| CEMP-C/E Regulation No. 415-3-11 | Department of the Army  
U.S. Army Corps of Engineers  
Washington, DC 20314-1000 | ER 415-3-11  
20 Feb 91 |
|----------------------------------|--------------------------------------------------|------------------|
| Engineering and Design  
POST COMPLETION AND DESIGN CRITERIA  
FEEDBACK INSPECTION (RCS EXEMPT:  
AR 335-15, PARAGRAPH 5-2E(6)) | Distribution Restriction Statement  
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Engineering and Design

POST COMPLETION INSPECTION AND DESIGN CRITERIA FEEDBACK INSPECTION
(RCS Exempt: AR 335-15, Paragraph 5-2e(6))

1. **Purpose.** This regulation provides the general policy and procedures for acquiring feedback information from field engineering and construction sources, and the processing and dissemination of the feedback information to appropriate levels of USACE Engineering and construction and MACOM.

2. **Applicability.** This regulation is applicable to HQUSACE elements, Major Subordinate Commands (MCS) and District Commands (DC) having responsibility for design and/or construction of facilities.

3. **References.**
   a. ER 37-345-10
   b. ER 1110-345-100

4. **Policy.** The procedures set forth in this regulation will be used in acquisition and processing of feedback information pertaining to the design and/or construction of facilities. Organizations identified in this regulation as responsible for acquisition of feedback will also be responsible for assuring that feedback information is appropriately processed for dissemination to the field. Feedback which results in changed requirements, criteria or guidance will be incorporated into applicable publication media.

5. **Post Completion Inspection (PCI).** Post Completion Inspections will be used to identify deficiencies or defects in design, construction, materials, equipment, operability, maintainability or functional adequacy of a completed facility that are not discernible until projects have been subjected to usage. To this end a PCI will be conducted approximately six months after occupancy of a facility. Post completion inspections of Air Force projects, except for medical facilities, will be made only when specifically authorized or requested by the AFRCE or command acting in this capacity.

This regulation supersedes ER 415-3-11, 28 September 1984
6. Design Criteria Feedback Inspection (DCFI). HQUSACE design guidance must be kept current in part through a program or periodic inspections of facilities that have been in use for two or more years or have been identified as having design criteria or functional problems. A two year old facility will be user-tested, but normally will not have original features obscured by alterations or repairs. The functional performance of these facilities will be analyzed and reviewed to determine effectiveness. If a problem is noted, the operational use of these facilities will be evaluated in comparison with the basis for design to ensure that improper usage is not the problem.

7. Selection and Scheduling. The HQUSACE Directorate of Military Programs, Engineering and Construction Divisions, on an annual basis, will jointly develop a list of types of facilities which are candidates for inspection. The Department of Army Facilities Standardization Program and other appropriate sources will be used to develop the list. Elements within HQUSACE and EHSC are encouraged to nominate types of facilities for inspection. Using an AMPRS generated listing of completed construction projects, Construction Evaluation Branch will select specific facilities for inspection. The selection process will include consideration of special problems or investigations, similar type facilities currently in or projected for repetitive construction, and user requests for assessment of comparable facilities. This process will be coordinated by Military Programs Engineering Division, EHSC, and other appropriate organizations. A minimum of two facilities each will be selected for both PCI and DCFI. An inspection schedule will be prepared by Construction Evaluation Branch and coordinated with Engineering Division. The coordinated schedule will be forwarded to USACE MSC commanders for comments and suggested revision. After receipt of comments from the MSC commanders, the schedule will be finalized and published with the quarterly update of the Design-Construction Evaluation (DCE) travel schedule.

8. Team Composition. A joint inspection team will visit each selected facility. This team will be composed of representatives from the Directorate of Military Programs, HQUSACE (Engineering and Construction Divisions), EHSC, representatives of the design agent, MSC and DC commanders, Installation Facilities Engineer (FE), Director of Engineering and Housing (DEH), User or Local Sponsor, host and user Major Commands (MACOM), Center of Expertise, Center of Standardization, Troop Support Agency (TSA) for Food Service facilities, Defense Commissary Agency (DECA) and other customers. The Center of Standardization will represent Engineering Division on inspections of facilities based on DA approved standard designs.

9. Pre-Inspection Action. The USACE design MSC/DC will be required to provide the following assistance and information for visits to their activities.
a. The designated "Point-Of-Contact (POC)" from each design MSC/DC to be visited will participate in the team visit and will arrange, in coordination with the installation, briefings to the inspection team by FE/DEH and/or a key staff member.

b. The POC will prepare a selected facilities inspection package consisting of the design instructions to the designer including both functional and design criteria, the as-built drawings, contract specifications with any amendments, a listing of contract modifications with the related costs, and the project's basis for design. This package will be furnished to the team upon arrival at the facility to be inspected. A copy of DD Form 1354, Transfer and Acceptance of Military Real Property, for each facility to be inspected, should be available for review by the team.

c. In addition to the above, the POC will obtain from the user a list of alterations made to each facility subsequent to original construction including the reason therefore, and a maintenance history for each facility and the operational experience with new innovative items, such as installed solar energy systems. This will be included in the inspection package.

10. Inspection Procedures. The field on-site inspection and review will include discussions with the installation Facilities Engineer, the Resident Engineer, and the local sponsor or using agency representative, as appropriate. Pertinent comments, recommendations, description of facility deficiencies, evidence of poor serviceability of materials equipment, or operations systems will be recorded. The inspection team will be responsible for evaluating criteria deficiencies and for recommending proposed solutions.

11. Reporting. The team members will record their findings and comments on ENG Form 4702-R, Observation Card, for each facility inspected. The Construction Evaluation Branch representative will prepare a written trip summary which will include information on each facility regarding specific recommendations for updating and improving design criteria. The report, i.e., findings, comments and trip summary, will be transmitted by HQUSACE (Military Programs Directorate) to the design MSC commander with copies furnished to Engineering Division and EHSC.

12. Costs. District Command costs for performing these inspections are chargeable through the Engineering Division Indirect Account to current engineering and design projects pursuant to definition of Cost Account 800, Chapter 6, ER 37-345-10. Major Subordinate Command costs will be charged through their Technical Account to its O&MA funds. MACOM, DEH, TSA, and other customers cost associated with these visits will be charged to their funds. Costs for performing these inspections on Air Force projects will be charged to Air Force funds listed in the authorizing document.
13. **Recommendations for Improvement.** The flow of feedback information should be such as to initiate improvements. Recommendations that are part of a report or a formal document continue to be reported in accordance with the regulation requiring those documents. Recommendations that are not part of a report or a formal document and lessons-learned shall be transmitted by memorandum through channels to CEMP-ES.

FOR THE COMMANDER:

[Signature]

ROBERT L. HERNDON
Colonel, Corps of Engineers
Chief of Staff

1 Appendix
APP A - ENG Form 4702-R
# APPENDIX A

**OBSERVATION CARD**

(ENG Form 4702-R)

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ENG FORM 4702-R, Apr 86

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ENG FORM 4702-R - INSTRUCTIONS

NOTE: Items marked with * need only be completed on the first card for each contract evaluated. All insertions are to be left-hand justified (start at left).

LOCATION - Self-explanatory
DESCRIPTION - Self-explanatory
RPT# - Year in which visit is made followed by sequential number for each inst/loc visited
CARD# - Sequential number on each card at each inst/loc visited
TYPE - Type of observation and evaluation/inspection. In first block insert "C" for construction, "D" for design, "M" for maintenance or "O" for other. In second block insert "F" for DCFI, "P" for PCI, "R" for DCE, and "W" for Warranty Inspection.
SPEC# - Appropriate Guide Spec number for subject addressed
CATCODE - Five digit Army Category Code or six digit Air Force Category Code
DDMMYY - Date of evaluation/inspection day, month, year
DIST - Self-explanatory
CONT# - Contract Number
1 - Increments of a contract encompassing several facilities.
   This will occur when a single contract is awarded, i.e., a barracks complex consisting of a BOQ, chapel, brigade headquarters, etc., Leave blank if contract is for a single facility.

ILH - Initials of technical evaluator
AG - Insert "AR" if Army, "AF" if Air Force, "OT" if other
P - "P" if a photograph taken, otherwise leave blank
D.CODEx - Deficiency code
SUBJECT - Brief description of subject addressed, i.e., paragraph title from specifications.
COMMENT - Self-explanatory
RECOMMENDATION - Self-explanatory
ACTION AGENCY - Agency responsible for taking action
RESPONSE - "Y" for yes response required. "N" for no response required.
BY - Name of individual making observation.
OFFICE - Office Symbol of individual making observation.

Reverse of ENG Form 4702-R, Apr 88