

CEMP-RT  Engineer Regulation 1110-1-8153	Department of the Army U.S. Army Corps of Engineers Washington, DC 20314-1000	ER 1110-1-8153  14 May 1999
	Engineering and Design  ORDNANCE AND EXPLOSIVES RESPONSE	
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ER 1110-1-8153  
14 May 1999



**US Army Corps  
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ENGINEERING AND DESIGN

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## **ORDNANCE AND EXPLOSIVES RESPONSE**

**ENGINEER REGULATION**

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Regulation  
No. 1110-1-8153

14 May 1999

Engineering and Design  
ORDNANCE AND EXPLOSIVES RESPONSE

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Regulation  
No. 1110-1-8153

14 May 1999

Engineering and Design  
ORDNANCE AND EXPLOSIVES RESPONSE

1. Purpose. This regulation establishes roles and responsibilities for U.S. Army Corps of Engineers (USACE) elements in managing and executing Ordnance and Explosives (OE) response actions and authorizes and provides for the delegation of such roles and responsibilities.
2. Applicability. This regulation applies to all Headquarters, USACE (HQUSACE) elements and all USACE commands having responsibility for performing OE response activities.
3. References. Required and related publications are listed in appendix A.
4. Distribution. Approved for public release; distribution is unlimited.
5. Explanation of Abbreviations and Terms. Abbreviations/acronyms and special terms used in this regulation are explained in the glossary at appendix B.
6. Policy. The policy of the USACE is to produce products and services that fully meet customers' expectations of quality, timeliness, and cost effectiveness, within the bounds of legal responsibility. An acceptable level of quality does not imply perfection; however, there should be no compromise of functional, health, or safety requirements. Adherence to the principles outlined in ER 5-1-11, Program and Project Management, and ER 1110-1-12, Engineering and Construction Quality Management, will contribute to achieving this goal. OE response procedures must be formulated to ensure harmony with the USACE Strategic Vision and should be executed in concert with activities presented in other USACE guidance.
7. Ordnance and Explosives Response Objectives.
  - a. The primary objective of OE response actions is to reduce the risk to the general public in a manner that ensures the safety of OE response specialists, is cost effective, and complies with all applicable legal requirements. In certain circumstances, it may be appropriate to seek a waiver of certain legal requirements. The process for seeking such waivers will be initiated only after consultation with the OE Mandatory Center of Expertise (MCX) and the Office of Counsel (OC) supporting the OE MCX.

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b. Major Subordinate Commands (MSC), District commands, OE Design Centers, and the OE MCX will comply with all applicable laws and regulations. The district which serves as the Project Manager (PM) will provide general legal services. For Formerly Used Defense Site (FUDS) projects, the determination of the laws and regulations governing environmental aspects for any specific OE project will be made in consultation with the OC supporting the OE MCX. In the event of any sort of dispute with a regulator over the governing laws on a FUDS project, the district providing general legal services will represent the agency in negotiations or adversary proceedings. For non-FUDS projects performed by the USACE under a different program or authority (i.e., Base Realignment and Closure (BRAC), Installation Restoration (IR), Work for Others), the appropriate legal representative of the sponsoring agency will be the lead counsel for all legal matters, although USACE counsel will be available for consultation. OE response actions will be executed in compliance with 40 CFR Part 260 et al - Military Munitions Rule, the OE requirements of DOD 6055.9-STD, AR 385-61, AR 385-64, DA Pam 385-61, HQDA LTR 385-98-1 "Explosives Safety Policy for Real Property Containing Conventional Ordnance and Explosives", and any other applicable OE publications listed at appendix A. All USACE elements will comply with Department of Defense (DOD) and Department of the Army (DA) safety and health regulations and procedures.

8. Background.

a. In conjunction with its other missions, the USACE is responsible for managing environmental restoration projects in the specialized field of OE at FUDS and for providing OE services to other customers (e.g., BRAC, IR, etc.) as requested.

b. The U.S. Army Engineering and Support Center, Huntsville (USAESCH), is designated as the USACE OE MCX and an OE Design Center.

c. Based on OE program funding, other OE Design Centers may be established. HQUSACE will monitor the status of the OE Response Program and authorize MSCs to establish OE Design Centers when appropriate.

d. Districts may execute final removal actions when approved by the MSC Commander after receiving written concurrence or non-concurrence from the OE MCX (see procedures at appendix C for transfer of OE removal actions to districts).

e. The USAESCH is the only USACE command authorized to execute Non-Stockpile Chemical Warfare Materiel (CWM) projects as described at paragraph 10. The USAESCH may delegate, after consultation with and approval by the MSC, other responsibilities in this area to districts on a case-by-case basis.

9. Responsibilities.

a. General.

(1) MSC Commanders are assigned overall responsibility for the safe and efficient execution of OE response actions for all projects for which they are the PM in accordance with (IAW) ER 5-1-11.

(2) The responsibilities detailed herein are FUDS specific. For projects under the management of an active or transferring installation, the installation may want to retain some degree of management control. In such cases, the district PM will hire the appropriate OE Design Center to provide USACE assistance in a manner that is transparent to the customer, but the PM will remain the interface with the installation.

(3) It is the responsibility of all USACE personnel involved with the OE Program to safely execute OE response projects in accordance with applicable laws, regulations, and policies. All USACE organizations will ensure that all personnel involved with onsite activities at OE project sites are familiar with and have access to copies of the approved safety plans prepared for the specific site activities to be conducted. In addition, each organization will ensure that such personnel receive appropriate training, medical surveillance, and personal protective equipment required by the safety plan, contract specifications, Occupational Safety and Health Administration (OSHA) Standards, USACE regulations, and applicable DOD and DA regulations.

(4) All USACE elements will ensure that OE response actions include provisions for meaningful stakeholder involvement pursuant to all applicable laws, regulations, and policies.

(5) The Director, Military Programs, will assign the OE mission and delegate appropriate authorities to a proposed OE Design Center. The proposed center's MSC and the OE MCX will provide written positions to the Director, Military Programs, outlining capabilities, missions, and functions recommended for the proposed OE Design Center.

b. HQUSACE.

(1) The Environmental Division, Directorate of Military Programs (CEMP-R) has programmatic responsibility to develop, disseminate, and coordinate USACE execution policies and procedures with all USACE elements involved in OE activities (i.e., safety, engineering, construction, counsel, real estate, public affairs, procurement, financial management, Army policy or defense policy elements). CEMP-R is the designated HQUSACE point of contact (POC) for OE activities and will:

(a) Oversee and direct the USAESCH on OE MCX activities.

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(b) Provide program direction, guidance, and work assignments IAW ER 5-1-10, and coordinate funding for the OE mission.

(c) Scope, review, and approve development of OE policy, guidance, and criteria documents.

(d) Coordinate the OE program and policy issues with higher headquarters and other DOD elements.

(2) The Corps of Engineers Safety and Occupational Health Office (CESO) has responsibilities that include safety and occupational health and other supporting issues related to the proper implementation and execution of the OE program activities under USACE management (such as Defense Environmental Restoration Program (DERP), BRAC, range clearance, etc.). Safety and occupational health requirements for OE activities are currently specified in ER 385-1-92 and will be re-issued as a separate ER in the future. CESO is the HQUSACE POC for the OE safety and occupational health program and will:

(a) Oversee the safety and occupational health activities and policy development within the USACE OE Program.

(b) Coordinate the OE safety and occupational health program and policy issues with higher headquarters and other DOD elements.

(c) Approve OE Explosives Safety Submissions (ESS) and Non-Stockpile CWM Safety Submissions and forward them to higher headquarters.

(d) Review, approve, and disseminate safety and occupational health technical guidance developed by the OE MCX or others.

c. Major Subordinate Commands. Major Subordinate Commands will:

(1) Manage OE projects within their geographic boundaries to include programming appropriate actions to ensure public safety and identifying funding and manpower requirements to HQUSACE.

(2) Designate and approve districts to execute OE removal actions IAW appendix C.

(3) Monitor, review, and/or approve OE project documents IAW the matrices in appendices D, E, or F.

(4) Ensure that districts coordinate OE activities with the OE MCX IAW



ER 1110-1-8158.

(5) Perform Quality Assurance (QA) reviews of OE work within their geographic boundaries to ensure that all organizations execute work IAW applicable policies, procedures, management plans, project work plans, and site safety and health plans (SSHP). Prepare and implement Quality Management Plans (QMP) IAW ER 1110-1-12.

(6) Approve and sign decision documents for OE cost share projects at FUDS where total settlement cost at each site does not exceed \$6 million.

(7) Determine contracting strategy for execution of OE removal actions (and provide signed documentation of the determination) when the OE Design Center and the district do not reach a consensus for the selection of a contracting strategy.

(8) Perform the following activities for each OE project. These responsibilities may be delegated to assigned districts within the MSC's geographic area.

(a) Appoint a PM to manage all phases of the OE project IAW ER 5-1-11.

(b) Conduct Preliminary Assessments (PA) and prepare the Inventory Project Reports (INPR) for OE project sites, including an analysis of real estate records and any existing property restrictions.

(c) Perform real estate functions (i.e., obtain rights of entry, prepare real property transfer documentation, etc.).

(d) Prepare the Community Relations Plan and provide public affairs support/community outreach for every FUDS project and as required for other OE projects.

(e) Initiate and maintain a project Administrative Record for every FUDS project IAW the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

(f) Establish Restoration Advisory Boards (RAB) for FUDS projects IAW DERP 10 USC 2705C when there is sufficient, sustained community interest. Serve as the RAB Co-Chair for FUDS projects. Manage and contract for Technical Assistance for Public Participation (TAPP) services IAW 32 CFR, Part 203, when TAPP services are requested by the RAB.

(g) Execute OE project activities and review and approve project documents IAW appendices D, E, or F. Provide copies of project documents to USACE elements for review and approval IAW appendices D, E, or F.

(h) Coordinate with stakeholders, regulators, and customers.

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(i) Coordinate with state and Federal agencies to obtain the required environmental and historical documentation and approvals.

(j) Perform contractor surveillance (outside of the exclusion zone) and provide administrative support during OE field work.

(9) Ensure that districts approved to execute OE removal actions:

(a) Serve as the Contracting Officer (CO) when contracts are awarded by the district. When contracts are awarded by the OE Design Center, the district executing the removal action may be delegated, on a case-by-case basis, limited or full Contracting Officer's Representative authority. See paragraph 13.d for contracting requirements and limitations.

(b) Oversee the OE safety and occupational health, technical, and administrative aspects of the field work for the OE removal action.

(c) Provide project documents for review and approval IAW appendix E.

(d) Request engineering and design assistance from the appropriate OE Design Center.

(e) Coordinate with the appropriate OE Design Center and/or the OE MCX all contract modifications affecting the OE design before implementing the change.

(f) Execute administrative and field contract modifications not affecting the design (prior coordination with the OE MCX is not necessary).

(g) Ensure that OE Manifest documents (when required) are properly prepared and signed by the appropriate personnel.

d. OE Design Center. An OE Design Center provides direct support to MSCs and Removal Districts. To accomplish this, an OE Design Center will:

(1) Designate a POC for each OE project who will coordinate all OE project activities with the district PM.

(2) Prepare OE contract acquisition strategies and planning to ensure sufficient contract capabilities exist to execute assigned work.

(3) Execute OE project activities and review and approve project documents IAW appendices D, E, or F. Provide copies of project documents to USACE elements for review and approval IAW appendices D, E, or F.

(4) Prepare project-specific statements of work (SOW) and independent Government estimates (IGE) for OE response activities.

(5) Contract for OE design services; contract for or assist the district approved to execute OE removal actions in contracting for removal actions.

(6) Prepare budget, fact sheet, and schedule for each OE response project and update and submit this information to the district PM on a regular basis.

(7) Coordinate with the district PM to obtain the required environmental and historical documentation and approvals.

(8) Provide engineering and design support for OE removal actions IAW ER 1110-1-12 (even when removal action is transferred to the district).

(9) Oversee the OE safety and occupational health, technical, and administrative aspects of the field work for design and removal actions. (The district will assume these responsibilities upon transfer of the removal action. See paragraph 9.c(9).)

(10) Ensure that OE Manifest documents (when required) are properly prepared and signed by the appropriate personnel (unless the removal action is transferred to the district).

(11) Stay abreast of and utilize state-of-the-art technologies for OE response activities.

(12) Provide OE public affairs support to the district PM as needed.

(13) Implement lessons learned and recommend to the OE MCX changes needed in criteria, policy, and standards related to OE response.

e. OE MCX. The OE MCX provides general support to OE Design Centers and Removal Districts. To accomplish this, the OE MCX will:

(1) As tasked by HQUSACE, review Federal, DOD, and DA regulations related to OE and develop and propose to HQUSACE implementation guidance to ensure USACE compliance.

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(a) In coordination with the MSCs, develop and propose to CEMP-R evaluation criteria to establish prioritization for response at potential or confirmed OE sites IAW applicable Federal, DOD, and DA regulations.

(b) For the purpose of determining appropriate removal actions, develop and propose to CEMP-R, evaluation criteria for assessing public risk at confirmed OE sites IAW applicable Federal, DOD, and DA regulations.

(2) Review and provide comments and written concurrence or non-concurrence on OE and OE-related products IAW appendices D, E, and F to ensure compliance with Federal, DOD, DA, and USACE OE safety and environmental regulations.

(3) When requested by HQUSACE, participate in OE program Quality Reviews and Evaluations of MSCs. Participate in QA reviews of OE and OE related projects when requested by the MSC. Perform OE Assistance Visits to selected OE project sites to develop lessons learned, identify areas for improvement, and identify gaps in current policy and guidance.

(4) Assimilate and analyze lessons learned from OE response projects and provide them to the HTRW MCX for inclusion in the USACE lessons learned database.

(5) Have dedicated personnel available for telephonic or written inquiries from OE Design Centers, districts, MSCs, or HQUSACE regarding regulatory and OE safety and technical information for OE projects. This includes having personnel available for timely response to specific HQUSACE directed OE related assignments. Provide OE technical support to any USACE office conducting construction and/or HTRW operations in areas where OE is suspected or known to exist.

(6) Review and evaluate OE detection and removal technology (primarily from DOD sponsored demonstrations and ongoing USACE OE detection and response projects). Propose and develop implementation guidance to ensure USACE techniques are the most efficient and effective.

(7) Review OE research and development initiatives and projected USACE OE requirements and recommend through HQUSACE the input required to ensure that DOD is incorporating USACE future needs.

(8) Develop and submit technology application proposals to HQUSACE that will affect OE projects.

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(9) Develop and provide OE-specific contract requirements, including OE contractor personnel qualifications and work standards, for contract acquisition. Maintain current OE contract Data Item Descriptions (DID) for inclusion in every OE contract.

(10) Assist HQUSACE in identifying OE program training requirements. Develop course material and provide instructor support for OE related PROSPECT training.

(11) Assist HQUSACE and MSCs in reviewing and monitoring district OE qualifications as potential archives search or OE removal action executors, or OE Design Centers.

(12) Assist HQUSACE in developing cost to complete methodology for OE IAW DOD/DA direction.

(13) Maintain the expertise to assist HQUSACE, as technical experts, in discussing program-wide issues with the Department of Defense Explosives Safety Board (DDESB), the Office of the Surgeon General, the 52<sup>nd</sup> Ordnance Group (EOD), the Chemical and Biological Defense Command (CBDCOM), research and development activities, and other affected elements and authorities.

(14) On behalf of HQUSACE, serve as the proponent for negotiation of necessary studies for OE cost share projects at FUDS. The OC supporting the OE MCX will serve as lead negotiator. The MSC Commander will approve and sign the decision document where total settlement cost at each site does not exceed \$6 million.

(15) Develop the capability to field emergency response team within 24 hours of emergency notification; develop and implement emergency notification procedures so that HQUSACE is contacted within two hours of OE MCX notification.

(16) Develop and provide an annual briefing and report to HQUSACE detailing OE MCX accomplishments, expenditure of current year funding, projection of next year funding, and OE-related issues with proposed resolutions.

10. Non-Stockpile Chemical Warfare Materiel (CWM) Sites (See definition of CWM at appendix B).

a. Non-Stockpile CWM projects will be executed IAW AR 385-61, DA Pam 385-61, and ER 385-1-92.

b. The USAESCH is the only USACE command authorized to execute Non-Stockpile CWM projects as defined in appendix B and described in this paragraph and the responsibilities matrix in appendix F. Soil, water, debris, and other media contaminated with chemical agent is

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not considered CWM. The USAESCH may delegate, after consultation with and approval by the MSC, other responsibilities in this area to districts on a case-by-case basis.

c. The following responsibilities are specific to Non-Stockpile CWM projects and are in addition to those listed in paragraphs 9.a, 9.b, 9.c(1)-(8), 9.d, and 9.e. Responsibilities for Non-Stockpile CWM are also delineated in the matrix at appendix F.

(1) CESO will conduct the Pre-Operational Survey (when delegated this responsibility by the HQDA Safety Office).

(2) The MSC will perform the following activities. These responsibilities may be delegated to assigned districts within the MSC's geographic area.

(a) Negotiate Memorandums of Agreement (MOA) for medical support.

(b) Obtain HTRW support from the servicing HTRW Design District as required.

(c) Prepare the Executive Summary and Protective Action Plan for inclusion in the Safety Submission.

(d) Compile and submit Safety Submissions for review and approval.

(e) Host Tabletop Exercises with participation from the OE MCX and the USAESCH OE Design Center.

(f) Conduct the dry run of the Pre-Operational Survey with participation from the OE MCX and the USAESCH OE Design Center.

(g) Construct Interim Holding Facilities (IHF) and other facilities as needed.

(3) The USAESCH OE Design Center will:

(a) Serve as the primary liaison with the CBDCOM.

(b) Prepare the Downwind Hazard Methodology Plans for inclusion in the Safety Submission.

(c) Prepare the Maximum Credible Event (MCE) documentation and the No Significant Effects (NOSE) calculations.

(d) Coordinate preparation of the Safety Submission.

(4) The OE MCX will serve as the POC within the USACE for all Non-Stockpile CWM matters and assist HQUSACE on the Pre-Operational Survey and Tabletop Exercise Teams.

11. Chemical Agents in Soil and Other Media.

a. Soil, water, debris, and other media contaminated with chemical agent will be identified, handled, and managed IAW 29 CFR 1910.120, 40 CFR 260-279, and/or 40 CFR 300, AR 50-6, and other applicable laws and regulations. The requirements of ER 385-1-92, Safety and Occupational Health Requirements for HTRW Activities will apply, to include the appropriate health and safety design analyses (HSDA) and SSHPs. Removal and disposal activities will be coordinated with the U.S. Army Medical Command and the Office of the Surgeon General. Investigation and design activities will be carried out by the appropriate HTRW Design District, with all work plans and design documents (such as the HSDA and SSHP) being submitted to the OE MCX for review. All document submittals to the HTRW MCX required by the current approved HTRW roles and responsibilities matrix (the matrix is available on the Internet at <http://www.usace.army.mil/inet/centers/mcx/htrw/htrw.htm> under the “List of Mandatory Services”) will also apply. All SSHPs developed for construction activities will be reviewed by the OE MCX, and accepted by the executing district’s Safety and Occupational Health Office prior to execution.

b. When a project involves soil, water, debris, and other media contaminated with chemical agents, the assigned PM and designated HTRW Design District will coordinate with the USAESCH OE Design Center to determine if OE items such as munitions, CWM, chemical agent identification sets, etc., are comingled with the contaminated media. A decision will be made by the district PM and USAESCH OE Design Center, and fully documented, regarding responsibilities for execution of investigation, design, and remediation.

12. Explosive Soils (See definition at appendix B).

a. Primary Explosives and Propellants. For soils known or suspected to be contaminated with any concentration of primary explosives or propellants, the following will apply:

(1) Contact the OE MCX for sampling and cleanup procedures prior to initiating any work.

(2) Responsibilities for sampling and cleanup of soils contaminated with any concentration of primary explosives or propellants will be determined on a case-by-case basis.

b. Secondary Explosives. For soils known or suspected to be contaminated with secondary explosives, the following will apply:

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(1) The HTRW Design District is responsible for the design and removal or remedial action to clean up soils contaminated with secondary explosives; however, where military munitions (excluding bulk explosives) are suspected or known to exist, the OE Design Center is responsible for the design and the OE Design Center or the district approved to execute OE removal actions is responsible for the cleanup.

(2) The HTRW Design District will sample and analyze site soil samples to determine by compositional analysis whether areas exist where soils are in excess of ten percent secondary explosives. Sampling and analysis procedures can be obtained from the HTRW MCX. Project documents to include a sampling and analysis plan will be prepared and submitted to the HTRW MCX IAW the current approved HTRW responsibilities matrix. The work plan and SSHP will be submitted to the OE MCX for review prior to beginning any sampling. UXO support is required during sampling.

(3) When the concentration of secondary explosives is determined to be ten percent or greater, the HTRW Design District will prepare an ESS for cleanup in addition to the project documents required by existing HTRW guidance. Project documents will be submitted to the HTRW MCX IAW the current approved HTRW responsibilities matrix. The work plan and design documents (HSDA and SSHP) will be submitted to the OE MCX for review; the ESS will be submitted to the OE MCX for comments and written concurrence or non-concurrence. The OE MCX will forward the ESS to CESO for monitoring, concurrence, and forwarding to higher headquarters for approval. The cleanup will not begin until the DDESB or their designee approves the ESS. Contact the OE MCX for ESS requirements.

(4) Where the concentration of secondary explosives is determined to be less than ten percent, the HTRW Design District will prepare and submit documents for review and approval IAW the current approved HTRW responsibilities matrix and ER 385-1-92.

c. If military munitions (excluding bulk explosives) are discovered during any phase of the explosive soils remediation, cease work and contact the OE MCX. The OE MCX will assess the situation and consult with the HTRW MCX and the OE project team to determine the appropriate course of action to take in completing the project.

### 13. Ordnance Avoidance/Construction Support.

a. Districts preparing to work on a project site with known or suspected OE (including Civil Works) will coordinate the project with the appropriate OE Design Center and the OE MCX. Once notified, the district, the OE Design Center, and the OE MCX will develop a plan of action for addressing the OE safety issues.



b. Ordnance/anomaly avoidance (see definition at appendix B) techniques will be employed at sites with known or suspected OE to avoid any potential surface UXO and any subsurface anomalies. All surface UXO and subsurface anomalies will be avoided during investigation activities. Intrusive anomaly investigation is not authorized during ordnance avoidance operations.

c. Construction projects on known or suspected OE sites may require UXO support. The level of effort for construction support (see appendix B for definition) will be determined on a case-by-case basis.

d. Items developed for ordnance/anomaly avoidance and construction support (i.e., SOWs, work plans, etc.) will be submitted to the OE MCX for review IAW the matrix in appendix D prior to initiation of work.

e. OE concerns will be addressed before initiating any work. The order of work will be determined on a case-by-case basis. If the OE MCX and the appropriate OE Design Center determine that OE avoidance or construction support procedures are adequate, then the other activities may proceed. If not, then OE must be responded to before other activities are initiated. The OE Design Center will be notified and a response plan will be developed.

f. The district is responsible for supervising the field work. The OE MCX will spot check the field work to ensure conformance with the approved work plan and SSHP. Upon completion of the field work, the district will prepare a draft report that will be sent to the OE MCX for review.

g. HTRW Design Districts should include OE avoidance capability in all applicable indefinite delivery order contracts for HTRW reports, designs, or remedial actions on FUDS or active military sites. Contact the OE MCX for applicable contract DIDs.

#### 14. Project Execution.

##### a. Project Management.

(1) General. Project management for OE projects will be implemented IAW ER 5-1-11.

(2) Project Management Plan (PMP). The district PM will prepare a PMP for every OE project IAW ER 5-1-11.

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b. Funds Control and Financial Reporting.

(1) General. Funding may be received through a direct funding allotment, i.e., Funding Authorization Document, or on a reimbursable basis by DD Form 448, Military Interdepartmental Purchase Request (MIPR). Funding from an outside customer will be received by MIPR.

(2) OE MCX Funding. The OE MCX will receive program-related funds for OE program tasks from HQUSACE. The OE MCX may receive OE project funding from the OE Design Center or district for project-related tasks.

(3) OE Project Funding. The district PM is responsible for programming all OE project funding needs regardless of executing command.

(a) OE Design Center. The OE Design Center will submit funding requirements to the district PM for inclusion in the annual OE work plan. The OE Design Center will receive in-house project funds from HQUSACE based on the approved annual work plan. The OE Design Center will receive contract funds from HQUSACE by written request through the district PM. Work will be initiated upon receipt of funds. For projects other than FUDS, the OE Design Center will receive funds from the district PM by MIPR.

(b) Districts. Districts will request and receive funds from HQUSACE through the annual work plan.

(c) Project funding may also be provided by an outside agency for which work is being performed.

(4) Financial Reports. The district PM is responsible for project financial reporting. Reports will be submitted as required by ER 5-1-11. The OE Design Center will provide funding information to the district PM as requested.

c. Program Reporting Requirements.

(1) As part of program management and execution, the OE MCX, as directed by HQUSACE, will prepare all program-related reports needed to fulfill all appropriate requirements.

(2) As part of project management and execution, the district PM will prepare all project-related reports as required by HQUSACE. The OE Design Center will provide project information to the district PM as requested.

d. Contracting for OE Projects.

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(1) The OE Design Center will evaluate its contract requirements and solicit and award OE contracts as needed. Items to consider include customer needs, project workload, reasonable contingencies for unknown requirements, resources available within the Government, and private sector capabilities.

(2) When a removal action is transferred to an OE Removal District, the OE project team will determine whether the OE Design Center or the district will award the contract. The OE MCX must review and provide comments for safety and technical adequacy on all contracts for OE actions. The project file will contain full documentation regarding the decision reached on project execution strategy including actions taken to address each issue.

(3) The OE Design Center will perform all contracting actions for Time Critical Removal Actions (TCRA) and sites containing ordnance for which the risk of accidental detonation is unusually high. Sites with unusual risk include impact areas, test ranges or open burn/open detonation sites where scatterable mine systems and other sensitive electronically fuzed ordnance items have been disposed or fired. Such sites also include manufacturing and disposal facilities that have been subjected to accidental fires or explosions and require remediation.

(4) The USAESCH OE Design Center will perform all contracting actions for Non-Stockpile CWM sites.

(5) The OE MCX will maintain the current OE contract DIDs for inclusion in every OE contract. Contact the OE MCX for the current DIDs.

(6) OE MCX personnel are available to participate in the Contract Review Board process for award of OE contracts as requested.

e. Chemical Data Quality Management. ER 1110-1-263 applies to projects involving chemical analysis. When an OE Design Center executes a project involving compositional chemical analysis, they will adhere to the requirements of ER 1110-1-263.

f. Public Affairs Coordination. The district, with support from the OE Design Center and the OE MCX as needed, will be responsible for public affairs and interface support with state and local regulatory agencies and the community.


FOR THE COMMANDER:

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FOR THE COMMANDER:

6 Appendices  
(See Table of Contents)



RUSSELL L. FUHRMAN  
Major General, USA  
Chief of Staff

**APPENDIX A  
REFERENCES**

**Section I  
Required Publications**

**Comprehensive Environmental Response,  
Compensation, and Liability Act  
(CERCLA) of 1980**, PL 96-510,  
94 Stat 2767, 42 USC 9601

**Defense Environmental Restoration  
Program**, PL 99-499, Section 211,  
100 Stat 1719, 10 USC 2701 et seq.

**Resource Conservation and Recovery Act  
(RCRA) of 1976**, Public Law (PL) 94-580,  
90 Stat 2796, 42 USC 6901, et seq., as  
amended

**Superfund Amendment and  
Reauthorization Act (SARA) of 1986**,  
PL 99-499, 100 Stat 1613, amending  
CERCLA, 42 USC 9601 et seq., and  
miscellaneous other sections

**29 CFR 1910.120**  
OSHA Hazardous Waste Operations and  
Emergency Response

**32 CFR Part 203**  
Technical Assistance for Public Participation  
(TAPP) in Defense Environmental Restoration  
Activities

**40 CFR Part 260, et al**  
U. S. Environmental Protection Agency  
(EPA) Military Munitions Rule

**40 CFR Part 300**  
EPA National Oil and Hazardous Substance  
Pollution Contingency Plan

**DOD 6055.9-STD**  
Ammunition and Explosives Safety Standards

**AR 50-6**  
Chemical Surety

**AR 385-61**  
Army Toxic Chemical Agent Safety Program

**AR 385-64**  
U.S. Army Explosives Safety Program

**AR 405-90**  
Disposal of Real Estate

**DA Pam 385-61**  
Toxic Chemical Agent Safety Standards

**DA Pam 385-64**  
Ammunition and Explosives Safety Standards

**TM 9-1300-214**  
Military Explosives

**ER 5-1-10**  
Corps-wide Areas of Responsibility

**ER 5-1-11**  
Program and Project Management

**ER 385-1-92**  
Safety and Occupational Health Requirements  
for Hazardous, Toxic, and Radioactive Waste  
(HTRW) and Ordnance and Explosive Waste  
(OEW) Activities

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**ER 1110-1-12**

Engineering and Construction Quality Management

**ER 1110-1-263**

Chemical Data Quality Management for Hazardous Waste Remedial Activities

**ER 1110-1-8158**

Corps-Wide Centers of Expertise Program

**EM 385-1-1**

Safety and Health Requirements Manual

**HQDA LTR 385-98-1, DACS-SF**

Explosives Safety Policy for Real Property Containing Conventional Ordnance and Explosives

**HQDA Policy Memorandum**

Interim Guidance for Biological Warfare Materiel (BWM) and Non-Stockpile Chemical Warfare Materiel (CWM) Response Activities (Use until final guidance is issued.)

**HQUSACE, CEMP-R**

Environmental Cleanup and Protection Management Plan for Military Programs

**HQUSACE, CEMP-RF**

Program Manual for DERP-FUDS

**Section II**

**Related Publications**

A related publication is merely a source of additional information. The user does not have to read it to understand this regulation.

**AR 75-15**

Responsibilities and Procedures for Explosive Ordnance Disposal

**AR 200-2**

Environmental Effects of Army Actions

**AR 210-21**

Ranges and Training Areas

**DA Pam 40-8**

Occupational Health Guidelines for the Evaluation and Control of Occupational Exposure to Nerve Agents GA, GB, GD, and VX

**DA Pam 40-173**

Occupational Health Guidelines for the Evaluation and Control of Occupational Exposure to Mustard Agents H,HD, and HT

**DA Pam 50-6**

Chemical Accident or Incident Response and Assistance (CAIRA) Operations

**ER 210-3-2**

Army Range Programs

**APPENDIX B**  
**GLOSSARY**

**Section I**  
**Abbreviations/Acronyms**

**AR**  
Army Regulation

**ASR**  
Archives Search Report

**BRAC**  
Base Realignment and Closure

**BWM**  
Biological Warfare Materiel

**CBDCOM**  
Chemical and Biological Defense Command

**CEMP-R**  
Corps of Engineers Military Programs,  
Environmental Division

**CERCLA**  
Comprehensive Environmental Response,  
Compensation, and Liability Act

**CESO**  
Corps of Engineers Safety Office

**CFR**  
Code of Federal Regulations

**CO**  
Contracting Officer

**CWM**  
chemical warfare materiel

**DA**  
Department of the Army

**DA Pam**  
Department of Army Pamphlet

**DDESB**  
Department of Defense Explosives Safety  
Board

**DERP**  
Defense Environmental Restoration Program

**DID**  
Data Item Description

**DOD**  
Department of Defense

**DOE**  
Department of Energy

**EE/CA**  
Engineering Evaluation/Cost Analysis

**EM**  
Engineer Manual

**EOD**  
Explosives Ordnance Disposal

**EPA**  
Environmental Protection Agency

**ER**  
Engineer Regulation

**ERDEC**  
Edgewood Research Development  
Engineering Center

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**ESS**

Explosives Safety Submission

**FUDS**

Formerly Used Defense Site

**HTRW**

Hazardous, Toxic, and Radioactive Waste

**HQDA**

Headquarters, Department of the Army

**HQUSACE**

Headquarters, U.S. Army Corps of Engineers

**HSDA**

Health and Safety Design Analysis

**IGE**

Independent Government Estimate

**IHF**

Interim Holding Facility

**INPR**

Inventory Project Report

**IR**

Installation Restoration

**MCE**

Maximum Credible Event

**MCX**

Mandatory Center of Expertise

**MIPR**

Military Interdepartmental Purchase Request

**MOA**

Memorandum of Agreement

**MSC**

Major Subordinate Command

**NCP**

National Contingency Plan

**NOSE**

No Significant Effects

**O&M**

Operations and Maintenance

**OC**

Office of Counsel

**OE**

Ordnance and Explosives

**OSHA**

Occupational Safety and Health  
Administration

**PA**

Preliminary Assessment

**PAP**

Protective Action Plan

**PL**

Public Law

**PM**

Project Manager

**PMP**

Project Management Plan

**QA**

Quality Assurance



**QC**

Quality Control

**QMP**

Quality Management Plan

**RAB**

Restoration Advisory Board

**RAC**

Risk Assessment Code

**RCRA**

Resource Conservation and Recovery Act

**SARA**

Superfund Amendments and Reauthorization Act of 1986

**SOW**

Statement of Work

**SSHP**

Site Safety and Health Plan

**TAPP**

Technical Assistance for Public Participation

**TCRA**

Time Critical Removal Action

**USACE**

U.S. Army Corps of Engineers

**USAEC**

U.S. Army Environmental Center

**USAESCH**

U. S. Army Engineering and Support Center,  
Huntsville

**USATCES**

U.S. Army Technical Center for Explosives Safety

**UXO**

Unexploded Ordnance

**Section II**

**Terms**

**Active Range**

A military range that is currently in service and is being regularly used for range activities. (40 CFR 266.201)

**Administrative Record**

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

**Chemical Warfare Materiel**

An item configured as a munition containing a chemical substance that is intended 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. Due 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. (HQDA Interim Guidance for Biological Warfare

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Materiel (BWM) and Non-Stockpile Chemical Warfare Materiel (CWM) Response Activities)

### **Construction Support**

Support provided by qualified UXO personnel during construction activities at potential OE sites to ensure the safety of construction personnel from the harmful effects of UXO. When a determination is made that the probability of encountering UXO is low (e.g., current or previous land use leads to an initial determination that OE may be present), a minimum of a two person UXO team will stand by in case the construction contractor encounters a suspected UXO. When a determination is made that the probability of encountering a UXO is moderate to high (current or previous land use leads to a determination that OE was employed or disposed of in the parcel of concern, e.g., open burn and open detonation areas, maneuver areas, etc.), UXO teams are required to conduct subsurface UXO clearance for the known construction footprint either in conjunction with the construction contractor or prior to construction intrusive activities. The level of effort will be determined on a case-by-case basis in coordination with the OE MCX.

### **Conventional Ordnance and Explosives**

The term “conventional OE” refers to ordnance and explosives (see definition) other than CWM, BWM, and nuclear ordnance.

### **Design Center**

A specified USACE field office assigned a singular technical mission that is permanent and USACE-wide in scope. The designated office is to be considered the "lead activity" in

a specialized area where capability needs to be concentrated for maximum effectiveness, economy, and efficiency. Should the district approved to execute removals elect not to do so, the OE Design Center (in coordination with the district PM) will execute all phases of the OE response project after the approval of the InPR. Only the USAESCH OE Design Center is authorized to execute any phase of a Non-Stockpile CWM response.

### **Downwind Hazard Methodology Plan**

This plan includes an analysis of site activities with a potential for agent release off-site. The Maximum Credible Event calculations are contained in this plan.

### **Explosive Soil**

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

(a) The concentration of a particular explosive in soil necessary to present an explosion hazard depends on whether the particular explosive is classified as “primary” or “secondary.” Guidance on whether an explosive is classified as “primary” or “secondary” can be obtained from the OE MCX or Chapters 7 and 8 of TM 9-1300-214, Military Explosives.

(b) Primary explosives are those extremely sensitive explosives (or mixtures thereof) that are used in primers, detonators, and blasting caps. They are easily detonated by heat, sparks, impact, or friction. Examples of primary explosives include Lead Azide, Lead Styphnate, and Mercury Fulminate.

(c) Secondary explosives are bursting and boosting explosives (i.e., they are used as the main bursting charge or as the booster that

sets off the main bursting charge). Secondary explosives are much less sensitive than primary explosives. They are less likely to detonate if struck or when exposed to friction or to electrical sparks. Examples of secondary explosives include Trinitrotoluene (TNT), Composition B, and Ammonium Picrate (Explosive D).

(d) Soil containing 10 percent or more by weight of any secondary explosive or mixture of secondary explosives is considered "explosive soil." This determination was based on information provided by the USAEC as a result of studies conducted and reported in USAEC Report AMXTH-TE-CR 86096.

(e) Soil containing propellants (as opposed to primary or secondary high explosives) may also present explosion hazards.

### **Inactive Range**

A military range that is not currently being used, but that is still under military control and considered by the military to be a potential range area, and that has not been put to a new use that is incompatible with range activities. (40 CFR 266.201)

### **Mandatory Center of Expertise**

An MCX is a USACE organization that has been approved by HQUSACE as having a unique or exceptional technical capability in a specialized subject area that is critical to other USACE commands. Specific mandatory services to be rendered by an MCX are identified on the MCX's homepage. These services may be reimbursable or centrally funded. The USAESCH is the OE MCX for the USACE.

### **Maximum Credible Event**

The worst single event that could occur at any time, with maximum release of a chemical agent from a munition, container, or process as a result of unintended, unplanned, or accidental occurrence. (HQDA Interim Guidance for Biological Warfare Materiel (BWM) and Non-Stockpile Chemical Warfare Materiel (CWM) Response Activities)

### **Military Munitions**

All ammunition products and components produced or used by or for the U.S. DOD or the U.S. Armed Services for national defense and security, including military munitions under the control of the DOD, the U.S. Coast Guard, the US Department of Energy (DOE), and National Guard personnel. The term military munitions includes: confined gaseous, liquid, and solid propellants, explosives, pyrotechnics, chemical and riot control agents, smokes, and incendiaries used by DOD components, 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. Military munitions do not include wholly inert items, improvised explosive devices, and nuclear weapons, nuclear devices, and nuclear components thereof. However, the term does include non-nuclear components of nuclear devices, managed under DOE's nuclear weapons program after all required sanitization operations under the Atomic Energy Act of 1954, as amended, have been completed. (40 CFR 260.10)

### **Military Range**

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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. (40 CFR 266.201)

#### **No Significant Effects (NOSE) Dosage**

That dose at which the general population (to include more susceptible subpopulations) would not experience any significant effects. (DA Pam 385-61)

#### **Non-Stockpile Chemical Warfare Materiel**

CWM (defined above) that is not included in the chemical stockpile. Non-stockpile CWM is divided into five categories: buried CWM, recovered chemical weapons (items recovered during range clearing operations, from chemical burial sites, and from research and development testing), former chemical weapon production facilities, binary chemical weapons, and miscellaneous CWM (unfilled munitions and devices and equipment specially designed for use directly in connection with employment of chemical weapons). (HQDA Interim Guidance for Biological Warfare Materiel (BWM) and Non-Stockpile Chemical Warfare Materiel (CWM) Response Activities)

#### **Ordnance and Explosives**

OE consists of either (1) or (2) below:

(1) Ammunition, ammunition components, chemical or biological warfare materiel or explosives that have been abandoned, expelled from demolition pits or burning pads, lost,

discarded, buried, or fired. Such ammunition, ammunition components, and explosives are no longer under accountable record control of any DOD organization or activity. (HQDA Policy Memorandum "Explosives Safety Policy for Real Property Containing Conventional OE")

(2) Explosive Soil. See definition under "Explosive Soil."

#### **OE Project Team**

The OE Project Team consists of the customer(s), the PM, and multi-disciplined representatives from the technical/functional elements necessary to execute the project.

#### **OE Removal District**

A district with requisite capabilities to perform the assigned mission of OE removal actions, which has been specifically selected and approved by the MSC Commander in coordination with the OE MCX.

#### **OE Safety Specialist**

USACE Personnel, classified as a GS-018 Safety Specialist, and who is UXO qualified. OE Safety Specialists perform safety, quality assurance and UXO subject matter expert functions for the Government. The Safety Specialist may reside in and report to the construction field office or may reside in the engineering/construction office within the OE Design Center.

#### **Ordnance/Anomaly Avoidance**

Techniques employed by EOD or UXO personnel at sites with known or suspected OE to avoid any potential surface UXO and any subsurface anomalies. This usually occurs at mixed hazard sites when HTRW investigations must occur prior to execution of

an OE removal action. Intrusive anomaly investigation is not authorized during ordnance avoidance operations.

### **Pre-Operational Survey**

Survey to ascertain that personnel, equipment, and materials required for work activities are on site, that personnel are trained and qualified to perform their work assignments, and that work procedures and safety controls are appropriate for the tasks, effective in accomplishing the work objectives, and provide for a adequate level of safety. Pre-operational surveys are based on the approved safety submission, incorporate personnel interviews, records reviews, equipment and material inventories and performance tests, and simulations of planned work and emergency response activities. (HQDA Interim Guidance for Biological Warfare Materiel (BWM) and Non-Stockpile Chemical Warfare Materiel (CWM) Response Activities)

### **Removal Action**

The cleanup or removal of OE from the environment to include the disposal of removed materiel. The term includes, in addition, without being limited to, security fencing or other measures to prevent, minimize, or mitigate damage to the public health or welfare or to the environment.

### **Response Action**

Action taken instead of or in addition to a removal action to prevent or minimize the release of OE so that it does not cause substantial danger to present or future public health or welfare or the environment.

### **Restoration Advisory Board**

A forum for discussion and exchange of information between agencies and affected communities. RABs provide an opportunity for stakeholders to have a voice and actively participate in the review of technical documents, to review restoration progress, and to provide individual advice to decision makers regarding restoration activities.

### **Tabletop Exercise**

An exercise utilizing simulations to conduct drills of emergency response to differing non-stockpile CWM accident/incident scenarios. The purposes of the tabletop exercises are to ensure the effectiveness of these responses, to identify deficiencies or omissions in the emergency response process, and to establish continuity and coordination among response agencies. (HQDA Interim Guidance for Biological Warfare Materiel (BWM) and Non-Stockpile Chemical Warfare Materiel (CWM) Response Activities)

### **Technical Assistance for Public Participation**

Program that can provide independent assistance to Restoration Advisory Boards in interpreting scientific and engineering issues with regard to the nature of OE hazards and response activities at an OE project site.

### **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, personnel, or material and remain unexploded either by malfunction, design, or any other cause. (40 CFR 266.201)

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**UXO Personnel**

Contractor personnel who have completed specialized military training in EOD methods and have satisfactorily performed the EOD function while serving in the military. Various grades and contract positions are established based on skills and experience. Check with the OE MCX for current ratings.

**APPENDIX C**  
**PROCEDURES FOR TRANSFERRING OE REMOVAL ACTIONS TO DISTRICTS**

1. The MSC Commander will select, train, and assign, in writing, the mission to the OE Removal District(s) that may conduct OE removal action execution. Before making the official assignment of an OE Removal District, the MSC Commander will coordinate the planned action with the OE MCX and solicit their comments and written concurrence or non-concurrence for the proposed assignment.
2. MSC selected districts will submit an OE Removal Action Execution Plan (Project Management Plan) to the OE MCX that addresses and includes the following items:
  - a. How the UXO safety support will be provided. The District must demonstrate the core competencies to perform the work (in particular, OE Safety). See glossary for definition of in-house (OE Safety Specialist) and contractor (UXO Personnel) personnel. Specify existing and planned in-house capabilities and contracted capabilities. Define the Safety and Occupational Health Office role in oversight, the construction role in execution, and the coordination role with the OE MCX and OE Design Center.
  - b. Define proposed contracting strategy for removal action execution (type of contract - stand alone, task order to existing Indefinite Delivery Order contract, etc.). Discuss how the contract/task order will be administered, i.e., which office will serve as CO, will CO delegate responsibilities to Contracting Officer Representative or Administrative Contracting Officer, etc. Describe how contract modifications will be processed.
  - c. What documents will be submitted for review and approval to the OE MCX and OE Design Center? Provide project-specific responsibilities matrix. See appendix E for guidance.
  - d. How will the Explosives Safety Submission be prepared and routed?
  - e. Training requirements.
3. The Commander of the approved district will sign a “Capabilities Certification and Assumption of Responsibility” memorandum prior to OE Design Center transfer of each project.

**APPENDIX D**  
**ROLES AND RESPONSIBILITIES OF USACE ELEMENTS**  
**FOR CONVENTIONAL OE RESPONSE PROJECTS AND ACTIVITIES**

CERCLA Based OE Activity	District	MSC	OE Design Center	OE MCX	HQUSACE	NOTES
<b>Preliminary Assessment</b>						
Scope of Work/IGE	E,A					
Abbreviated SSHP	E,A					
Inventory Project Report (INPR)	E	A		R	R	1
RAC Worksheet	E	A		R		2
<b>Time Critical Removal Action</b>						
Action Memorandum	R	R,A	E	R	R,A	2,3
Scope of Work/IGE	R		E,A	M		
Work Plan and SSHP	R	M	E,A	R		1
ESS (as required)	R	M	E	R	R,A	1,4,5
Safety Oversight			E	M		
TCRA Report	R	I	E,A	R	M	2
<b>Site Inspection</b>						
Scope of Work/IGE	R		E,A			
Abbreviated SSHP	R		E,A			
RAC (updates)	R		E,A			
Archives Search Report	R	I	E,A	R	M	1
<b>Engineering Evaluation/ Cost Analysis (EE/CA)</b>						
Scope of Work/IGE	R		E,A			
Work Plan	R		E,A	M	M	
SSHP	R	M	E,A	M		
QC Plan	R	M	E,A	M		
Field Investigation	R		E,A	M		
OE Risk Assessment	R		E,A	M	M	
EE/CA Report	R	I	E,A	R	M	1
Action Memorandum	R	R,A	E	R	A	2,3
ESS (as required)	R	M	E	R	R,A	1,4,5
<b>Removal Design</b>						
Scope of Work/IGE	R		E,A			
Value Engineering Study/ Report	R	I	E,A	M		
Further Site Characterization	R		E,A			
Removal Action Work Plan	R		E,A	M		
SSHP	R	M	E,A	M		
QC Plan	R	M	E,A	M		
ESS	R	M	E	R	R,A	1,4,5

CERCLA Based OE ACTIVITY	District	MSC	OE Design	OE	HQUSACE	NOTES
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			Center	MCX		
<b>Removal Action</b>						
Engineering & Design After Award	R		E	M		
OE Safety Oversight			E	M		
Daily QA Reports	M	M	E			
Contractor Status Reports	R		E,A			
Site-Specific Removal Report	R		E,A	R		1
Project Completion Memorandum	R	I	E,A	R	I	2,6
<b>Operations and Maintenance</b>						
Preparation of O&M Contracts	R		E,A		M	
O&M Contract Administration	R		E,A	M		
O&M Reports	R		E,A	M		
Long-Term Monitoring	E	M		R		
<b>Miscellaneous Project Activities</b>						
Project Management	E					
Real Estate Documents	E,A		M			
Public Affairs	E		I			
Community Relations Plan	E,A		R			
RAB/Technical Review Committee	E		I			
Administrative Record	E		I			
OE Avoidance/Construction Support SOWs, Work Plans, etc.	E			R		2
OE Avoidance/Construction Support ESS (as required)	R	M	E	R	R,A	1,4,5
Cost Share Site Negotiation		A		E	A	
OE Assistance Visits				E		

**LEGEND:**

- A Approve:** Approve means that all comments have been appropriately handled. The submittal may be finalized and the next stage may proceed.
- E Execute:** Execute includes the performance of the actual activity for or from which a plan is prepared. These activities may be conducted with in-house resources or by contract and includes appropriate quality verification activities.
- I Information:** Submittals are provided for information only.
- M Monitor:** The executing agent must provide submittals. Comments will be provided if deemed necessary. The monitoring activity is not required to respond to the submittal.

**R Review:** The executing activity must provide submittals for review. The reviewing office is required to respond to the submittal, and provide comments and written concurrence or non-concurrence for the decision/approval authority.

**NOTES:**

**GENERAL:**

- The MSC is responsible for activities listed under “District”. The “District” responsibilities as listed are recommended.
- This table shows the program phases and the major submittals or activities that are usually required for an OE response project performed under CERCLA (these include Superfund & most DERP and BRAC projects and may include projects for other agencies including DOE projects).
- Specific Projects may not require all of the elements listed or may have specific requirements that are not shown.
- Approval authority held by the district is at the Commander’s level and may not be delegated to a lesser authority.
- This table is generated around a FUDS. Work for active or closing installations may cause a shift of some responsibilities from the district and MSC to the installation (such as public affairs and approvals for action memoranda). However, OE Design Center and OE MCX roles will not change appreciably. All items still must be submitted IAW the matrix.
- SOWS for and contractor proposed work plans prepared under pre-placed removal action contracts and Total Environmental Restoration Contracts must be submitted to the OE MCX for review. Other documents generated under these type contracts must be submitted for review as indicated in this table.
- Only MSC approved districts will perform OE activities.
- All districts will coordinate with the OE MCX where OE issues are present.

**SPECIFIC:**

1. The OE MCX will be allowed 20 Calendar Days for this review (from receipt of the item in the OE MCX). If no comments are received, concurrence may be assumed by the executing agency.
2. The OE MCX will be allowed 15 Calendar Days for this review (from receipt of the item in the OE MCX). If no comments are received, concurrence may be assumed by the executing agency.
3. The approvals for Action Memorandums vary. In general, HQUSACE will approve all actions in excess of \$6M. The MSC Commander will approve all other actions. The MSC Commander may delegate this authority to the District Commander.
4. Explosives Safety Submissions will be routed and approved IAW DOD 6055.9-STD as implemented by DA and HQUSACE.

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5. Explosives Safety Submissions are also required for removal of soils contaminated with any concentration of primary explosives and soils contaminated with ten percent or more by weight of secondary explosives.

6. The OE Design Center will prepare a memorandum summarizing the OE removal action activities and stating that the OE project is completed. The memorandum will be forwarded to the district for subsequent property/project close-out of the entire FUDS (see the *Program Manual for DERP-FUDS* for close-out procedures). For BRAC sites, a Statement of Clearance will be prepared and staffed IAW AR 405-90, Disposal of Real Estate.

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**APPENDIX E**  
**ROLES AND RESPONSIBILITIES OF USACE ELEMENTS**  
**WHEN A REMOVAL ACTION IS TRANSFERRED TO A DISTRICT**

The matrix shown below will apply when the OE removal action is transferred to a district approved to execute removal actions (see appendix C for transfer procedures). The OE Design Center POC will serve as liaison between the district PM and the OE Design Center CO, as required, when the OE removal action is executed utilizing an OE Design Center contract.

CERCLA Based OE Activity	District	MSC	OE Design Center	OE MCX	HQUSACE	NOTES
<b>Removal Action</b>						
Engineering and design after award	R		E	M		
OE Safety Oversight	E			M		
Daily QA Reports	E,A	M	M			
Contractor Status Reports	E,A		M			
RA Final Report	E,A		R	R		1
Statement of Clearance	E,A	R	R	R	I	2,3
OE Assistance Visits				E		

**LEGEND: See Appendix D - LEGEND.**

**NOTES:**

**GENERAL: See Appendix D - NOTES: GENERAL.**

**SPECIFIC:**

1. The OE MCX will be allowed 20 Calendar Days for this review (from receipt of the item in the OE MCX). If no comments are received, concurrence may be assumed by the executing agency.
2. The OE MCX will be allowed 15 Calendar Days for this review (from receipt of the item in the OE MCX). If no comments are received, concurrence may be assumed by the executing agency.
3. The Statement of Clearance is required for BRAC projects and will be prepared and staffed IAW AR 405-90, Disposal of Real Estate. For FUDS projects, the district will follow the procedures in the *Program Manual for DERP FUDS* for property/project close-out.

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**APPENDIX F**  
**ROLES AND RESPONSIBILITIES OF USACE ELEMENTS**  
**FOR NON-STOCKPILE CWM RESPONSE PROJECTS AND ACTIVITIES**

<b>CERCLA Based OE Activity</b>	<b>District</b>	<b>MSC</b>	<b>USAESCH Design Ctr</b>	<b>OE MCX</b>	<b>HQUSACE</b>	<b>NOTES</b>
<b>Preliminary Assessment</b>						
Scope of Work	E,A					
Abbreviated SSHP	E,A					1
Inventory Project Report (INPR)	E	A	R	R	R	2
RAC Worksheet	E	A	R	R		3
<b>Time Critical Removal Action</b>						
Action Memorandum	R	R,A	E	R	R,A	3,4
Scope of Work/IGE	R		E,A	M		
Tabletop Exercise	E					5
Pre-Operational Survey					E	6
Safety Submission	R	M	E	R	A	7,8,9
OE Safety Oversight			E	M		
TCRA Report	R	I	E,A	R	M	2
<b>Site Inspection</b>						
Scope of Work/IGE	R		E,A			
Work Plan	R		E,A			
Abbreviated SSHP	R		E,A			1
Risk Assessment Codes (updates)	R		E,A			
Archives Search Report	R	I	E,A	R	M	2
<b>Engineering Evaluation/ Cost Analysis (EE/CA)</b>						
Scope of Work	R		E,A	M		
Tabletop Exercise	E					5
Pre-Operational Survey			E		E	6
Work Plan	R		E	R,A	M	7,8
Site Safety and Health Plan	R	M	E	R,A		7,8
Safety Submission (as required)	R	M	E	R	R,A	7,8,9
Contract Laboratory Validation			M	E		10
Field Investigation	R		E,A	M		
IHF Construction (as required)	E		R	M		
OE Risk Assessment	R		E,A	M	M	
EE/CA Report	R	I	E,A	R	M	2
Action Memorandum	R	R,A	E	R	A	3,4

<b>CERCLA Based OE Activity</b>	<b>District</b>	<b>MSC</b>	<b>USAESCH</b>	<b>OE</b>	<b>HQUSACE</b>	<b>NOTES</b>
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			<b>Design Ctr</b>	<b>MCX</b>		
<b>Removal Design</b>						
Scope of Work/IGE	R		E,A			
Value Engineering Study/Report	R	I	E,A	M		
Further Site Characterization	R		E,A			8,9
Safety Submission	R	M	E	R	A	7,8,9
QC Plan	R	M	E,A	M		
<b>Removal Action</b>						
Tabletop Exercise	E					5
Pre-Operational Survey					E	6
Value Engineering Change Proposal	R		E,A	M		
Contract Laboratory Validation			M	E		10
OE Safety Oversight			E	M		
Daily QA Reports	M		E			
Contractor Status Reports	R		E,A			
IHF Construction	E		R	M		
Site-Specific Removal Report	R		E	R,A		2
Project Completion Memorandum	R	I	E,A	R	I	3,11
<b>Operations and Maintenance</b>						
Preparation of O&M Contracts	R		E,A		M	
O&M Contract Administration	R		E,A	M		
O&M Reports	R		E,A	M		
Long-Term Monitoring		M	E	R		
<b>Miscellaneous Project Activities</b>						
Project Management	E					
Real Estate Documents	E,A		M			
Public Affairs	E		I			
Community Relations Plan	E,A		R			
RAB/Technical Review Committee	E		I			
Administrative Record	E		I			
OE Avoidance/Construction Support SOWs, Work Plans, etc.	E			R,A		3
Cost Share Site Negotiation		A		E	A	
OE Assistance Visits				E		

**LEGEND:** See Appendix D - LEGEND

**NOTES:**

**GENERAL:**

- The MSC is responsible for activities listed under “District”. The “District” responsibilities as listed are recommended.
- The USAESCH is the only USACE command authorized to execute Non-Stockpile CWM technical project activities (all phases).
- The USAESCH OE Design Center will perform all contracting actions for Non-Stockpile CWM sites.
- Approval authority held by the district is at the Commander’s level and may not be delegated to a lesser authority.
- This table is generated around a FUDS. Work for active or closing installations may cause a shift of some responsibilities from the district and MSC to the installation (such as public affairs and approvals for decision documents). However, OE Design Center and OE MCX roles will not change appreciably. All items still must be submitted IAW the matrix.
- Specific projects may not require all of the elements listed or may have specific requirements that are not shown.
- All districts will coordinate with the OE MCX where OE issues are present.

**SPECIFIC:**

1. This plan is for site visits or walk-throughs only. Plans for further investigation must be approved by the OE MCX.
2. The OE MCX will be allowed 20 Calendar Days for this review (from receipt of the item in the OE MCX). If no comments are received, concurrence may be assumed by the executing agency.
3. The OE MCX will be allowed 15 Calendar Days for this review (from receipt of the item in the OE MCX). If no comments are received, concurrence may be assumed by the executing agency.
4. The approvals for Action Memorandums/Decision Documents vary. In general, HQUSACE will approve all action in excess of \$6M. The MSC Commander will approve all other actions. The MSC Commander may delegate this authority to the District Commander.
5. Tabletop exercises will be successfully completed prior to initiating any intrusive work. Tabletop exercises will be conducted by the district with participation of the OE MCX, the USAESCH OE Design Center, and other Army agencies and local responders involved in or supporting the activity.
6. Pre-operational surveys will be successfully completed prior to initiating any intrusive work. The Army Safety Office will conduct the pre-operational survey unless the responsibility is delegated to HQUSACE. The OE MCX will assist HQUSACE in conducting the pre-operational survey. The district will conduct the dry run of the pre-operational survey with participation of the OE MCX and the USAESCH OE Design Center. If a Safety Submission is not required, the USAESCH OE Design Center will conduct the Pre-Operational Survey.

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7. The OE MCX will be allowed 30 Calendar Days for this review (from receipt of the item in the OE MCX). If no comments are received, concurrence may be assumed by the executing agency.

8. Safety submissions are required for activities such as surface removal of Non-Stockpile CWM or excavations when the intent is to uncover, characterize, and remove geophysical anomalies.

9. The Safety Submission is comprised of the following Plans. Responsibilities for execution of each plan are as indicated. The district is responsible for compiling the plans and submitting the Safety Submission for review/approval. CESO submits the USACE approved Safety Submission to USATCES for final approval.

<b>Safety Submission Plan</b>	<b>District</b>	<b>MSC</b>	<b>USAESCH Design Ctr</b>	<b>OE MCX</b>	<b>HQUSACE</b>	<b>NOTES</b>
Executive Summary	E		R	R	A	
Work Plan	R		E	R	A	
Anomaly Review Board Plan (as required)	R		E	R	A	
Downwind Hazard Methodology Plan	R		E	R	A	12
Soil Sampling Plan	R		E	R	A	
Protective Action Plan	E		R	R	A	13
Public Affairs Plan	E		R	R	A	
SSHP	R		E	R	A	
ERDEC Support Plan (as required)	R		E	R	A	14
IHF Plan	R		R	R	A	14
Transportation Plan	R		R	R	A	14
Technical Escort Unit (TEU) Support Plan (as required)	R		R	R	A	14
Conventional OE Storage, Transportation , and Disposal Plan (as required)	R		E	R	A	

10. Laboratory validation for chemical surety will be conducted by ERDEC.

11. The USAESCH OE Design Center will prepare a memorandum summarizing the OE removal action activities and stating that the OE project is completed. The memorandum will be



forwarded to the district for subsequent property/project close-out of the entire FUDS (see the *Program Manual for DERP-FUDS* for close-out procedures). For BRAC sites, a Statement of Clearance will be prepared and staffed IAW AR 405-90, Disposal of Real Estate.

12. The Downwind Hazard Methodology Plan documents the Maximum Credible Event for the project, the hazards resulting from an accidental release of chemical agent, the downward chemical safety distances and controls to be implemented to minimize or eliminate hazards.

13. The Protective Action Plan (PAP) documents and communicates the hazards to the public arising from site activities and the actions to be taken to protect public health and safety. The PAP includes Memorandums of Agreement (MOA) between area hospitals, EMT, and Life Flight for medical support arrangements and an excavation plan for use by local police, firemen, National Guard, etc. Contact the USAESCH OE Design Center for examples of PAPs, MOAs and excavation plans.

14. Plan prepared by other agencies. The USAESCH OE Design Center is responsible for ensuring that these plans are completed and included in the Safety Submission.