class/division quantity of explosives and ammunition involved; the type and quantity of explosives requiring the greater distance will govern the magazine separation. Also called "intermagazine separation."

Intraline Distance (ILD)

The distance to be maintained between any 2 operating buildings and sites within an operating line, of which at least 1 contains or is designed to contain explosives, except that the distance from a service magazine for the line to the nearest operating building may be not less than the ILD required for the quantity of explosives contained in the service magazine.

Intrusive Activity

An activity, which involves, or results in, the penetration of the ground surface at an area known or suspected to contain MEC or RCWM in other than munitions (OTM) configurations. Intrusive activities can be of an investigative or removal action nature.

K-factor

The factor in the formula $D = KW^{1/3}$ used in QD determinations where “D” represents distance in feet and “W” is the NEW in pounds. The K-factor is a constant and represents the degree of damage that is acceptable. Typical constants range from 1.25 to 50; the lower the factor, the greater the acceptance of damage. The K-factors also correspond with specific overpressure levels.

Laboratory

An individual room or rooms within a facility that provides space in which work with etiologic energetics or chemical agents may be performed. It contains appropriate engineering features and equipment required for either a given biosafety level or chemical agent to protect personnel working in the laboratory and the environment and personnel outside of the laboratory.

Loading Docks

Facilities, structures, or paved areas, designed and installed for transferring AE between any 2 modes of transportation.

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Lunchroom

Facilities where food is prepared or brought for distribution by food service personnel. It may serve more than one PES. Personnel may use a breakroom in an operating building PES to eat meals. Lunchrooms generally require application of QD, breakrooms do not.

Magazine

Any building or structure, except an operating building, used for the storage of AE.

Material Potentially Presenting an Explosive Hazard (MPPEH)

Material potentially containing explosives or munitions (for example, munitions containers and packaging material; munitions debris remaining after munitions use; demilitarization, or disposal; and range-related debris); or material potentially containing a high enough concentration of explosives such that the material presents an explosive hazard (such as 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 DoD's established munitions management system and other hazardous items that may present explosion hazards (for example, gasoline cans or compressed gas cylinders) that are not munitions and are not intended for use as munitions.

Maximum Credible Event (MCE)

In hazards evaluations, the MCE, from a hypothesized accidental explosion, fire, or toxic chemical agent release (with explosives contribution) is the worst single event that is likely to occur from a given quantity and disposition of ammunition and explosives (AE). The event must be realistic with a reasonable probability of occurrence considering the explosion propagation, burning rate characteristics, and physical protection given to the items involved. The MCE evaluated on this basis may then be used as a basis for effects calculations and casualty predictions.

Maximum Fragment Range (MFR)

This is the distance at which most fragments from a MEC item will travel. This is the prescribed minimum separation distance (MSD) for all personnel on an MMRP site from intentional detonations, unless DDESB-approved engineering controls are used. There is a MFR-H and an MFR-V. This stands for maximum fragment range on a horizontal basis and a maximum fragment range on a vertical basis.

Military Munitions (MM)

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. 101(e)(4)(A) through (C)].

Minimum Separation Distance (MSD)

MSD is the distance at which personnel in the open must be from an intentional or unintentional detonation.

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Munitions Constituents (MC)

Any materials originating from unexploded ordnance, discarded military munitions, or other military munitions, including explosive and non-explosive materials, and emission, degradation, or breakdown elements of such ordnance or munitions. [10 U.S.C. 2710(e)(3)].

Munitions Debris (MD)

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

Munitions and Explosives of Concern (MEC)

This term, which distinguishes specific categories of military munitions that may pose unique explosives safety risks means: (A) Unexploded ordnance (UXO), as defined in 10 U.S.C. 101(e)(5)(A) through (C); (B) Discarded military munitions (DMM), as defined in 10 U.S.C. 2710(e)(2); or (C) Munitions constituents (e.g., TNT, RDX), as defined in 10 U.S.C. 2710(e)(3), present in high enough concentrations to pose an explosive hazard.

Munitions and Explosives of Concern (MEC) Related Operations

Any operations conducted by UXO Technicians/Qualified personnel with the purpose of intentional physical contact with MEC.

Munition with the Greatest Fragmentation Distance (MGFD)

The munition with the greatest fragmentation distance that is reasonably expected (based on research or characterization) to be encountered in any particular area.

Munitions Response

Response actions, including investigation, removal actions, and remedial actions to address the explosives safety, human health, property 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 formerly used defense site that is known or suspected to contain UXO, DMM, or MC. Examples include former ranges and munitions burial areas. A munitions response area is comprised of one or more munitions response sites.

Munitions Response Site

A discrete location within an MRA that is known to require a munitions response.

Net Explosive Quantity (NEQ)

Net explosive quantity (expressed in kilograms)

Net Explosive Weight (NEW)

Net explosive weight (expressed in pounds)

Non-DOD Component

Any entity (Government, private, or corporate) that is not a part of DOD.

No Significant Effects (NOSE) Distance

The distance at which the general population (to include more susceptible subpopulations) would not experience any significant effects from exposure of chemical agents.

On-site Construction Support

Dedicated UXO construction support, where the probability of encountering MEC, or RCWM, has been determined to be moderate to high.

On-The-Surface

A situation in which MEC, or RCWM, are: (a) entirely or partially exposed above the ground surface (i.e., the top of the soil layer); or (b) entirely or partially exposed above the surface of a water body (e.g., because of tidal activity)

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Operating Building

Any structure, except a magazine, in which operations pertaining to manufacturing, processing, handling, loading, or assembling of AE are performed.

Ordnance and Explosives (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 Eglin 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 MEC/RCWM.

Parametric Design - (Code 3, 5 - 15 Percent Design)

One of two “first stages” of design used in the MILCON programming and execution process, the other being the concept design level. A Code 3 design directive authorizes the design contracting officer to proceed through the 5 - 15 percent design stage. (See AR 420-1, Chapter 4.)

Potential Explosion Site (PES)

The location of a quantity of Ammunition and Explosives (AE) that will create a blast, fragment, thermal, or debris hazard in the event of an accidental explosion of its contents.

Primary Explosives

Primary explosives are highly sensitive compounds that are typically used in detonators and primers. A reaction is easily triggered by heat, spark, impact or friction. Examples of primary explosives are lead azide and mercury fulminate.

Public Traffic Route (PTR)

Any public street, road, highway, navigable stream, or passenger railroad (includes roads on a military reservation that are used routinely by the general public for through traffic).

Pyrotechnic Material

The explosive or chemical ingredients, including powdered metals, used in the manufacture of military pyrotechnics.

Quality

The totality of features and characteristics of a product or service that bear on its ability to meet the stated or implied needs and expectations of the project. Quality expectations need to be negotiated among the PDT members (which includes the customer) and are set in the Project Management Plan. (ER 5-1-11). More specifically, the quality of a response action is measured by how closely that response action meets the standards and expectations of the customer.

Quality Assurance (QA)

An integrated system of management activities involving planning, implementation, assessment, reporting, and quality improvement to ensure that a process, item, or service is of the type and quality needed to meet project requirements defined in the PMP.

Quality Assurance Specialist, Ammunition Surveillance (QASAS)

Department of the Army civilians that function in the ammunition surveillance program at DOD installations, activities, and commands that receive, store, maintain, issue, use, and dispose of ammunition.

Quality Assurance Surveillance Plan (QASP)

All service contracts require the development and implementation of a QASP. A QASP describes how government personnel will evaluate and assess contractor performance. The purpose of the QASP is to describe how project performance will be measured and assessed against performance standards. It is based on the premise that the contractor, not the government, is responsible for managing quality control (QC).

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Quality Control (QC)

The overall system of technical activities that measures the attributes and performance of a process, item, or service against defined standards to verify that they meet the stated requirements established in the PMP; operational techniques and activities that are used to fulfill requirements for quality.

Quantity Distance (QD)

The quantity of explosives material and distance separation relationships that provide defined types of protection.

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.

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

Recovered Chemical Warfare Materiel (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 to start those operations, and ensure compliance with all provisions of the site plan and safety submission and Army regulations.

Removal Action

The cleanup or removal of released hazardous substances from the environment. Such actions may be taken in the event of the 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 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 9604(b), and any emergency assistance which may be provided under the *Disaster Relief and Emergency Assistance Act* [42 USC 5121 et seq.] The requirements for removal actions are addressed in 40 CFR §§300.410 and 300.415. The three types of removals are emergency, time-critical, and non time-critical removals. (*DoD Management Guidance for the DERP*)

Response Action (RA)

A CERCLA-authorized action involving either a short-term removal action or a long-term removal response. This may include, but is not limited to, removing hazardous materials, containing or treating the waste on-site, and identifying and removing the sources of ground water contamination and halting further migration of contaminants.

Restricted Area

Any area, usually fenced, at an establishment where the entrance and egress of personnel and vehicular traffic are controlled for reasons of safety.

Risk

The product of the probability or frequency that an accident will occur within a certain time and the accident's consequences to people, property or the environment.

Risk Acceptance

The management process of having the proper authority to review and accept risks.

Risk Assessment

The evaluation of the risk associated with an activity which may include one or more analysis methodologies.

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Risk Decision

The decision to accept or not accept the risks associated with an action made by an individual responsible for performing that action.

Secondary Explosives

Secondary explosives are generally less sensitive to initiation than primary explosives and are typically used in booster and main charge applications. A severe shock is usually required to trigger a reaction. Examples are TNT, cyclo-1,3,5-trimethylene-2-4-6-trinitramine (RDX or cyclonite), HMX, and tetryl.

Service Magazine

A building of an operating line used for the intermediate storage of explosives materials.

Site Investigation

Activities undertaken to determine the presence, type, distribution, density, and location of MEC. Includes physical detection and identification of MEC as well as chemical sampling and monitoring.

Site Safety and Health Plan (SSHP)

An appendix to the APP that describes the site-specific practices.

Site Visit

Any visit to an MEC, or suspected MEC contaminated, site prior to any MEC operation.

Small Arms Ammunition (SAA)

Ammunition without projectiles that contain explosives (other than tracers), that is .50 caliber or smaller, including 20 millimeter, or for shotguns.

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 MEC operations/activities.

Stand-by Construction Support

Construction UXO support provided, on an as-needed basis, where the probability of encountering MEC, or RCWM, has been determined to be low. This support can respond from offsite when called, or be onsite and available to provide required construction support.

Substantial Dividing Wall (SDW)

An interior wall designed to prevent simultaneous detonation of quantities of explosives on opposite sides of the wall.

Surveillance

The observation, inspection, investigation, test, study, and classification of ammunition, ammunition components, and explosives in movement, storage, and use with respect to degree of serviceability and rate of deterioration.

Surveillance Workshop Facility

A special building equipped to permit all normal ammunition surveillance inspections.

Team Separation Distance (TSD)

This is the distance that essential personnel must be separated by during the conduct of MEC activities on an MMRP site. Normally this is the K40 distance of the NEW of the MGFD for the site (MRS/MRA).

Time Critical Removal Action (TCRA)

Removal actions where, based on the project evaluation, a determination is made that a removal is appropriate, and that less than 6 months exists before on-site removal activity must begin (40 CFR 300.5).

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), per-

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sonnel, or material and remain unexploded either by malfunction, design, or any other cause (10 U.S.C. 101(e)(5)(A) through (C)).

Unexploded Ordnance (UXO) and UXO-Related Operations/Activities/Procedures

See MEC-Related Operations.

Unexploded Ordnance (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. Refer to DDESB TP 18 for detailed information for approved contract titles and qualifications.

Unexploded Ordnance (UXO) Sweep Personnel (UXOSP)

UXO sweep personnel assist UXO Technicians and UXO Qualified personnel in the performance of UXO-related activities. UXOSP do not have to be a UXO Technician, however they shall be provided job and site specific training. This training is identified in TP 18. UXOSP are not involved in the execution of explosives operations and shall not have intentional physical contact with MEC.

Unexploded Ordnance (UXO) Technicians

Personnel who are qualified for (as defined 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 DDESB TP 18 for detailed information for approved contract titles and qualifications.

Venting

Exposing any internal cavities of MPPEH, to include training or practice munitions (for example, concrete bombs), using DDESB- or DoD component-approved procedures, to confirm that an explosive hazard is not present.

Waiver

A written authority that permits a temporary deviation from a short term (five (5) years or less) mandatory requirement of U. S. Army AE safety standards. Existing waivers will not be renewed and will be replaced with a Certificate of Risk Acceptance if the hazard has not been rectified. All existing waivers will be replaced by 1 October 2011.

Weaponized

This term is used to denote the type of carrier used for chemical agent. If the carrier is a munition shell with a burster and fuze, the agent is said to be weaponized. If this is the case, and the filler is an industrial chemical (for example, CG, AC, CK) the munition is to be treated and handled as RCWM.

Work Plan (WP)

Describes procedures, goals, methods, and personnel used for MEC field activities, see EM 1110-1-4009.

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