

DATA ITEM DESCRIPTION

Title: Engineering Evaluation/Cost Analysis (EE/CA) Report

Number: OE-010.01

Approval Date: 20021001

AMSC Number:

Limitation:

DTIC Applicable: No

GIDEP Applicable: No

Office of Primary Responsibility: CEHNC-OE-CX

Applicable Forms:

Use/Relationship: The Engineering Evaluation/Cost Analysis (EE/CA) Report will be used to document the methods employed during site characterization and present the results of the site characterization, an analysis of Ordnance and Explosives (OE) response alternatives, and the recommended OE response alternative. This Data Item Description provides the requirements for preparing EE/CA Reports for OE projects.

Requirements:

1. Format. This report shall be printed on standard size (e.g. 8 ½ by 11 inch) white paper, with drawings folded, if necessary, to this size or to fit within pockets of this size. Pages shall be sequentially numbered. Drawings shall be of engineering quality in drafted form with sufficient detail to show interrelations of major features. When drawings are required, data may be combined to reduce the number of drawings. All attachments shall be identified and referenced in the text of the report. The report shall be legible and suitable for reproduction.

1.1 Chapters shall be numbered sequentially. Within each chapter, each page shall be numbered sequentially, starting with the specific chapter number. Within each chapter, the paragraphs shall be numbered sequentially starting with the chapter number and using a decimal system, with each section and paragraph having a unique decimal designation. Within each chapter, any figures, tables, and charts shall be numbered sequentially starting with the chapter number. Reports shall be bound in a three-ring binder. Binders shall hold pages firmly while allowing easy removal, addition, or replacement of pages.

1.2 Appendices shall be lettered alphabetically. Within each appendix, each page shall be numbered sequentially starting with the appendix letter.

1.3 A title sheet will be provided on the front of the binder and also inside the binder which includes the name of the project (site), contractor's name and address, the Corps of Engineers' contract number, Task Order/Delivery Order number, and project number, the date of the report, and the title of the report. The contractor's name/logo shall not dominate the title sheet. The title sheet shall identify the contracting agency and shall name the Geographical Corps District where the project is located. The version of the report (i.e., draft, final, etc.) shall be clearly identified on the title sheet.

1.4 Each page of the report shall contain a date footer and the Corps of Engineers' contract/Task Order/Delivery Order number. When revisions to the report are required, a revision date, revision number, Corps of Engineers' contract/Task Order/Delivery Order and amendment/modification number (if applicable) shall be included in the date footer. A dated summary page listing all revised pages shall be submitted with each revision. This summary page shall be clearly identified as such and placed directly behind the title page.

1.5 The report shall be written in common language easily understood by the general public.

1.6 The contractor shall prepare a responsiveness summary that discusses any significant public comments received and the actions taken to address those comments. The responsiveness summary will be included as an Appendix to the EE/CA Report.

1.7 The contractor shall revise the Draft Final EE/CA Report to incorporate appropriate comments received during the mandatory 30 day public review period.

1.8 All versions (i.e., draft, final, etc.) of the EE/CA Report shall be signed by the Corporate Quality Management representative attesting that the report is accurate and complies with contractual requirements.

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1.9 The Final EE/CA Report shall contain a professional engineer certification.

2. The Contractor shall determine inapplicable requirements, or requirements in addition to those listed below, that should be included in the report. The report shall contain only the data necessary to support the selection of a response alternative and future recurring reviews. Existing documentation shall be relied on whenever possible. Chapters shall be organized as follows:

2.1 Executive Summary.

a. Identify agencies involved in the project (local, state, Federal, Native American Indian, Restoration Advisory Board, etc.)

b. Summary of source, nature, and extent of OE presence.

c. Summary of site conditions (land use and public access).

d. Summary of recommended alternative(s).

e. Summary of Recurring Review Plan including a discussion of residual risk and how it will be managed.

f. Include a statement/tabulation of costs for each alternative and a full summary of costs for the recommended alternative. For each alternative, costs will be listed under the following headings:

(1) Removal Design (RD) - provided by the OE Design Center,

(2) Removal Action (RA) - provided by the EE/CA contractor, and

(3) Long Term Management (LTM) (Recurring Review) – provided by the EE/CA contractor

2.2 Chapter 1. Introduction. At a minimum the following information shall be included:

a. Regulatory Framework/Authorization

b. Purpose and Scope

c. Technical Project Planning (TPP) Team (including regulators and stakeholders) by name

d. Summary of Public Participation

e. Other environmental contamination encountered and reference to applicable reports, studies, etc. For RCWM projects, other contamination includes conventional OE.

2.3 Chapter 2. Site Description/Problem Identification

a. Site Location

b. Physical Description

c. History (Past Uses)

d. Current and Reasonably Anticipated Future Site Use

2.4 Chapter 3. Project Objectives

a. Project Team (includes Customer) goals

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- b. Regulatory/Other Stakeholder Concerns
- c. Constraints
- d. Identification of Possible Response Action Alternatives
- e. Project Objectives. List objectives identified by the TPP Team and include a statement if the objectives were met or, if not, why not.
- f. Data Quality Objectives (DQOs). Describe DQOs and include a statement if each was met or, if not, why not.

2.5 Chapter 4. Site Characterization. State from where the information was obtained, what relevant information was gained, what project objective(s) the information supported, and reference where supporting data can be found.

- a. Summation of the Analysis of Historical Records
- b. Summation of personal interviews conducted
- c. Summation of the Analysis of Aerial Photography
- d. Site Investigations Performed (to include previous investigations, removal actions, etc.).
- e. Source, Nature, and Extent of OE (type, quantity, location). Include maps of each area of investigation. Describe the general characteristics of each OE item and include photographs and/or schematics.

2.6 Chapter 5. Risk Evaluation.

- a. Description of Conceptual Site Model and development
- b. Description of the OE Risk Assessment methodology used (e.g., OERIA)
- c. OE Risk Assessment
- d. Description of the level of safety risk that exists at the site as a result of the OE contamination, using the risk assessment methodology selected

2.7 Chapter 6. Response Alternatives Evaluation.

- a. Identification of possible alternatives including proposed institutional controls reflected in the institutional analysis. Depending on the extent of the physical removal being proposed, the types of proposed institutional controls may vary. Also include a discussion on the No DoD Action Indicated (NDAI) alternative.
- b. Description of the alternatives screening process
- c. Comparative screening of the selected alternatives (Note: The OE risk assessment results become the input for the Effectiveness criterion of “Overall protection of human health and the environment”.)
 - (1) Effectiveness (Overall protection of human health and the environment, achievement of response action objectives)
 - (2) Implementability (technical feasibility, schedule requirements, Public and Regulatory/Administrative acceptance of Alternative)
 - (3) Cost

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d. Comparative Analysis of Response Action Alternatives. Compare the feasible alternatives that survive the screening analysis in “c” above.

(1) Effectiveness (Overall protection to human health and the environment, compliance with ARAR’s, long-term effectiveness and permanence, reduction of mobility and volume through treatment (toxicity is not applicable to an OE explosive hazard), and short-term effectiveness)

(2) Implementability (technical feasibility, administrative feasibility, availability of services and materials, regulatory/community acceptance)

(3) Cost (capital costs, post-removal site control costs, etc.)

2.8 Chapter 7. Institutional Control Plan (Refer to DID OE-100.01). Institutional Control Plan included here with the Institutional Analysis and Institutional Analysis Report to be included as Appendices.

2.9 Chapter 8. Recommended Response Action Alternative(s). Summarize the recommended response alternative(s). State the recommended alternative(s), including a discussion on the draft Recurring Review Plan, and give a full presentation of costs and assumptions for the alternatives listed below (as recommended). Costs will be in the form of an engineering estimate with detailed backup included in Appendix E. Costs will be rolled up into the three line items of RD, RA, and LTM.

a. NDAI

b. Physical removals recommended

c. Institutional controls recommended (if used alone or to support physical removals)

d. Implementation of the Recurring Review Plan

2.10 Chapter 9. Quality Control (QC). (Reference where supporting data can be found.)

a. QC methods used.

b. QC results.

c. Lessons learned.

2.11 Appendices.

a. Appendix A. SOW

b. Appendix B. Scrap disposition documentation

c. Appendix C. Demo activity summation tables

d. Appendix D. Institutional Analysis and Institutional Analysis Report. (Refer to DID OE-100.01.)

e. Appendix E. Cost breakdowns and assumptions (to be a detailed engineering estimate)

f. Appendix F. Responsiveness Summary

g. Appendix G. Draft Recurring Review Plan (Refer to DID OE-110.01.)

3. End of DID OE-010.01.