

U. S. Army Corps of Engineers
Ordnance and Explosives Center of Expertise (OE-CX)

OE Mentoring Program

1. Purpose:

The OE-CX is committed to the formal mentoring of U.S. Army Corps of Engineer (USACE) Major Subordinate Commands (MSCs) and their Districts who express a desire to become an OE Design Center for conventional OE design activities. This plan has been developed to formalize this commitment at a programmatic level and to facilitate the execution of mentoring activities. This plan will be appended for each participating MSC to reflect additional MSC-specific details of the mentoring program, i.e., specific mentoring needs, other agreements, projects that will be used for mentoring, schedules, and roles and responsibilities of all parties. In addition, the MSC will include a documented quality management plan that specifies their technical review process for OE design and execution and their plans on how and when they will conduct process and contractor audits.

2. Applicability:

This plan applies to all USACE commands that have an interest in and the necessary capability to become an OE Design Center.

3. References:

- a. ER 1110-1-8153, Ordnance and Explosives Response.
- b. ER 5-1-10, Corps-wide Areas of Responsibility.
- c. ER 1110-1-8158, Corps-wide Centers of Expertise Program.
- d. ER 385-1-95, Safety and Health Requirements for Ordnance and Explosives Response Actions.
- e. ER 5-1-11, Program and Project Management.
- f. ER 1110-1-12, Engineering and Construction Quality Management.

4. Background:

Currently, the U.S. Army Engineering and Support Center, Huntsville (USAESCH) is the only designated OE Design Center within USACE. Reference 3a specifies that HQUSACE may authorize Major Subordinate Commands

(MSCs) to establish other OE Design Centers when it is determined to be appropriate based on OE program funding.

Several MSCs, as well as their USACE Districts, who want to develop their expertise to become an OE Design Center have contacted the OE-CX. Discussions have taken place with some of these commands in an effort to establish how they should go about obtaining the necessary skills to execute OE design activities consistent with the references in paragraph 3 above.

The OE-CX has recommended the development and execution of a mentoring program to accomplish this end. HQUSACE has approved this approach. In addition, HQUSACE has specified that while all commands may be eligible to enter into a mentoring arrangement, final decisions regarding which commands will ultimately be designated as OE Design Centers resides with HQUSACE. The OE-CX will provide HQUSACE a recommendation prior to the final decision to designate any USACE Command.

5. OE Mentoring Program Goals:

- a. Transfer of technical OE design expertise including engineering/scientific, safety, contracting, and legal considerations.
- b. Increase knowledge and understanding of OE Program policies and procedures.
- c. Ensure USACE commands have sufficient knowledge and skills to execute OE design activities in a safe, cost effective manner that includes meaningful stakeholder involvement and participation.
- d. Ensure quality and consistency of design/execution efforts between USACE OE Design Centers.

6. Structure of the Mentoring Program:

The OE Mentoring Program will offer a broad range of training and other activities that can be modified to fit the needs of each MSC based on their current level of OE design expertise. Typical activities include:

- a. Formal training in a classroom environment. This training would consist of the following training modules:
 - (1) Policy and Guidance.
 - (2) Project Management.

(3) Engineering Concepts/Design. This module includes understanding and applying risk management techniques to OE projects and the communication of risk management to stakeholders and regulators.

(4) Safety and Quality Assurance.

(5) Metrics for Success.

b. On-the-job training, e.g., shadowing assignments in USAESCH that will provide opportunities for individuals to participate in project design activities for on-going projects. These types of assignments will be structured to provide individuals hands-on experience to develop their knowledge and understanding of: (1) contract management issues, (2) the capabilities and application of unexploded ordnance technologies, (3) OE safety considerations, and (4) the Engineering Evaluation and Cost Analysis (EE/CA) phase of OE response actions. Specific emphasis areas include the Technical Project Planning process to be used in the development of Conceptual Site Models and Data Quality Objectives. All aspects of meaningful stakeholder/regulator involvement will be a major focus area throughout the initial planning, characterization, evaluation, and selection of alternatives as well as the final response decision(s) for reducing risk at an OE site.

c. Informal training, such as ad hoc meetings to provide advice, brainstorming sessions to discuss options for dealing with project or program-level issues, impromptu telecons to discuss and resolve programmatic and/or technical project issues. The OE CX will involve the appropriate Huntsville Center resources e.g., from the disciplines of engineering, contracting, safety, legal, or quality assurance as needed.

d. Coaching and guiding, e.g., increased emphasis will be placed on ensuring that lessons learned on OE design activities are communicated to program participants. The participating districts will implement internal mentoring initiatives to broaden the knowledge base to include new employees being assigned OE responsibilities.

e. Periodic staff assistance visits from the OE-CX as requested by the MSC.

7. Integration Needs:

Each MSC participating in the OE Mentoring Program will coordinate with the OE-CX in the development of a Mentoring Plan to document MSC-specific mentoring needs. Each mentoring plan will be included as an addendum to this program-level plan. Areas of emphasis will include additional training modules or other agreements not specified in this plan, mentoring schedules, project(s) to be used during the mentoring process and to identify the responsible parties for execution of the mentoring process.

8. Duration of the Mentoring Process:

Mentoring plans will be tailored to the needs of the MSCs to the extent possible. The timeframe for completion of the mentoring process will vary depending on the MSCs level of expertise going into the program, the duration of the project or projects that are selected as mentoring projects, the level of complexity of the project(s), and achievement of the program level measures as well as any MSC specific measures that are developed to evaluate the level of success.

9. Measures of Success:

Successful completion of the mentoring process will be determined based on an evaluation of the following criteria:

- a. Demonstrates knowledge of Project Management principles. Utilizes Technical Project Planning principles, conceptual site models, data quality objectives, and meaningful stakeholder/regulator involvement based on experience in executing this process.
- b. Demonstrates understanding of applicable systems and explosives safety considerations on OE projects including a good understanding of the Department of Defense Explosives Safety Board (DDESB) requirements for the development of Explosives Safety Submissions.
- c. Knowledge of the capabilities of available advanced technologies and the ability to evaluate and apply these technologies.
- d. Knowledge of interdisciplinary engineering and design procedures that apply to OE project activities.
- e. Demonstrates a broad understanding DOD, DA, and USACE OE Program policies and procedures.
- f. Demonstrates a thorough understanding of the OE decision-making process sufficient to ensure OE response projects are designed/executed in a manner that is consistent with the National Contingency Plan and USACE policies and procedures. This includes all aspects of the EE/CA phase including impact analysis, institutional analysis, land use controls/institutional controls, and the development of recurring review plans.
- g. Demonstrates a general understanding of OE specific contractor Data Item Descriptions, e.g., minimum qualifications requirements, work plan requirements, safety considerations, etc.

10. Evidence of the level of knowledge and capability the district has acquired will be evaluated by staff assistance visits from the OE-CX, in conjunction with MSC representatives and steering committee representatives , as appropriate.

11. This plan will be modified as lessons learned during the mentoring process are captured and assessed to ensure continuous improvement across USACE.

C. DAVID DOUTHAT, P.E., CSP
Director, Ordnance and Explosives
Directorate