

Department of the Army  
SOUTH PACIFIC DIVISION, CORPS OF ENGINEERS  
333 MARKET STREET  
SAN FRANCISCO, CALIFORNIA 94105-2195

CESPD R 1110-1-10

REGULATION  
NO. 1110-1-10

20 August 1999

Engineering and Technical Services  
DESIGN AND CONSTRUCTION EVALUATION (DCE)

1. **Purpose.** This interim regulation prescribes the administrative evaluation, technical evaluation, and reporting system for the Civil Works (CW); Hazardous, Toxic and Radioactive Waste (HTRW); Military (MILCON); Support For Others (SFO); and Work For Others (WFO) design and construction programs. This is an interim regulation pending revisions to applicable regulations.
2. **Applicability.** This interim regulation applies to South Pacific Division (SPD) elements and districts.
3. **References.**
  - a. AR 415-15, Military Construction, Army (MCA) Development, dated 2 September 1998.
  - b. CESPD R 1110-1-8, Quality Management Plan, dated 14 December 1998.
  - c. CESPD R 1180-1-9, Design-Build Contracting Regulation, dated 28 February 1999.
  - d. ER 5-1-11, Program and Project Management, dated 27 February 1998.
  - e. ER 415-1-10, Contractor Submittal Procedures, dated 15 April 1997.
  - f. ER 415-1-11, Biddability, Operability and Environmental Review, dated 1 September 1994.
  - g. ER 415-1-13, Design and Construction Evaluation (DCE), dated 29 February 1996.
  - h. ER 415-1-15, Construction Time Extensions for Weather, dated 31 October 1989.
  - i. KER 415-1-17, Contractor Performance Evaluations, dated 26 March 1993.
  - j. ER 415-345-38, Transfer and Warranties, dated 31 January 1993.

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k. ER 1110-1-12, Quality Management, dated 1 June 1993.

l. ER 1110-1-261, Quality Assurance of Laboratory Testing Procedures, dated 28 April 1999..

m. ER 1110-1-8154, Automated Review Management System, dated 15 June 1995.

n. ER 1110-345-723, System Commissioning Procedures, dated 31 July 1995.

o. ER 1180-1-6, Construction Quality Management, dated 30 September 1995.

p. ER 1180-1-9, Design-Build Contracting, dated 29 October 1997.

4. **Policy.** The Design and Construction Evaluation (DCE) effort is under the overall direction of the Directorate of Engineering and Technical Services (DETS), South Pacific Division. Execution is by Chief, Construction-Operations Division (CESPD-ET-C) and Chief, Engineering Division (CESPD-ET-E) with the assistance of Directorate of Programs Management (CESPD-PM). The DCE program shall encompass all phases of the project, identify quality management successes as well as failures, and provide the basis for improvement through feedback and distribution of evaluation information. The purposes of the DCE are, first, to verify that the districts are utilizing the specified programs, systems and methods to manage the design and construction and, second, to verify the effectiveness and completeness of HQUSACE, MSC, and District design and construction management policies. The DCE team will analyze current policies and, as needed, develop proposed revisions to those policies. Deficiencies will be identified, analyzed and discussed to determine if the district's and contractor's quality assurance (QA) and quality control (QC) systems are working properly. The DCE team members will provide technical and other assistance as requested. In making the analysis, the DEC team will specifically consider the following aspects of construction projects:

a. **Construction.** All Phases of construction execution will be examined for overall soundness of design and construction practices as well as compliance with the contract provisions and Corps guidance. Contractor QC, field office QA, and contract administration will be evaluated for compliance with applicable regulations and effectiveness. Field office files will be examined to ensure that Corps of Engineers procedures are being followed. Area, Resident and Project offices will be evaluated to determine if they are adequately staffed, trained and equipped to perform their mission. Construction site safety will also be evaluated.

b. **Engineering.** The DCE team members will examine the following: incorporation of special local requirements; use of the design analysis; use of instructions to the field; the lessons learned system; designers response to field comments; responsiveness of the designers to field needs such as requests for information and shop drawings; quality control of the design aspect of design-build projects; compliance with the design; life safety issues; and overall design quality.

The DCE team will evaluate the design by examining the number and significance of change orders and requests for information. The team will also review the application of the project quality assurance plan.

c. **Program Management (PM)**. South Pacific Division Program Management will be invited to participate in all DCE visits. Program Management will evaluate the Corps' relationship with customer and overall customer satisfaction. The PM and team leader will participate in the interview with the installation engineer and local sponsor, which will be scheduled at each visit. South Pacific Division Program Management will be responsible for coordinating the participation of other program/project management staff.

5. **Procedures**. The following paragraphs outline the Design and Construction Evaluation Program procedures:

a. **Team Composition**. The DCE team may be composed of any or all of the following: a team leader selected by the SPD Chief, Construction-Operations Division (CESPD-ET-C); members drawn from SPD DETS; a Resident Engineer from another SPD District; and district technical specialists, if a specific technical expertise is required. Representatives from CESPD-PM and other division offices can be added to the team as described in paragraph 5.b below. The DCE team will be comprised of the fewest possible members and will be tailored to the specific projects visited. All technical disciplines may not be represented on all visits. District personnel are encouraged to participate in all DCE visits particularly designers with first-hand knowledge of the projects to be visited.

b. **Additional SPD Team Members**. Representatives from CESPD-PM, Contracting, Installation Support Office, Safety Office, Real Estate and other SPD offices will be notified by published schedules of pending DCE visits. These team members will review the project from their special perspective and provide input into the final trip report. These staff elements are responsible for coordinating their participation with the team leader.

c. **Selection and Scheduling**. South Pacific Division Construction-Operations Division (CESPD-ET-C) will develop a schedule of visits in the first quarter of the fiscal year from project information provide by SPD PM. The schedule will identify the district to be visited, the team leader, projects of interest and general topics of interest. The schedule will be coordinated with the district to assure the DCE visits have the minimum disruption to field offices. The memorandum announcing each evaluation visit will include the checklist, the proposed travel itinerary and a project listing. The package will be forwarded to the appropriate district office 60 days in advance of the visits. Each district will be visited at least once a year. Additional visits may be scheduled by SPD if justified by the workload or the needs of the field. The DCE visits are intended to be a learning exercise, not a faultfinding exercise or a detailed technical inspection. Accordingly, identification of the topics that will be discussed during the visit will be made known in advance so the field office can prepare.

d. **Travel Arrangements.** Each team member shall be responsible for his/her own travel arrangements in accordance with the final itinerary. The DCE team will make all necessary arrangements for local transportation and lodging for the team based on information provided by the district or field office. The itinerary will list the projects and installations selected for evaluation.

e. **Checklist.** The Construction Office Checklist (see in enclosure 1 for sample) will be sent to the Chief of Construction-Operations Division in the district to be visited prior to the visit. The cover memorandum transmitting the checklist will identify which particular checklist items need to be answered prior to the DCE visit. This will allow the field office an opportunity for self-evaluation. Not all checklist items will be required to be completed for each visit. The DCE team will review the completed form and may determine additional items of interest for further study.

f. **Reporting.** All items noted by the DCE team will be briefed at the field office. The DCE team leader will collect the input from the team members and prepare a narrative trip report that summarizes the most significant findings. Items will be identified as "mandatory" or "advisory". Only the most important items will be flagged for reply or follow-up. The team leader will sign the trip report. The final trip report will be sent to SPD Chief of Construction-Operations Division and SPDD Chief of Engineering Division. Copies will be furnished to the DCE team members. South Pacific Division Director of Programs management, field offices visited, district Chief of Construction, district Chief of Engineering, district Director of Programs Management and others as appropriate.

g. **Resolution of Mandatory Comments.** Few items will be indicated as requiring mandatory reply, however, all deficiency items noted in the report shall be promptly corrected. Deficiencies noted in one visit may be followed up during future visits, whether noted for specific reply or not. The District may appeal in writing to the Director of SPD-DETS team leader any finding or recommendation of the team.

h. **Coordination of Policy Issues.** The DCE team will encourage the field offices to report any policy issues to HQUSACE using ENG 3078, subject: Recommended Changes to Engineering Documents. The DCE team leader will initiate ENG 3078 after coordination with the field for special cases that are not site specific. In addition, when design or construction deficiencies are identified, an analysis of the current policies will be forwarded to the policy proponent along with a proposed policy revision.

i. **Meeting with Installation Engineer or Local Sponsor.** The DPW/BCE Questionnaire (see enclosure 2 for sample) or the Civil Works Sponsor Questionnaire (see enclosure 3 for sample) will be mailed to the customer by SPD in advance of the visit along with a cover memorandum introducing the visit. The District receiving the visit will schedule the time and place for a brief meeting between selected members of the DCE team and the installation

engineer or local sponsor, if available. This meeting with the customer may also include participants from the visited District including the Resident/Area Engineer, Program/Project Manager, Installation Support Officer and others. The customer meeting should be limited to the fewest number of people required.

j. **Funding.** South Pacific Division will fund its own representatives and the travel and per diem expenses for the Technical Specialists, invited Resident Engineer and others functioning as SPD representatives. The visited district will fund its own representatives.

6. **Subordinate Command Responsibilities.** Districts may supplement this regulation. A copy of the district regulation will be furnished to CESPD-ET for information.



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1. Construct Office Checklist
2. DPW/BCE Questionnaire
3. Civil Works Sponsor Questionnaire

DISTRIBUTION:  
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