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31 October 2003

US Army Corps
of Engineers®

EXPLOSIVES

# RECURRING REVIEWS ON ORDNANCE AND EXPLOSIVES (OE) RESPONSE ACTIONS

**ENGINEER PAMPHLET**

## AVAILABILITY

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DEPARTMENT OF THE ARMY
U.S. Army Corps of Engineers
Washington, DC 20314-1000

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No. 75-1-4

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RECURRING REVIEWS ON
ORDNANCE AND EXPLOSIVES (OE)
RESPONSE ACTIONS

1. Purpose. This pamphlet provides U.S. Army Corps of Engineers (USACE) personnel with procedural guidance for performing Recurring Reviews for ordnance and explosives (OE) response actions.

2. Applicability. This pamphlet applies to all Headquarters, U.S. Army Corps of Engineers (HQUSACE) elements and all USACE commands having responsibility for performing OE response activities.

3. Distribution Statement. Approved for public release; distribution is unlimited.

4. References.

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

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

c. 40 CFR Part 300, EPA National Oil and Hazardous Substance Pollution Contingency Plan.

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

e. Base Realignment and Closure Act of 1988, Public Law (PL) 100-526, 102 Stat. 2632.

f. Defense Base Realignment and Closure Act of 1990, PL 101-510, 104 Stat. 1808.

g. Army Regulation (AR) 25-400-2, Army Records Information Management System (ARIMS).

h. AR 335-15, Management Information Control System.

i. Office of the Chief of Engineers (OCE) Supplement 1 to AR 335-15, Management Information Control System.

j. Engineer Regulation (ER) 5-1-11, U.S. Army Corps of Engineers Business Process.

k. ER 1110-1-8153, Ordnance and Explosives Response.

l. Proposed ER 200-3-1, Formerly Used Defense Sites Program Guidance.

m. Engineer Pamphlet (EP) 385-1-95a, Basic Safety Concepts and Considerations for Ordnance and Explosives Operations.

n. EP 1110-1-18, Ordnance and Explosives Response.

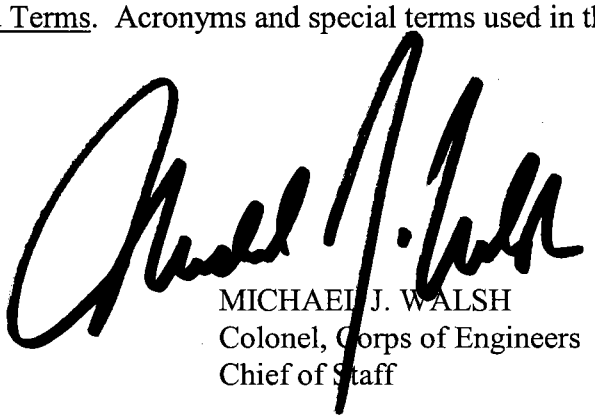
o. EP 1110-3-8, Public Participation in the Defense Environmental Restoration Program (DERP) for Formerly Used Defense Sites (FUDS).

p. Engineer Manual (EM) 200-1-2, Technical Project Planning (TPP) Process.

q. EM 1110-1-4009, Ordnance and Explosives Response.

5. Explanation of Acronyms and Terms. Acronyms and special terms used in this pamphlet are explained in the glossary.

FOR THE COMMANDER:



1 Appendix
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# CHAPTER 1
# OVERVIEW OF RECURRING REVIEWS

1-1. Introduction. This Engineer Pamphlet (EP) presents procedures for developing and implementing Recurring Review requirements for ordnance and explosives (OE) response actions. The purpose of Recurring Reviews for OE response actions is to determine if a response action continues to minimize explosives safety risks and continues to be protective of human health, safety, and the environment. Recurring Reviews are conducted under the Long Term Management phase once a Formerly Used Defense Site (FUDS) achieves Response Complete. Recurring Review satisfies the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) five-year review requirement.

a. Responsibility for executing an OE Recurring Review depends on whether the site is a FUDS or an active or transferring installation.

(1) FUDS. OE Recurring Reviews at FUDS are the subject of this pamphlet. OE Recurring Reviews at sites that were formerly under the jurisdiction of the Department of Defense (DOD), but which subsequently have been transferred out of DOD control (i.e., FUDS) are conducted under the Defense Environmental Restoration Program-FUDS (DERP-FUDS). Authority for executing OE response actions at FUDS has been delegated to the United States Army Corps of Engineers (USACE) by DOD through Headquarters, Department of the Army (HQDA). It is the responsibility of the USACE district, which serves as the Project Manager (PM), to execute OE Recurring Reviews for FUDS.

(2) Active or Transferring Installations. OE response actions at active installations are conducted under the Installation Restoration Program (IRP). OE response actions at transferring installations are conducted under the Base Realignment and Closure (BRAC) program. While this pamphlet does not directly apply to active or transferring installations, the procedures described in this pamphlet may be helpful for conducting Recurring Reviews at active or transferring installations, depending on the installation's requirements. The USACE may or may not be involved in OE response actions at active or transferring installations.

b. OE Response actions may be planned, managed, and executed using either the removal or remedial process. Further information on this topic will be published at a later date in the proposed Engineer Regulation (ER) 200-3-1, Formerly Used Defense Sites Program Guidance. If further assistance is needed with regards to this issue, contact the OE Mandatory Center of Expertise (OE MCX) (hereinafter referred to as the OE CX).

1-2. OE Recurring Review Regulatory Authorities.

a. Major Subordinate Commands (MSC), district commands, OE Design Centers, and the OE CX will comply with all applicable statutes and regulations. The determination of the

governing statutes and regulations for any specific OE project will be made by the District Office of Counsel in consultation with counsel supporting the OE CX for FUDS, or the appropriate legal representative of the sponsoring agency for work performed by USACE under a different program or authority (e.g., BRAC, IRP, or Work for Others). All USACE elements will comply with DOD and Department of the Army (DA) safety and health regulations and procedures.

b. CERCLA. The CERCLA was enacted by Congress in 1980 and subsequently amended by the Superfund Amendments and Reauthorization Act of 1986 (SARA) [Public Law 96-510, 94 Stat. 2767, 42 United States Code (U.S.C.) 9601 and 9621, as amended by SARA, Public Law 99-499, 100 Stat 1613, (together referred to as "CERCLA")]. CERCLA requires the review of response actions no less than every five years to assure that human health and the environment are being protected.

(1) NCP. The National Oil and Hazardous Substance Pollution Contingency Plan (NCP), which was first promulgated in 1973 under the Clean Water Act and last substantially amended in February 1994, recognized DOD as the removal response authority for incidents involving munitions. The NCP presents a procedural and organizational framework for preparing and conducting response actions as described in 40 Code of Federal Regulations (CFR) Part 300. It also provides that remedial actions that do not allow unlimited use and unrestricted exposure must be reviewed no less than every five years following initiation of the on-site field work phase to implement the selected response action or more frequently if required by the decision document.

c. DERP. The Defense Environmental Restoration Program (DERP) was established by Congress in 1986 under Chapter 160 of SARA. As stated in 10 U.S.C. 2701, DERP directed the Secretary of Defense to "carry out a program of environmental restoration" at facilities under the jurisdiction of the Secretary of Defense. DERP includes the FUDS program and the IRP and provides for Recurring Reviews on FUDS OE sites.

d. BRAC. The Base Realignment and Closure Act of 1988 (Public Law 100-526, 102 Stat. 2623) and the Defense Base Realignment and Closure Act of 1990 (Public Law 101-510, 104 Stat. 1808), 10 U.S.C. 2687, provide for a recurring, systematic review and evaluation of all closing installations operated by the U.S. Armed Forces.

1-3. Purpose of the Recurring Review. The purpose of Recurring Reviews for OE response actions is to determine if a response action continues to minimize explosives safety risks and continues to be protective of human health, safety, and the environment. Recurring Reviews also provide an opportunity to assess the applicability of new technology for addressing previous technical impracticability determinations.

a. The scope of the review will be site-specific and will depend upon the response objectives and the specific responses implemented. The review will evaluate appropriate site-

specific factors that may impact the continued effectiveness of the response. These factors may include changes in physical conditions at the site, changes in public accessibility and land use, and the applicability of new technology for addressing a previous technical impracticability determination. The review will also evaluate the maintenance and enforcement of Land Use Controls (LUCs). Further detail regarding the scope of the review is provided in Chapters 2 and 3 of this EP.

b. The Recurring Review will answer three general questions:

(1) Is the response functioning as intended?

(2) Are any assumptions used at the time of response selection still valid?

(3) Does new information indicate that the previously selected response no longer minimizes explosives safety risks or is no longer protective of human health, safety, and the environment considering the best available technology?

c. Data Quality Objectives (DQOs) will be developed during the Recurring Review planning process as described in Engineer Manual (EM) 200-1-2, Technical Project Planning (TPP) Process.

1-4. Sites Requiring a Recurring Review.

a. The decision document for an OE response action conducted on a non-National Priorities List (NPL) site under the remedial process will identify if a Recurring Review is required for a site. All sites where an OE response action is implemented require Recurring Reviews. EP 1110-1-18 provides additional information on the Action Memorandum, which documents the response decision for an OE response action conducted under the non-time critical removal action (NTCRA) process. The Action Memorandum will be the decision document at some sites.

b. Sites where the decision document identifies a determination of No DOD Action Indicated (NDAI) because there is no evidence of OE, do not require Recurring Reviews unless a risk is identified at a later date. If a risk is identified at a later date, USACE will address the risk in accordance with EP 1110-1-18. Sites with an NDAI determination based on other conditions such as low risk, technical impracticability, etc., do require Recurring Reviews.

c. Sites that require a Recurring Review for an OE response action may also require a five-year review for Hazardous, Toxic, and Radioactive Waste (HTRW) hazards. The OE and HTRW reviews should be coordinated.

1-5. Frequency of Recurring Reviews.

a. The Project Delivery Team (PDT), in coordination with stakeholders and regulators, will determine the frequency for conducting Recurring Reviews at a site and the duration for continuing Recurring Reviews.

(1) If a Recurring Review is required at a site, it will be conducted no less than every five years following initiation of the on-site field work phase to implement the selected response action.

(2) The review cycle may be more frequent than every five years, if necessary, depending on site-specific conditions and design considerations. For example, soil erosion, wave processes, or other factors may create environmental conditions which alter the potential for exposure to OE items (e.g., exposing previously buried items or increasing the accessibility to a property containing OE items) that may suggest that it is appropriate/necessary to conduct a Recurring Review more frequently than every five years.

(3) Recurring Reviews may be necessary for up to 30 years depending on site conditions, however sound design considerations will be used in making this determination. Thirty years is a suggested duration of Recurring Reviews used for government planning purposes. Factors to consider in assessing termination of Recurring Reviews are further discussed in paragraph 4-3.

b. The proposed frequency and duration of Recurring Reviews at a site will be documented in the Engineering Evaluation/Cost Analysis (EE/CA) report or Remedial Investigation/Feasibility Study (RI/FS) report. The decision document will document whether a Recurring Review will be conducted but it will not specify the frequency or duration of Recurring Reviews at a site.

c. The time frame for Recurring Review efforts will be tracked in the Formerly Used Defense Sites Management Information System (FUDSMIS) by the district PM.

d. Should a problem with an implemented OE response be identified or an incident occur between scheduled Recurring Reviews, a request for a Recurring Review may be submitted to the FUDS Manager at the USACE district office to have the OE response action reviewed. Depending on the nature of the issue, the USACE district office may generate a Recurring Review Report or use a less formal documentation method.

e. Subsequent reviews will be conducted no later than five years, or more frequently if specified, from the signature date on the previous Recurring Review Report.

1-6. Funding.

a. FUDS.

(1) The Defense Environmental Restoration Account (DERA) will fund Recurring Review activities for FUDS projects. Funding for Recurring Reviews is subject to approval of the district's annual OE Work Plan. The active sites program imposes a 10-year funding limit on Recurring Reviews, while the FUDS program does not currently identify such a limit.

(2) It is the responsibility of the USACE district, which serves as the PM, to program funding requirements for Recurring Reviews, input and track milestones in the FUDSMIS, input information to the Corps of Engineers Financial Management System (CEFMS), and develop and implement Recurring Review plans for OE response activities. Funding requirements should include adequate funding for all offices associated with the Recurring Review as well as adequate funding for personnel from other offices to participate in the Recurring Review, as necessary. Effective Recurring Review efforts require the commitment of Federal, state, local, and individual resources. Additional detail regarding developing programming cost estimates can be found in EM 1110-1-4009, OE Response.

b. Active or Transferring Installations.

(1) The installation/Installation Management Agency (IMA) is responsible for updating the Restoration Cost-to-Complete System (RCTCS) to ensure that the necessary funds are included to conduct Recurring Reviews. The installation/IMA is responsible for updating the Army Environmental Database-Restoration (AEDB-R) to ensure required funds identified in the RCTCS are programmed to conduct Recurring Reviews. The installation/MACOM needs to program funds in at least two quarters prior to the trigger date of the first response action that requires a recurring review. This advance programming of funds is necessary to ensure that the review is completed within the specified time. The active sites program imposes a 10-year funding limitation on Recurring Reviews; however, there is no corresponding limitation imposed for the active or transferring installations.

(2) BRAC installation reviews will be funded out of the BRAC account.

1-7. Notification. Stakeholders and regulators will be involved in the preparation of the Recurring Review Plan, which is the first step in the Recurring Review process. The PM will then notify stakeholders and regulators at the time a Recurring Review is being initiated in order to seek their involvement. Another broad notification will also be made when a Recurring Review is completed. The PM will notify stakeholders of the need for the Recurring Review by hosting an open meeting in the local community and through other standard communication techniques, such as notices in local newspaper, press releases and/or direct mailings, as required. Chapter 3 and EP 1110-3-8, Public Participation in the Defense Environmental Restoration Program (DERP) for Formerly Used Defense Sites (FUDS) provides further information

regarding stakeholder and regulator involvement in the Recurring Review process and details on notification requirements and procedures.

# CHAPTER 2
# DEVELOPMENT OF THE RECURRING REVIEW PLAN

2-1. Introduction. A Recurring Review Plan will be developed prior to initiating Recurring Reviews on a site. This chapter discusses when the Recurring Review Plan is to be prepared; who is responsible for preparing the plan; procedures for preparing the plan; approval procedures for the plan; and how the plan may be modified.

2-2. Timing for Preparation of the Recurring Review Plan.

a. Current Projects. The draft Recurring Review Plan is prepared during the EE/CA or RI/FS phase, as applicable, of an OE response action. The draft plan is contained as an appendix in the EE/CA or RI/FS Report, as applicable, and will reflect the recommended response action alternatives contained in the report. The decision document will document the requirements for the Recurring Review, the review cycle, and the proposed funding for the Recurring Review.

b. Executed Projects. A Recurring Review Plan will be developed for OE projects that have already been executed and which have no Recurring Review Plan in place. The district PMs are responsible for reviewing all of their projects and determining the need for development of a Recurring Review Plan, with the District Commander providing overall approval.

2-3. Parties Responsible for Preparation of the Recurring Review Plan.

a. Recurring Review Plans will be developed with the full involvement of the PDT and in coordination with stakeholders, including Federal, state and local regulators. ER 1110-1-8153, OE Response, provides further details regarding organizational responsibilities throughout the OE response action process.

b. District PM. The district PM is responsible for preparation of the Recurring Review Plan. The district PM leads the PDT and is responsible for overall coordination of PDT members.

c. PDT. The PDT, under the direction of the district PM, will be fully involved in the preparation of the Recurring Review Plan. The PDT members include the district PM; other representatives from the district, as required; the OE Design Center; an OE Safety Specialist; the OE CX, as required; the HTRW MCX and/or HTRW Design Center, as required; Federal land managers; the prime contractor PM; the Native American Tribal Government point of contact, if applicable; representatives from other Federal and state agencies; and other key technical and non-technical individuals, as appropriate.

2-4. Preparation of the Recurring Review Plan.

a. A typical Recurring Review will include a review of existing documentation, identification and review of new information, a site visit, and preparation of the Recurring Review Report.

b. The Recurring Review Plan will include a site description; details regarding the frequency of the Recurring Review, the documents to be reviewed, and the methodologies to be used during the site visit; and a discussion on termination of Recurring Reviews at the site. Table 2.1 provides a sample format for the Recurring Review Plan. The plan will include any information that will be useful in conducting the Recurring Reviews.

Table 2.1
Sample Format for the Recurring Review Plan

| Section | Title |
|---|---|
| | Cover Sheet |
| | Table of Contents |
| 1 | Introduction |
| 2 | Site Description |
| 3 | Schedule for Recurring Review |
| 4 | Review of Existing Documentation |
| 5 | Stakeholder Notification |
| 6 | Identification/Review of New Information and Current Site Conditions |
| 7 | Preliminary Site Analysis and Work Plan |
| 8 | Site Visit |
| 9 | Recurring Review Report |
| 10 | Termination of Recurring Review |

(1) Introduction. Provide a brief introduction including the site location, response actions and the objective of the Recurring Review.

(2) Site Description. Provide a site description including a description of site history, previous investigations, and a more detailed description of response actions that have been or will be implemented. Sufficient detail will be included in this section so that it provides a full

understanding of the site's background, keeping in mind that the reader may not have any previous familiarity with the site.

(3) Schedule for Recurring Review. Discuss the frequency of Recurring Reviews for the site.

(4) Review of Existing Documentation. Identify existing documentation that will be reviewed during the Recurring Review. These will include all final reports and decision documents. The location of the reports, preferably electronic copies posted to the Internet [e.g., the Project Information Retrieval System (PIRS)], must be identified. Table 2.2 provides examples of the types of documents that normally will be reviewed.

Table 2.2
Examples of Existing Documentation to be Listed in the Recurring Review Plan

| Document Examples |
|---|
| ___ Statement of Work |
| ___ Work Plans |
| ___ Archives Search Report |
| ___ EE/CA or RI/FS Report |
| ___ Institutional Analysis |
| ___ Decision Document |
| ___ Institutional Control Plan |
| ___ Explosives Safety Submissions |
| ___ Site-Specific Response Report |
| ___ Responsiveness Summaries |
| ___ HTRW documents, if applicable |
| ___ Real estate records |
| ___ Newspaper records |
| ___ Accident reports |
| ___ Incident reports |
| ___ Operation and Maintenance records |
| ___ Previously conducted Recurring Review Report at the site, if applicable |
| ___ Current DOD Risk Prioritization Results |

(5) Stakeholder Notification. Identify key stakeholders, provide their contact information, and provide suggested avenues for notification based on what was successful in the EE/CA or RI/FS process.

(6) Identification/Review of New Information and Current Site Conditions. The Recurring Review Plan will include a description of the procedures that will be used to identify new information and current site conditions. The PDT will identify readily available information regarding the site that has become available since implementation of the response action or since the last Recurring Review and will identify the current site conditions.

(7) Preliminary Site Analysis and Work Plan. The PDT will prepare a preliminary site analysis based upon the review of existing and new information. This analysis will identify any additional information that is required in order to prepare the final site analysis. The PDT will prepare a work plan to identify procedures to be used in collecting the additional information identified during the preliminary site analysis.

(8) Site Visit. Describe the scope of the site visit, investigative or community relations activities that will be undertaken during the visit, and any methodologies to be utilized in connection with the visit.

(9) Recurring Review Report. The PDT will prepare a Recurring Review Report to document the information collected and evaluated, and present the findings of the evaluation of the continued protectiveness of the OE response action. The report will document whether the response action that was implemented continues to minimize explosives safety risks and is still protective of human health, safety, and the environment and/or recommend follow-up actions, as warranted.

(10) Termination of the Recurring Review. The PDT, in coordination with stakeholders and regulators, will determine the duration for continuing the Recurring Reviews at a site. The PDT will develop a strategy and rationale to clearly demonstrate when Recurring Reviews would be terminated. Further information on the termination of Recurring Reviews is discussed in paragraph 4-3 of this EP.

2-5. Approval of the Recurring Review Plan.

a. The draft Recurring Review Plan is an appendix in the EE/CA or RI/FS Report, as applicable. Therefore, approval of the draft Recurring Review Plan will be in conjunction with approval of the EE/CA or RI/FS (as documented in the signed decision document) and in accordance with ER 1110-1-8153 and EP 1110-1-18.

b. The draft Recurring Review Plan will be updated, as necessary, during the design of the response action and at the completion of the response action.

c. The Recurring Review Plan will be finalized after completion of the response action.

2-6. Modification of the Recurring Review Plan.

a. The draft Recurring Review Plan may require modification during the design of the response action or at the completion of the response action and post response action phases as new information becomes available.

b. These changes will be coordinated with stakeholders and regulators through appropriate channels, depending on the phase of the project when the modification is made. For example, if it is determined during the design phase that a change to the Recurring Review Plan is necessary, the changes may be coordinated with stakeholders and regulators in conjunction with coordination of the Work Plan for the response action.

c. Modifications to the Recurring Review Plan are the responsibility of the district PM. The District Commander is the designated approval authority to approve the modified Recurring Review Plan.

2-7. Project Files. The Recurring Review Plan and any modifications will be included in the Project Files for the site.

# CHAPTER 3
# EXECUTING THE RECURRING REVIEW

3-1. Introduction.

a. This chapter discusses the execution requirements for the PDT involved in Recurring Reviews, including: establishing a PDT; reviewing existing documentation; notifying stakeholders; identifying and reviewing new information and current site conditions; preparing a preliminary site analysis and work plan; conducting a site visit; and preparing the Recurring Review Report. Figure 3-1 illustrates the Recurring Review process.

b. Project Management for Recurring Reviews will be implemented in accordance with ER 5-1-11, U.S. Army Corps of Engineers Business Process.

3-2. Establish PDT to Conduct the Recurring Review. Successful performance of a Recurring Review requires establishment of an interdisciplinary PDT. The district will form a team that includes staff with necessary OE and environmental expertise, the district Division of Real Estate, and the district Public Affairs Office.

a. If possible, personnel already familiar with the site and the response action will be considered for the PDT conducting the Recurring Review.

b. The district Division of Real Estate representative will obtain rights of entry, if required (see EP 1110-1-18 for additional information on access agreements for OE response actions). The District Chief of Real Estate and/or the HQUSACE Director of Real Estate should be consulted for additional information and project-specific issues. The district PM should allow ample time to obtain the appropriate access agreements by coordinating with the district Division of Real Estate representative very early in the process.

3-3. Community Involvement.

a. The PM will review the Community Relations Plan and update the plan as appropriate, determine stakeholder information requirements, and ensure appropriate involvement of the various stakeholder groups. The district Public Affairs Office may be consulted as needed.

b. The PM will establish an information repository at a location near the project site (e.g., public library) in order to provide the community with access to project information.

c. The PDT will schedule an open meeting in the local community for initial coordination with stakeholders, including regulators, and any local community leaders to discuss activities being planned for the Recurring Review and to obtain their input. The method of notification

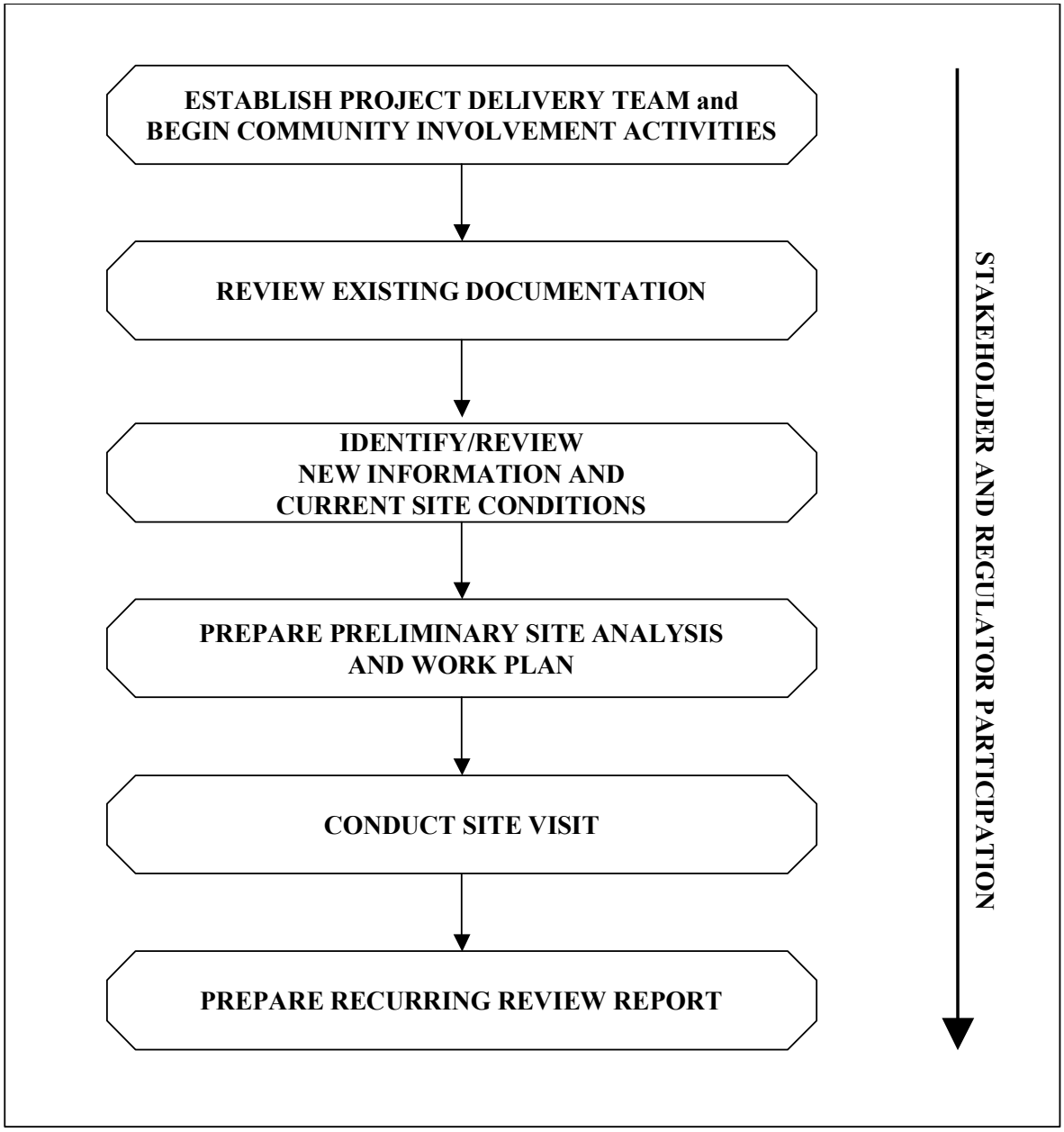



Figure 3-1. Recurring Review Process

will depend on the characteristics of the site and the local community, but may include notices in local newspapers, press releases and/or direct mailings. The notification regarding the open meeting will include the following: a brief site history; notice that a Recurring Review will be conducted; how the community can contribute; and how the Recurring Review Report will be made available for review and comment when completed.

d. The PDT will also disseminate questionnaires or surveys to identify community-wide interest and concerns. Under the Privacy Act (PA), the Paper Reduction Act (PRA), and in accordance with Army Regulation (AR) 335-15, Management Information Control (MIC) System, and Office of the Chief of Engineers (OCE) Supplement 1 to AR 385-15, information collection via questionnaires, surveys or interviews that involve 10 or more members of the public within a 12 month period must have prior review and approval by the USACE Management Information Control Officer (MICO)/PA Clearance Officer, HQDA, and Office of Management and Budget (OMB) before being implemented.

3-4. Review Existing Documentation.

a. The PDT will review existing documentation for the site. At a minimum, the team will review the documents listed in the Recurring Review Plan and the Recurring Review Report from the previous review, if applicable.

b. Through this review, the PDT will become familiar with the site history and the implemented response action. The review will accomplish the following objectives:

(1) Determine what actions were completed at the site.

(2) Determine where unexploded ordnance (UXO) items are suspected or were located, if applicable, and document the basis for this determination.

(3) Identify and evaluate the basis for selection of the response action (e.g., land use, site accessibility, etc.).

(4) Determine if there is an immediate threat to human health, safety or environment that requires further response.

(5) If a determination of technical impracticability was made for the site, determine whether new technology is now available that could address remaining explosives safety risks at the site.

3-5. Identify/Review New Information and Current Site Conditions.

a. The PDT will identify readily available information regarding the site that has become available since implementation of the response action or since the last Recurring Review. New information will also be gathered through interviews with persons knowledgeable about the site

including stakeholders such as property owners, local agencies, local community members, and regulators.

b. Information may be gathered telephonically, through news articles or releases, public records, local authorities, stakeholder input, etc. PDT members will document all efforts to identify new information including a description of all sources that were searched, contact information for all people or agencies contacted, and a summary of all telephone conversations/interviews.

c. The PDT will gather information pertaining to the following areas:

(1) Development at the site or in the vicinity of the site;

(2) Erosion;

(3) Recreational or other activities at the site or in the vicinity of the site;

(4) Coastal processes (e.g., wave action);

(5) Fire;

(6) Frost heave;

(7) Storm damage (uprooted trees, etc.);

(8) Changes in land use at the site and in the vicinity of the site, both actual and potential;

(9) Changes in accessibility to the site;

(10) OE incidents;

(11) Status of Land Use Controls;

- For sites where land use controls were implemented, the PDT will review all aspects described in the Institutional Control Plan and contact all agencies responsible for implementing, maintaining and/or enforcing the land use controls. Land use controls may include legal, physical, or educational mechanisms that limit the access or use of a property, or warn of the hazard in order to protect property users and the public. The PDT will make an evaluation as to whether the implemented land use controls are operating as intended.

- For active installations, the PDT will also review the installation's master plan and related documents to ensure any land use controls required in the OE response action have been incorporated into those documents.

(12) Changes in stakeholder interest or concerns; and

(13) New technology or techniques that have become available and economical and may be applicable to the site.

3-6. Prepare Preliminary Site Analysis and Work Plan.

a. Preliminary Site Analysis. The PDT will prepare a preliminary site analysis based upon a review of existing and new information. This preliminary site analysis will include a preliminary evaluation of the continued protectiveness of the response action. This analysis will identify any additional information that is required in order to prepare the final site analysis (i.e., additional information required to make the final determination regarding continued protectiveness of the response action). The worksheet provided as Table 3.1 may be used to facilitate the preliminary site analysis.

b. Develop Work Plan.

(1) The PDT will prepare a work plan to identify procedures to be used in collecting the additional information identified during the preliminary site analysis. A typical work plan will include the following:

(a) Summary of the preliminary site analysis emphasizing what additional information is needed;

(b) Procedures to be used to collect the additional information;

(c) Safety precautions appropriate for the site specific conditions (see subparagraph (3) below); and

(d) Schedule.

(2) The PM will have the responsibility of an inter-disciplinary review of the work plan.

(3) Safety Precautions. Safety is a primary consideration when conducting a site visit at a property that potentially contains OE hazards. The team conducting the site visit will include an OE Safety Specialist.

(a) The Work Plan will state that the site visit will be executed using anomaly avoidance techniques (i.e., the site visit participants will avoid any potential UXO items).

Table 3.1
Preliminary Site Analysis Worksheet

| **PRELIMINARY SITE ANALYSIS WORKSHEET** | |
|---|---|
| **What changes have occurred that may affect prior decisions concerning the site?** | Physical Changes:<br><br>Accessibility to Public:<br><br>Land Use:<br><br>Technology Changes:<br><br>Other: |
| **How do these changes affect previous decisions for this site?** | |
| **What is the status of any Land Use Controls implemented at the site?** | |
| **What additional information is needed to develop a conclusion regarding the continued protectiveness of the response?** | |
| **Recommendations for follow-up action.** | |
| **List documents, resources used.** | |

(b) The Work Plan will describe procedures to be followed if OE is found at a site. The local point of contact (POC) designated in the Work Plan will be notified. On a FUDS site, this is normally the local law enforcement agency, which in turn will notify the appropriate military Explosive Ordnance Disposal (EOD) unit. For active installations, the Work Plan will normally identify the Range Control Officer, the Facility Engineer, or post headquarters, as the local POC. The Work Plan will also identify all other appropriate POCs to be notified. Additional information on Safety Considerations is discussed in EP 1110-1-18, Chapter 20 and EP 385-1-95a, Basic Safety Concepts and Considerations for Ordnance and Explosives Operations. The initial notification will be made in the most timely manner (e.g., via telephone).

(c) If ordnance is found during the site visit, extreme caution must be exercised. Personnel conducting the Recurring Review will not touch, move, or jar an apparent OE item in any way, regardless of its apparent condition. Markings such as "practice bomb," "dummy," or "inert" will not be interpreted to mean the item is not hazardous. Practice bombs can have explosive charges that are used to spot the point of impact or the item may be mismarked. If items are found with green band markings, which indicate the item may contain chemical fillers, then personnel will leave the area immediately. A full description of the items will be provided to the local POC designated in the Work Plan, including a photograph or video, an estimate of the diameter and length, and any visible markings or other identifiers.

3-7. Conduct Site Visit. The PDT will conduct a site visit to visually confirm and document the current physical condition of the site and surrounding area, and the current condition or status of any land use controls included in the OE response action. The PDT may also conduct stakeholder outreach programs and interviews, as applicable, in conjunction with the site visit.

a. Site Evaluation.

(1) The site evaluation will include visual evaluation of the items listed in paragraph 3-5c.

(2) Sites that are no longer owned or controlled by DOD require a right of entry prior to conducting a site visit. The district Division of Real Estate will obtain rights of entry. The district PM should contact the district Division of Real Estate early in the review process due to the time required to obtain the necessary rights of entry. Additional information on acquisition of rights of entry is discussed in EP 1110-1-18.

b. Stakeholder Outreach. The PDT may schedule public information forums, media days, or other outreach initiatives to solicit further input regarding the site.

c. Interviews. The PDT may conduct interviews with stakeholders and regulators (face to face discussions with property owners, local authorities, other stakeholders, etc.) to supplement the interviews conducted over the telephone. Under the Paper Reduction Act and in accordance with AR 335-15 and OCE Supplement 1 to AR 385-15, information collection via questionnaires, surveys or interviews that involve 10 or more members of the public within a 12

month period must have prior review and approval by the USACE MICO Clearance Officer, HQDA, and OMB before being implemented.

3-8. Prepare Recurring Review Report.

a. General. The PDT will prepare a Recurring Review Report to document the information collected and evaluated, and present the findings of the evaluation of the continued protectiveness of the OE response action. The report will document whether the response action that was implemented continues to minimize explosive safety risks and is still protective of human health, safety, and the environment and/or recommend follow-up actions that may be warranted.

b. Contents of the Report.

(1) The Recurring Review Report is a flexible document tailored to the scope of the Recurring Review for the site. The report will be written with the assumption that the reader is not familiar with the site. Historical site information (e.g., site history, site description, response action descriptions, etc.) can be taken directly from existing site documents. The report will include a description of the Recurring Review process and the evaluation considerations used to assess the protectiveness of the response. The report will be brief, with supporting information provided as appendices.

(2) Table 3.2 provides a summary of the contents for a Recurring Review Report.

(3) The report checklist and report template included in Appendix A provide further details regarding the contents of each section of the Recurring Review Report. At a minimum, the report will include the information described in Appendix A.

3-9. Environmental Records Management.

a. Project records resulting from the recurring review process will be retained in accordance with AR 25-400-2, Army Records Information Management System (ARIMS) as permanent records. PMs should also refer to EP 1110-3-8 to determine the appropriate documents for inclusion in the Administrative Record.

Table 3.2
Sample Format for Recurring Review Report

| Section | Title |
|---|---|
| | Title Page with Signature and Date |
| | Signed Concurrence Memorandum (if applicable) |
| | Table of Contents |
| | Executive Summary<br>• Recurring Review Summary |
| 1 | Introduction |
| 2 | Site Chronology and Description<br>• Chronology of site history<br>• Background information<br>– Physical characteristics<br>– Land use history<br>– Previous investigations<br>• Response action<br>– Objectives, selection, description, implementation |
| 3 | Recurring Review Process<br>• Administrative Components<br>• Community Notification and Involvement<br>• Summary of information gathered and relied upon:<br>• Existing information/documentation<br>• New information<br>• Interviews<br>• Site Visit<br>• Progress Since Last Recurring Review |
| 4 | Final Site Analysis |
| 5 | Conclusions/Recommendations<br>• Response Deficiencies<br>• Conclusions<br>• Recommendations/Follow-up actions<br>• Responsibility Matrix<br>• Next Review |
| Appendices | |

# CHAPTER 4
# APPROVING AND TERMINATING THE RECURRING REVIEW

4-1. Introduction. This chapter discusses the process for review and approval of the draft and final Recurring Review Report, as well as termination of Recurring Reviews at a site.

4-2. Review and Approval of the Recurring Review Report. The district will prepare a draft and final Recurring Review Report as described in the following sections.

a. Draft Recurring Review Report.

(1) The district will prepare a draft Recurring Review Report. The district will provide a copy to the OE CX for review. The Office of Counsel for the District conducting the Recurring Review will review and provide comments on the draft Recurring Review Report generated by the PDT before it is released outside of the USACE. Following the approval of the District Office of Counsel, the district will provide a copy to stakeholders and regulators for review and comment. A copy of the report will also be placed in the information repository established for the Recurring Review for public review and comment.

(2) The district may hold a public meeting or availability session during the public comment period.

(3) The district will publish a notice in a major local newspaper of general circulation including the following information:

(a) Notification that the draft report has been completed and placed in the information repository;

(b) Location of the information repository for public review;

(c) Summary of the findings and conclusions of the Recurring Review;

(d) An announcement of a formal 30-day (minimum) public comment period for submission of written comments; and

(e) Location and time for a public meeting, if applicable.

(4) Upon completion of the public comment period, a responsiveness summary is prepared that discusses any significant public comments received on the report and the actions taken to address those comments. The responsiveness summary becomes part of the project files.

b. Final Recurring Review Report.

(1) The district will incorporate the comments received during the public comment period into the final Recurring Review Report.

(2) The final report must contain a signed determination by the District Commander (FUDS)/Installation Commander or MACOM Commander (active and transferring sites) stating that the response continues/does not continue to minimize explosives safety risks and is/is not protective of human health, safety, and the environment. The district will seek concurrence from the appropriate regulator(s) for the determination.

(3) The district will provide copies of the final report to appropriate stakeholders, regulators, and the OE CX. The final Recurring Review Report, along with the responsiveness summary, will be included in the project files for the site, including the information repository that was established during the Recurring Review.

c. Figure 4-1 illustrates the OE review and approval process. Table 4.1 may be used by the PM to track and document reporting activities for the Recurring Review.

4-3. Termination of Recurring Reviews.

a. Further Recurring Reviews may be terminated at a site when the PDT, stakeholders, and regulators reach agreement that the site is stable based on the results of previous Recurring Reviews and response actions that have been conducted at the site. Evaluation of the stability of a site will depend on site-specific characteristics. A site may be considered stable if:

(1) there are no issues at the site that result in a change in the effectiveness of the response actions;

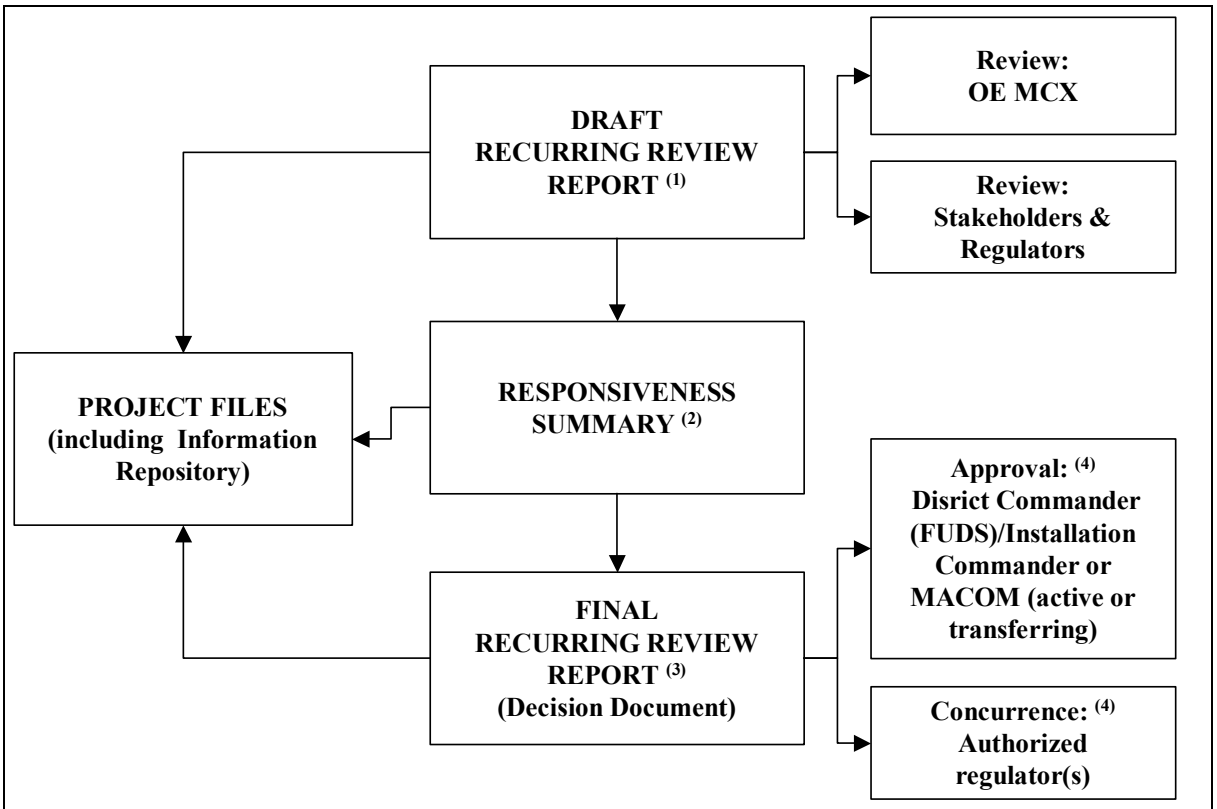
(2) there has been no erosion at the site that significantly impacts the response action;

(3) there have been no OE incidents at the site; and

(4) there have been no significant changes in land use for the site, etc.

b. USACE recognizes that there may be sites requiring Recurring Reviews over an indefinite period of time due to unique site conditions.

c. The final Recurring Review Report generated for the last Recurring Review at a site will state that no further Recurring Reviews will be conducted at the site. The report will also provide a discussion regarding the justification for termination of the Recurring Reviews and documenting agreement among the PDT, stakeholders, and regulators.




(1) The district will prepare the draft Recurring Review Report and provide a copy to stakeholders and regulators for review and comment. A copy of the report will be placed in the Information Repository for review and comment. The district will also provide a copy to the OE MCX for review.

(2) Upon completion of the public comment period, a responsiveness summary is prepared that discusses any significant public comments received on the report and the actions taken to address those comments. The responsiveness summary becomes part of the project files.

(3) The district will incorporate the comments received during the public comment period into the final Recurring Review Report. The final Recurring Review Report will be included in the project files for the site.

(4) The final report must contain a signed determination by the district commander (FUDS)/installation commander or MACOM commander (active or transferring) stating that the response is or is not protective of human health, safety, and the environment. The district will seek concurrence from the appropriate regulator(s) for the determination.

Figure 4-1. Review and Approval Process for the Recurring Review Report

Table 4.1
Sample Format to Track Recurring Review Reporting

| **RECURRING REVIEW REPORTING** | |
|---|---|
| **Draft Recurring Review Report** | Federal_____ Date Sent: _____ Comments: _____<br>State _____Date Sent: _____ Comments: _____<br>Tribal _____ Date Sent: _____ Comments: _____<br>Information Repository _____ Date Sent: _____ Comments: _____<br>Other _____ Date Sent: _____ Comments: _____<br>Other _____ Date Sent: _____ Comments: _____ |
| **Public Notice of Recurring Review Report and Findings** | Name of Newspaper(s): Publication Date(s):<br>_____ _____<br>_____ _____<br>_____ _____ |
| **Public Meeting** | Yes _____ No_____<br>Date held: _____<br>Location _____ |
| **Final Recurring Review Report** | Date Signed: _____<br>Federal_____ Date Sent: _____ Comments: _____<br>State _____Date Sent: _____ Comments: _____<br>Tribal _____ Date Sent: _____ Comments: _____<br>Information Repository _____ Date Sent: _____ Comments: _____<br>Other _____ Date Sent: _____ Comments: _____<br>Other _____ Date Sent: _____ Comments: _____ |

# APPENDIX A
# RECURRING REVIEW REPORT TEMPLATE

A-1. Introduction. This appendix provides a checklist and report template for Recurring Review Reports. The checklist appears first, followed by the report template. Each report should take into account site-specific circumstances, and the report format and content should be modified accordingly. For example, there may be site-specific questions that are not specifically addressed in the checklist /template presented in this appendix but that should be included in the Recurring Review Report. At a minimum, the report will include all applicable information described in the checklist and template.

a. Table A-1 is a checklist that may be used to verify that all appropriate information has been included in the Recurring Review Report. Depending on site-specific circumstances, some items may not be applicable.

b. The suggested format for Recurring Review Reports is presented in the report template, which also provides additional detail on the content of each section. The template provides details on the content of each section, boilerplate text, example tables, and protectiveness statements. Suggested boilerplate text is presented in text boxes. Within the boilerplate section, text enclosed in brackets ("[ ]") should be added as appropriate, and *italicized* text denotes discussions that the reviewer should add.

c. Use both the checklist and report template as guides for the types of information that should appear in the different sections of the Recurring Review Report. Also include information that is relevant to the site and needed to ensure that the rationale behind the protectiveness determination is adequately documented.

Table A-1
Content Checklist for
Recurring Review Reports for OE Response Actions

Project Name: _____

Project Location: _____

Preparer's Name and Title: _____

Date of Preparation: _____

Reviewer's Name and Title: _____

Date of Review: _____

| | Y | N | N/A |
|---|---|---|---|
| **Title page with signature and date** | _____ | _____ | _____ |
| **Signed concurrence memorandum (if applicable)** | _____ | _____ | _____ |
| **Table of Contents** | | | |
| • List of tables | _____ | _____ | _____ |
| • List of figures | _____ | _____ | _____ |
| • List of acronyms | _____ | _____ | _____ |
| • List of appendices | _____ | _____ | _____ |
| **Executive Summary** | | | |
| • Recurring Review Summary | _____ | _____ | _____ |
| **Introduction** | | | |
| • Site name, location and FUDS number | _____ | _____ | _____ |
| • Date of the Recurring Review | _____ | _____ | _____ |
| • Purpose of the Recurring Review | _____ | _____ | _____ |
| • Review number (e.g., first, second, etc.) | _____ | _____ | _____ |
| – date that the on-site field work for the selected response action began (i.e., "trigger date") | _____ | _____ | _____ |
| – date of the previous review (if applicable) | _____ | _____ | _____ |

| | Y | N | N/A |
|---|---|---|---|
| **Introduction (continued)** | | | |
| • If review covers only a portion of the site, define what areas are covered in the Recurring Review and summarize the status of other areas | _____ | _____ | _____ |
| • List of Project Delivery Team Members | _____ | _____ | _____ |
| – Organizations providing analyses in support of the review (e.g., the contractor supporting the lead agency) | _____ | _____ | _____ |
| – Other review participants or support agencies | _____ | _____ | _____ |
| **Site Chronology and Description** | | | |
| • Chronological list of site history, including all important site events such as the date of initial discovery of problem and milestone dates for the OE response action at the site (e.g., list of documents created during the removal or remedial response process such as the EE/CA or RI/FS report, decision documents, etc.).) | _____ | _____ | _____ |
| • Physical characteristics of the site (e.g., size, topography, and geology) | _____ | _____ | _____ |
| • Land use history (e.g., former, current, and future land use(s) of the site and surrounding areas) | _____ | _____ | _____ |
| • Site investigations | _____ | _____ | _____ |
| • Response action | | | |
| – Regulatory actions | _____ | _____ | _____ |
| – Response action objectives | _____ | _____ | _____ |
| – Response selection | _____ | _____ | _____ |
| – Response description | _____ | _____ | _____ |
| – Response implementation (e.g., status, history) | _____ | _____ | _____ |

| | Y | N | N/A |
|---|---|---|---|
| **Recurring Review Process** | | | |
| • Administrative Components | | | |
| – Notification of potentially interested parties of initiation of review process | _____ | _____ | _____ |
| – Identification of PDT members | _____ | _____ | _____ |
| – Outline of components and schedule for the Recurring Review | _____ | _____ | _____ |
| • Community Notification and Involvement | | | |
| – Community notification (prior and post review) | _____ | _____ | _____ |
| – Other community involvement activities (e.g., notices, fact sheets, etc., as appropriate) | _____ | _____ | _____ |
| – Stakeholder and Regulator Input | | | |
| o Summary of actions taken to provide information to and solicit input from stakeholders and regulators (e.g., public notices, direct mailings, meetings, interviews, etc.). | _____ | _____ | _____ |
| o Regulator and stakeholder concerns | _____ | _____ | _____ |
| o A copy of significant stakeholder correspondence, minutes from public meetings, interview forms, etc. should be included as an appendix. | _____ | _____ | _____ |
| • Summary of Information Gathered and Relied Upon | | | |
| – Existing information/documentation review (summary of existing documentation that was reviewed, information gathered during the site visit, and information gathered from stakeholders and regulators) | _____ | _____ | _____ |
| – New information (e.g., photographs from the site visit that illustrate current site conditions, information provided by stakeholders and regulators, incident reports, etc.) | _____ | _____ | _____ |

| | Y | N | N/A |
|---|---|---|---|
| **Recurring Review Process (continued)** | | | |

- If a determination of Technical Impracticability was made for the site, discuss whether new technology is now available that could address remaining explosives safety risks at the site _____ _____ _____

- Progress Since Last Recurring Review (if applicable)
  - Protectiveness statements from last review _____ _____ _____
  - Status of recommendations and follow-up actions from last review _____ _____ _____
  - Results of implemented actions, including whether they achieved the intended effect _____ _____ _____
  - Status of any other prior issues _____ _____ _____
- Interviews
  - Interview date(s) and location(s) _____ _____ _____
  - Interview participants (name, title, and other contact information) _____ _____ _____
  - Interview documentation _____ _____ _____
  - Interview summary _____ _____ _____
- Site Visit Findings
  - Date of Site Visit _____ _____ _____
  - Site Visit participants _____ _____ _____
  - Site visit scope and procedures _____ _____ _____
  - Site visit observations and conclusions _____ _____ _____
  - Maps, drawings, tables and photos (as necessary) _____ _____ _____

| | Y | N | N/A |
|---|---|---|---|
| **Final Site Analysis** | | | |
| • Answer Question 1: Is the response functioning as intended? | _____ | _____ | _____ |
| • Answer Question 2: Are any assumptions used at the time of response selection still valid? | _____ | _____ | _____ |
| • Answer Question 3: Does new information indicate that the previously selected response is no longer protective of human health, safety, and the environment considering the best available technology? | _____ | _____ | _____ |
| • In answering these questions, include: | | | |
| – Description of whether the response action continues to meet the response objectives. | _____ | _____ | _____ |
| – Description of any changes noted at the site and what impact they have on the protectiveness of the response (e.g., physical changes, changes in land use at the site or adjacent properties, changes in public accessibility, technology changes, etc.) | _____ | _____ | _____ |
| – Analysis of the current protectiveness of the OE response action based on the information gathered during the Recurring Review. | _____ | _____ | _____ |
| **Conclusions/Recommendations** | | | |
| • Response Deficiencies | _____ | _____ | _____ |
| • Conclusions | | | |
| – Protectiveness statement for each sector or area of the site, as appropriate (i.e., statement as to whether the response continues to minimize explosives safety risks and continues to be protective of human health, safety and the environment) | _____ | _____ | _____ |

| | Y | N | N/A |
|---|---|---|---|
| **Conclusions/Recommendations (continued)** | | | |
| • Recommendations/Follow-up Actions | | | |
| – If it is determined that the response is not currently protective or risk-related concerns are identified, include recommendations for follow-up actions to address the deficiencies. The report should indicate that the follow-up actions were identified and developed by the PDT in conjunction with stakeholders and regulators. | _____ | _____ | _____ |
| • Responsibility Matrix | | | |
| – Recommended follow-up actions | _____ | _____ | _____ |
| – Parties responsible for further action (i.e., for developing, implementing, and overseeing the actions) | _____ | _____ | _____ |
| – Target dates (i.e., schedule for completion of actions related to resolution of issues) | | | |
| • Next Review | | | |
| – Expected date of next review | _____ | _____ | _____ |
| – Proposed changes to the scope of subsequent reviews | _____ | _____ | _____ |
| – If the PDT has determined that no further Recurring Reviews will be conducted at the site, provide a discussion of the justification for termination and documenting agreement among the PDT, stakeholders and regulators. | _____ | _____ | _____ |

# Recurring Review Report

(First, Second, etc.) Recurring Review Report

for

Site Name

FUDS Number

City

County, State

Month, Year

PREPARED BY:

Lead Agency
Name and
Location

Approved by: Date:

_____ _____

[Name]
[Title]
[Affiliation]

## Signed Concurrence Memorandum

*If concurrence was obtained from the appropriate regulators, include a signed concurrence memorandum.*

# Recurring Review Report

Site Name
FUDS Number
City
County, State

*The following Table of Contents notes typical major divisions and subheadings for Recurring Review reports. Subheadings can be included as appropriate for a given review report. This is only a general example.*

## Table of Contents

# List of Acronyms

*You should include a list of acronyms used in the report.*

# Executive Summary

*You should include an Executive Summary at the beginning of the report. The Executive Summary should be brief, and should include a reiteration of the protectiveness statements included in Section 5.0 (Conclusions/Recommendations) of the Recurring Review Report.*

# Sample Format for Recurring Review Summary

| SITE IDENTIFICATION | | |
|---|---|---|
| Site name: | | |
| FUDS Number: | | |
| City: | County: | State: |

| SITE STATUS | |
|---|---|
| Selected Response Action Description: | |
| Response Action Status (choose all that apply): ___ Under Construction ___ Complete | |
| Initiation Date of On-site Field Work for Response Action Implementation: ___ / ___ / _____<br>Completion Date for Response Action Implementation: ___ / ___ / _____ | |
| Does the site include multiple Sectors/Areas? __YES __NO<br>If yes, list the areas included in this Recurring Review:<br>_____<br>_____<br>_____ | Has site been put into reuse? __ YES __ NO |

| REVIEW STATUS | |
|---|---|
| Lead agency: _____ | |
| Author/District PM name: | |
| Author/District PM title: | Author affiliation: |
| Review period:** ___ / ___ / _____ to ___ / ___ / _____ | |
| Review number: __1 (first) __ 2 (second) __ 3 (third) __ Other (specify) _____ | |
| Date(s) of site visit: ___ / ___ / _____ | |
| Triggering date: ___ / ___ / _____ | |
| Due date for initiation of this Recurring Review: ___ / ___ / _____ | |

## Sample Format for Recurring Review Summary, cont'd.

Summary of Findings and Final Site Analysis:

*Summarize findings and Final Site Analysis (see Chapters 3 and 4)*

Conclusions/Recommendations and Follow-up Actions:

*Summarize conclusions/recommendations and follow-up actions (see Chapter 5).*

Protectiveness Statement(s):

Other Comments:

# Recurring Review Report

1.0 Introduction

*Provide a synopsis of "who, what, where, when, and why." Detail the following:*

- *The site name, location and FUDS number (include site location figure);*
- *The purpose of the review;*
- *Who conducted the review, when, and for what site or portion of the site;*
- *Whether it is the first review or a subsequent review at the site, including the date that the on-site field work for the selected response action began (i.e., "trigger date") and the date of the previous review (if applicable);*
- *A brief status of areas of a site not addressed in the current review and/or the status of Recurring Reviews for other areas of the entire site.*

1.0 Introduction

The United States Army Corps of Engineers (USACE) has conducted a Recurring Review for the Ordnance and Explosives (OE) Response Action at [site name] [FUDS number] in [city, county, state]. The site location is illustrated in Figure 1.1. The [name of the areas of the site included in the review] is the subject of this review. The location(s) of the area(s) included in this review are illustrated in Figure 1.2.

The purpose of a Recurring Review for an OE response action is to determine whether the response action at a site continues to minimize explosives safety risks and continues to be protective of human health, safety, and the environment. The methods, findings, and conclusions of the review are documented in this report.

The Recurring Review was conducted from [start date] to [finish date] and is the [number of review, i.e., first, second, etc.] Recurring Review for this site. On-site field work for the selected response action at this site began on [date]. The previous review was conducted in [year of previous review].

The [USACE District] conducted the Recurring Review. The members of the Project Delivery Team (PDT) that conducted the review, including their titles and contact information, are provided in Table 1.1.

*If the Recurring Review does not include an entire site, also provide a brief synopsis of the status of response actions and/or Recurring Reviews for other areas.*

## 2.0 Site Chronology and Description

*List all important site events and relevant dates in the site chronology, such as those shown in Table 2.1. The identified events are illustrative, not comprehensive.*

Table 2.1: Chronology of Site Events

| Event | Date |
|---|---|
| Preliminary Assessment of Eligibility | |
| Site Inspection (incl. work plans and reports) | |
| Archives Search Report | |
| Time Critical Removal Actions | |
| Engineering Evaluation/Cost Analysis (EE/CA) or Remedial Investigation/Feasibility Study (RI/FS) | |
| Decision Document | |
| Explosives Safety Submissions | |
| Response Implementation | |
| Site-specific Response Report | |
| Previous Recurring Reviews | |

*Describe the fundamental aspects of the site, including:*

- *Physical characteristics of the site (e.g., size, topography, and geology);*
- *Land use history (e.g., former, current, and future land use(s) of the site and surrounding areas);*
- *Summary of site investigation history and findings; and*
- *Description of the selected response action, including response action objectives, response selection, response implementation, and basis for taking response. You should delineate all response measures, for instance, include land use controls. Discuss any changes to or previously identified problems with the response.*

*This information can be taken directly from existing site documents.*

## 3.0 Recurring Review Process

*Describe activities performed during the Recurring Review process and provide a summary of findings when appropriate. Include the following information:*

- *Administrative Components*
  - *Notification of potentially interested parties of initiation of review process*
  - *Identification of PDT members*
  - *Outline of components and schedule for the Recurring Review*
- *Community Notification and Involvement*
  - *Community notification (prior and post review)*
  - *Other community involvement activities (e.g., notices, fact sheets, etc., as appropriate)*
  - *Stakeholder and Regulator Input*
    - *Summary of actions taken to provide information to and solicit input from stakeholders and regulators (e.g., public notices, direct mailings, meetings, interviews, etc.).*
    - *Regulator and stakeholder concerns*
    - *Include a copy of significant stakeholder correspondence, minutes from public meetings, interview forms, etc. as an appendix to the report.*
- *Summary of Information Gathered and Relied Upon*
  - *Existing information/documentation review*
    - *Provide a list of the existing documentation that was reviewed and the location of this information;*
    - *Describe existing information gathered during the site visit and information gathered from stakeholders and regulators.*
  - *New information*
    - *Include a description of new information that is not already included in the project files but which is necessary to support the findings of the Recurring Review. This may include photographs from the site visit that illustrate current site conditions, information provided by stakeholders and regulators, and incident reports.*
    - *Include this new information as an appendix to the report.*
  - *If a determination of Technical Impracticability was made for the site, discuss whether new technology is now available that could address remaining explosives safety risks at the site.*
- *Progress Since the Last Recurring Review*

- *Protectiveness statements from the last review;*
- *Status of recommendations and follow-up actions from last review;*
- *Results of implemented actions, including whether they achieved the intended effect; and*
- *Status of any other prior issues*

*Table 3.1 below presents one approach for providing information on the recommendations and follow-up actions stated in the past review and subsequent actions. The accompanying text should also discuss why any recommendations and follow-up actions have not been implemented if that is the case, and whether implemented actions achieved desired results.*

Table 3.1: Actions Taken Since the Last Recurring Review

| Issues from Previous Review | Recommendations/ Follow-up Actions | Party Responsible | Milestone Date | Action Taken and Outcome | Date of Action |
|---|---|---|---|---|---|
| | | | | | |
| | | | | | |
| | | | | | |

- *Interviews*
  - *Provide a summary of interviews conducted to obtain new information about the site including:*
    - *Interview date(s) and location(s)*
    - *Interview participants (name, title, and other contact information)*
    - *Interview documentation*
    - *Interview summary*
  - *Include a detailed description of each interview in an appendix.*
- *Site Visit Findings*
  - *Date of Site Visit*
  - *Site Visit participants*
  - *Site visit scope and procedures*
  - *Site visit observations and conclusions*

–*Maps, drawings, tables and photos (as necessary)*

4.0 Final Site Analysis

*Provide an analysis of the current protectiveness of the OE response action based on the information gathered during the Recurring Review. In the analysis, provide the answers to the three questions that the Recurring Review is intended to address:*

- *Is the response functioning as intended?*
- *Are any assumptions used at the time of response selection still valid?*
- *Does new information indicate that the previously selected response no longer minimizes explosives safety risks and/or is no longer protective of human health, safety, and the environment considering the best available technology?*

*Provide the information that presents the basis for each answer as a framework for your protectiveness determination(s):*

- *Description of whether the response action continues to meet the response objectives.*
- *Description of any changes noted at the site and what impact they have on the protectiveness of the response (e.g., physical changes, changes in land use at the site or adjacent properties, changes in public accessibility, technology changes, etc.).*
- *Analysis of the current protectiveness of the OE response action based on the information gathered during the Recurring Review.*

*Explain the conclusions of your review, based on the information presented in the previous section.*

5.0 Conclusions/Recommendations

*Develop a protectiveness statement for each sector included in the Recurring Review. This will be a statement as to whether the response continues to minimize explosives safety risks and continues to be protective of human health, safety and the environment.*

*Explain and provide supporting rationale of the protectiveness determination. This will include a description of any response deficiencies that were noted during the Recurring Review. Address all issues that affect current and/or future protectiveness.*

*If it is determined that the response is not currently protective or risk-related concerns are identified, include recommendations for follow-up actions to address the deficiencies. These follow-up actions will be identified and developed by the PDT in conjunction with stakeholders and regulators. Develop a responsibility matrix that identifies the parties responsible for implementing and overseeing actions, milestone dates, etc.. Table 5.1 illustrates one way to include the necessary information.*

Table 5.1: Conclusions/Recommendations

| Issue | Recommendations and Follow-up Actions | Party Responsible for Implementation | Party Responsible for Oversight | Milestone Date |
|---|---|---|---|---|
| | | | | |
| | | | | |
| | | | | |

*Document the year of the next Recurring Review for the site and any proposed changes to the scope. If the PDT has determined that no further Recurring Reviews will be conducted at the site, provide a discussion of the justification for termination and document agreement among the PDT, stakeholders and regulators.*

Suggested protectiveness statements are provided below.

A. Response action is under construction:

Protective or will be protective:
*"The response action at [area X of site X] is expected to be effective in minimizing explosive safety risks and protective of human health, safety and the environment upon completion, and in the interim, conditions that could result in unacceptable risks are being controlled."*

Not protective:
*"The response action at [area X of site X] is not protective because of the following issues [describe the issue(s)]. The following actions need to be taken [describe the actions needed to ensure protectiveness]."*

Protectiveness deferred:
*"A protectiveness determination of the response at [area X of site X] cannot be made at this time until further information is obtained. Further information will be obtained by taking the following actions [describe the actions]. It is expected that these actions will take approximately [insert time frame] to complete, at which time a protectiveness determination will be made."*

B. Response action at the OU is operating or completed:

Protective:
*"The response action at [area X of site X] continues to minimize explosives safety risks and continues to be protective of human health, safety and the environment."*

Not protective:
*"The response action at [area X of site X] is not continuing to minimize explosives safety risks and is not continuing to be protective of human health, safety and the environment because of the following issue(s) [describe the issue(s)]. The following actions need to be taken [describe the actions needed to ensure protectiveness].*

Protectiveness deferred:
*"A protectiveness determination of the response at [area X of site X] cannot be made at this time until further information is obtained. Further information will be obtained by taking the following actions [describe the actions]. It is expected that these actions will take approximately [insert time frame] to complete, at which time a protectiveness determination will be made."*

Appendices

- Site maps (if not included in the body of the report)
- List of documents reviewed and their location
- New information obtained during the Recurring Review that is not currently a part of the project files
- Interview forms
- Photos Documenting Site Conditions
- Copies of significant stakeholder correspondence, community outreach materials, minutes from public meetings, interview forms, etc.
- Comments received from stakeholders

# GLOSSARY

## Section I
## Acronyms

AR .....Army Regulation
ARIMS .....Army Records Information Management System
BRAC.....Base Realignment and Closure
CEFMS .....Corps of Engineers Financial Management System
CERCLA.....Comprehensive Environmental Response, Compensation, and Liability Act
CFR .....Code of Federal Regulations
CRP .....Community Relations Plan
DA .....Department of the Army
DERA.....Defense Environmental Restoration Account
DERP .....Defense Environmental Restoration Program
DOD .....Department of Defense
DOE .....Department of Energy
DQO .....Data Quality Objective
DSERTS.....Defense Site Environmental Restoration System
EE/CA .....Engineering Evaluation/Cost Analysis
EM.....Engineer Manual
EOD .....Explosive Ordnance Disposal
EP .....Engineer Pamphlet
ER .....Engineer Regulation
FUDS .....Formerly Used Defense Sites
FUDSMIS .....Formerly Used Defense Sites Management Information System
HQDA .....Headquarters, Department of the Army
HQUSACE.....Headquarters, United States Army Corps of Engineers
HTRW.....Hazardous, Toxic, and Radioactive Waste
IRP .....Installation Restoration Program
LUC.....Land Use Control
MACOM .....Major Command
MCX .....Mandatory Center of Expertise
MIC .....Management Information Control
MICO .....Management Information Control Officer
MSC .....Major Subordinate Command
NCP.....National Contingency Plan
NDAI.....No DOD Action Indicated
NPL .....National Priorities List
OCE.....Office of the Chief of Engineers
OE .....Ordnance and Explosives
OE CX.....Ordnance and Explosives Center of Expertise
OE MCX .....Ordnance and Explosives Mandatory Center of Expertise

OMB .....Office of Management and Budget
PA .....Privacy Act
PDT.....Project Delivery Team
PIRS.....Project Information Retrieval System
PL.....Public Law
POC.....Point of Contact
PMP.....Project Management Plan
PM.....Project Manager
PRA.....Paper Reduction Act
RCTCS.....Restoration Cost-to-Complete System
RI/FS.....Remedial Investigation/Feasibility Study
SARA.....Superfund Amendments and Reauthorization Act of 1986
TPP.....Technical Project Planning
USACE .....United States Army Corps of Engineers
USAESCH .....United States Army Engineering and Support Center, Huntsville
USC.....United States Code
UXO.....Unexploded Ordnance

**Section II**
**Terms**

**Action Memorandum**
Approves time-critical removal action and also concludes the engineering evaluation/cost analysis. Provides a concise, written record of the decision to select an appropriate removal action. As the primary decision document, it substantiates the need for a removal action, identifies the proposed action, and explains the rationale for the removal action selected. (EP 1110-1-18)

**Active Installations**
Installations under the custody and control of DOD. Includes operating installations, installations in a standby or layaway status, and installations awaiting closure under the Base Realignment and Closure (BRAC) legislation. (EP 1110-1-18)

**Administrative Record**
The body of documents that "forms the basis" for the selection of a particular response at a 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 were ultimately rejected. (ER 1110-1-8153)

**Anomaly**
Any item that is seen as a subsurface irregularity after geophysical investigation. This irregularity should deviate from the expected subsurface ferrous and non-ferrous material at a site (i.e., pipes, power lines, etc.). (EP 1110-1-18)

**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. (ER 1110-1-8153)

**Archives Search Report (ASR)**
A detailed investigation to report on past OE activities conducted on an installation. The principal purpose of the Archives Search is to assemble historical records and available field data, assess potential ordnance presence, and recommend follow-up actions at a DERP-FUDS. There are four general steps in an Archives Search: records search phase, site safety and health plan, site survey, and archives search report including risk assessment. (EP 1110-1-18)

**Base Realignment and Closure (BRAC)**
Program governing the scheduled closing of Department of Defense sites. (Base Closure and Realignment Act of 1988, Public Law 100-526, 102 Stat. 2623, and the Defense Base Closure and Realignment Act of 1990, Public Law 101-510, 104 Stat. 1808)

**Community Relations Plan (CRP)**
The Community Relations Plan (CRP) serves as the framework to establish a successful information exchange with the public for OE response actions. The CRP follows guidelines set forth under CERCLA and the SARA. Each CRP must be tailored to fit the individual site and situation and should also accommodate any site-specific agreements between the U.S. Army and the EPA or state environmental agencies. The CRP is not a static document and should be revised to reflect the project's development/progress. (EP 1110-1-18)

**Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)**
CERCLA authorizes federal action to respond to the release or threatened release of hazardous substances into the environment or a release or threat of release of a pollutant or contaminant into the environment that may present an imminent or substantial danger to public health or welfare. (42 U.S.C. 9601)

**Data Quality Objectives (DQOs)**
Project specific statements that describe the intended data use(s), the data need requirements, and the means to achieve acceptable data quality for the intended use(s).

**Decision Document**
The Department of Defense has adopted the term Decision Document for the documentation of remedial action (RA) decisions at non-National Priorities List (NPL) FUDS Properties. The decision document shall address the following: Purpose, Site Risk, Remedial Alternatives, Public/Community Involvement, Declaration, and Approval and Signature. A Decision Document for sites not covered by an interagency agreement or federal facility agreement is still required to follow a CERCLA response. All Decision Documents will be maintained in the FUDS Property/Project Administrative Record file. An Action Memorandum is the decision document for a removal response action.

**Defense Environmental Restoration Program (DERP)**
Established in 1984, DERP promotes and coordinates efforts for the evaluation and cleanup of contamination at Department of Defense installations. (10 U.S.C. 2701)

**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. The OE Design Center (in coordination with the PM) will execute all phases of the OE response project after the approval of the inventory project report unless the removal action is transferred to an approved district. Only the USAESCH OE Design center is authorized to execute any phase of a Non-Stockpile chemical warfare material response. (ER 1110-1-8153)

**Engineering Evaluation/Cost Analysis (EE/CA)**
An EE/CA is prepared for all non-time-critical removal actions as required by Section 300.415(b)(4)(i) of the NCP. The goals of the EE/CA are to identify the extent of a hazard, to identify the objectives of the removal action, and to analyze the various alternatives that may be used to satisfy these objectives for cost, effectiveness, and implementability. (EP 1110-1-18)

**Explosive Ordnance Disposal (EOD)**
The detection, identification, field evaluation, rendering safe, recovery, and final disposal of unexploded ordnance or munitions. (EP 1110-1-18)

**Explosives Safety Submission (ESS)**
The document which serves as the specifications for conducting work activities at the project. The ESS details the scope of the project, the planned work activities, and potential hazards (including the maximum credible event) and the methods for their control. (EP 1110-1-18)
**Explosive Soil**

See Definition in ER 1110-1-8153.

**Formerly Used Defense Sites (FUDS)**
FUDS includes those properties previously owned, leased, or otherwise possessed by the U.S. and under the jurisdiction of the Secretary of Defense; or manufacturing facilities for which real property accountability rested with DOD but were operated by contractors (Government owned – contractor operated) and which were later legally disposed of. FUDS is a subprogram of the DERP. Restoration of military land was extended to formerly used sites in 1983 under Public Law 98-212 (DOD Appropriations Act of FY84).

**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 (FUDS), 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. (EP 1110-1-18)

**Information Repository**
A repository, generally located at libraries or other publicly accessible locations, which contains documents reflecting the on-going environmental restoration activities. This may include the EE/CA, CRP, Restoration Advisory Board meeting minutes, public notices, public comments and responses to those comments, etc. (EP 1110-1-18)

**Land Use Controls (LUCs)**
Physical, legal, or administrative mechanisms that restrict the use of, or limit access to contaminated property in order to reduce risk to human health and the environment. Physical mechanisms encompass a variety of engineered remedies to contain or reduce contamination and/or physical barriers to limit access to property, such as fences or signs. The legal mechanisms are generally the same as those used for institutional controls (ICs) as discussed in the National Contingency Plan. ICs are a subset of LUCs and are primarily legal mechanisms imposed to ensure the continued effectiveness of land use restrictions imposed as part of a remedial decision. Legal mechanisms include restrictive covenants, negative easements, equitable servitudes, and deed notices. Administrative mechanisms include notices, adopted local land use plans and ordinances, construction permitting, or other existing land use management systems that may be used to ensure compliance with use restrictions. (DERP Management Guidance)

**Mandatory Center of Expertise (MCX)**
A 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 a MCX is identified on the MCX's homepage. These services may be reimbursable or centrally funded. The USAESCH is the OE MCX for the USACE. (ER 1110-1-8153)

**National Oil and Hazardous Substance Pollution Contingency Plan (NCP)**
Revised in 1990, the NCP provides the regulatory framework for responses under CERCLA. The NCP designates the Department of Defense as the removal response authority for ordnance and explosives hazards. (40 CFR 300)

**Ordnance and Explosives (OE)**
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." (ER 1110-1-8153)

**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. (ER 1110-1-8153)

**Project Delivery Team (PDT)**
The PDT is a multi-disciplined project team lead by the Project Manager with responsibility for assuring that the project stays focused, first and foremost on the public interest, and on the customer's needs and expectations and that all work is integrated and done in accordance with a PMP and approved business and quality management processes. The PDT focuses on the quality project delivery, with heavy reliance on partnering and relationship development to achieve better performance. The PDT shall consist of everyone necessary for successful development and execution of all phases of the project. The PDT will include the customer(s), the PM, technical experts within or outside the local USACE activity, specialists, consultants/contractors, stakeholders, representatives from other Federal and state agencies, and vertical members from division and headquarters that are necessary to effectively develop and deliver the project. The customer is an integral part of the PDT. (ER 5-1-11)

**Project Information Retrieval System**
The Project Information Retrieval System (PIRS) was developed by the U.S. Army Corps of Engineers, Rock Island District, and the USAESCH. The purpose of PIRS is to make documents electronically accessible about the investigation and cleanup of sites in the DERP and the BRAC. See http://pirs.mvr.usace.army.mil.

**Remedial Investigation/Feasibility Study (RI/FS)**
An in depth study designed to gather the data necessary to determine the nature and extent of known contamination at a site, assess risk to human health and the environment, and establish criteria for cleaning up the site. During the FS, the RI data is analyzed and remedial alternatives are identified. The FS serves as the mechanism for the development, screening, and detailed evaluation of alternative remedial actions.

**Response Action**
Action taken to prevent or minimize the release of OE so that it does not cause substantial danger to present or future public health or welfare or the environment. (ER 1110-1-8153)

**Stakeholders**
Stakeholders include 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 real property which is to undergo an OE recurring review. (EP 1110-1-18)

**Superfund Amendments and Reauthorization Act (SARA)**
Enacted in 1986, this legislation establishes standards for cleanup activities, requires federal facility compliance with CERCLA, and clarifies public involvement requirements. (42 U.S.C. 9601)

**Technical Impracticability**
A decision that may occur when current technology is not available to address the OE risks at a site.

**Technical Project Planning (TPP) Process**
A four-phase, comprehensive and systematic planning process for designing a data collection program. The TPP process helps ensure that the requisite type, quality, and quantity of data are obtained to satisfy project objectives. The TPP process is a critical component of the USACE quality management system.

**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)