

DEPARTMENT OF THE ARMY
Portland District, Corps of Engineers
P. O. Box 2946
Portland, Oregon 97208

CENPP-VE
Regulation
No. 11-1-1

9 January 1984

ARMY PROGRAMS
Value Engineering

1. Purpose and Scope. This regulation provides policy, procedures and guidance for developing and executing the value engineering program within the Portland District.

2. References.

- a. Defense Acquisition Regulation (Section I, Part 17).
- b. AR 5-4, Department of the Army, Productivity Improvement Program, Chapter 4, Value Engineering, 18 August 1976.
- c. DA Pamphlet, 5-4-5, Value Engineering Handbook, October 1974.
- d. EP 11-1-3 Value Engineering Officers' Operational Guide, 15 June 1976.
- e. OCE Supplement 1 to AR 5-4, 25 July 1980.
- f. NPDR 5-1-1, Productivity Improvement Program, paragraph 7, Value Engineering, 30 September 1983.

3. Definitions.

- a. Value Engineering is an organized effort directed at analyzing the function of systems, equipment, supplies and facilities for the purpose of achieving the required function at the lowest overall cost consistent with the requirements for performance, reliability and maintainability.
- b. In-House VE pertains to studies originating within the District by District personnel responsible for or assigned to such studies.
- c. Contractor VE pertains to studies originating within the contractor's organization by contractor personnel in compliance with the VE incentive clause of the contract.
- d. Value Engineering Change Proposal (VECP) is a written proposal by a contractor to the Contracting Officer for consideration under the provisions of a contract Value Engineering Incentive Clause.

This Regulation supersedes PDR 11-1-1 dated 7 May 1979.

4. Policy.

a. Value Engineering will be an organized effort and will be actively promoted and supported in all organizational elements. Value Engineering applies to all activities of the District, but has principal application to design, construction, maintenance, operations and procurement.

b. Contractor participation in the VE program will be encouraged and informal assistance will be provided to contractors in preparing VECs.

5. Responsibilities.

a. Value Engineering Officer - The Value Engineering Officer (VEO) is responsible for the overall supervision and coordination of the District Value Engineering Program. The following duties are assigned:

(1) Establish and maintain an active and productive VE program in accordance with existing applicable regulations.

(2) Maintain a training program to assure that all engineers and key administrative officials are familiar with the principles and application of VE.

(3) Assure that there is a continuous effort in the performance of VE in-house studies in all technical elements of the District.

(4) Coordinating with the technical divisions concerned to promote active contractor participation.

(5) Assure that maximum cost reductions through VE is realized by adherence to established VE methodology.

(6) Prepare and submit progress reports to the District Engineer and higher authority.

(7) Establish and publish local regulations outlining the District policies and procedures regarding the conduct of the VE program.

(8) Selects teams of District employees to perform Value Engineering studies as required (selection will be coordinated with applicable organization supervisors.)

(9) The VEO will prepare an annual "VE Plan of Action".

b. District Value Engineering Committee -

(1) The District Value Engineering Committee membership will be as follows:

- Deputy District Engineer - Chairman
- Value Engineering Officer - Member
- Chief, Engineering Division - Member
- Chief, Construction Division - Member

Chief, Navigation Division	- Member
Chief, Project Operations Division	- Member
Chief, Planning Division	- Member

(2) The Value Engineering Committee will meet as required and as directed by the Chairman, and will perform the following:

(a) Serve as a focal point for the implementing of a broad District Value Engineering Program. Serves in advisory capacity on Value Engineering policy and acts as sounding board on VE activities.

(b) Take the lead in selecting functions, areas or end products for study as to improvements through Value Engineering. These studies normally would be those of broader scope than ones developed within a technical staff division and normally would cross organizational alignments. However, a study could emanate from within a technical staff division which, because of scope, complexity or other factors, may ultimately require coordination and further action at the committee level.

(c) Recommend assignments and responsibility for studies resulting from selections made as a result of (b) above, including recommendations for individual personnel assignments from various organizational elements for studies requiring a diversity of talents or which cross organizational lines.

(d) Promote and develop unified teamwork efforts by organizational elements engaged in Value Engineering studies and provide overall guidance.

(e) Review and evaluate the results of completed studies.

(f) Expedite the implementation of the approved studies.

c. Technical Division Staffs. Technical division staffs are responsible for the following:

(1) Provide continued motivation to personnel for participation in the VE program and application of VE principles and techniques.

(2) Select VE study subjects within their spheres of responsibility, particularly those involving high costs.

(3) Place into effect approved improvements obtained from Value Engineering studies.

(4) At the request of the Value Engineering Officer, provide personnel to assist in studies.

(5) Make available, personnel to receive Value Engineering training.

(6) Cause prompt evaluation and action, including necessary coordination to be taken on Value Engineering Change Proposals (VECP) submitted by contractors relating to contracts which are within their primary areas of responsibility for administration.

(7) Provide necessary information to the Value Engineering Officer for reporting purposes. Provide representatives for VE study groups as needed, and for providing assistance to the VEO within their respective organizations. Representatives will be employees who have adequate technical background, sound judgment, vision, initiative and a positive attitude toward the program.

d. Contracting Officer's Representatives (COR) and Personnel Charged with Contract Administration - COR's and all others responsible for the administration of contracts; supply, construction, maintenance and ship repair are responsible for creating and maintaining an awareness of the importance of the V.E. program, among both government and contractor personnel.

(1) Those in charge of contract administration and personnel under their supervision shall seek out items with high V.E. potential, and report them to the VEO through channels for possible study.

(2) At each preconstruction conference for contracts having a VE incentive clause, develop the contractor's understanding and encourage him/her to utilize said clause.

(3) Where practicable area, resident, and construction project engineers will perform in-house studies with resident office personnel. These studies shall be coordinated with the Value Engineering Officer.

(4) Area, resident, and construction project engineers and other personnel assigned responsibility for the administration of contracts will expedite all VECP's and will promptly forward them to the technical division involved for evaluation. Recommendations should accompany the VECP but may follow if necessary.

(5) The VEO will be advised of all potential VECP's including informal proposals.

6. Procedures.

a. Method of Selecting In-House Objects - Objects for a special in-house VE study will be selected in the following manner:

(1) Selection of objects by the District Value Engineering Committee or the Value Engineering Officer.

(2) By recommendation of District Officials to the VEO.

(3) By a special review team, established by the V.E. Committee with District Officials, to review construction projects, especially those with an estimated cost of \$1,000,000 or more. The teams will review projects for high potential V.E. study objects and recommend items for further study with emphasis on design and life cycle cost. Findings will be reviewed by the VEO or the V.E. Committee which will select those items for further study by VE teams. Selection of VE study objects will consider the overall effect on the District major objectives, programs and schedules.

Suggested checkpoints for reviewing projects are:

- (a) After completion of the General Design Memo.
 - (b) Draft of the Feature Design Memo.
 - (c) Review after the design is sufficiently complete for substantive comment.
 - (d) At checkpoints for work by A-E.
 - (e) Final review within 30 days before formal advertising.
- (4) By an employee in the District office who uses initiative to suggest subjects for VE to the VEO. This may be done by informal means.

b. Performance of In-House VE Studies.

(1) Objects selected will be subject to a formal VE effort utilizing the team approach. Preferably, the study team will be composed of not less than three members. Value Engineering studies will follow the format as outlined in EP 11-1-3 as a minimum. The VEO will define the scope of the project to the selected team chief, schedule the study, and provide the necessary work and proposal summary book. The team chief will be responsible for obtaining data, arranging meetings, leading the study and reporting the results. The VEO will be available for guidance.

(2) All completed studies will be forwarded to the VEO by the VE study team.

c. Contractor Initiated VECP:

(1) Contractors will submit their Value Engineering change proposals to the COR in accordance with the VE incentive clause of the contract. The COR will advise the VEO of the action as soon as possible.

(2) The COR will analyze the proposal, and promptly forward it to the Chief, Engineering Division, with his/her recommendations to follow if necessary. A copy of all correspondence will be furnished to the Chief, Construction Division and the VEO.

(3) The Chief, Engineering Division, will expeditiously notify the COR of approval or disapproval in writing with copies to the Chief, Construction Division and the VEO. In case of disapproval, a detailed technical statement of reasons will be set forth.

7. Cost Accounting. Costs incurred by personnel in conducting formal value engineering studies will be identified as value engineering under the appropriate project by the use of a special cost account number for each study which will be provided by the VEO. The establishment of the appropriate account number will be coordinated with the Comptroller organization by the VEO. This

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procedure will apply regardless of the appropriation involved. These procedures apply to VECP's as well as in-house studies.

8. Value Engineering Goals. Monetary goals will be established at the beginning of each fiscal year for each technical division concerned. The VEO will provide the District Engineer a recommended target for each organization for the next fiscal year by 1 August of each year.

9. Training.

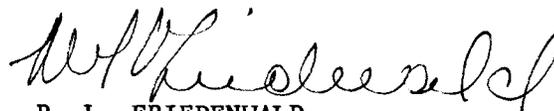
a. All engineers, scientists, and appropriate other staff within the District will be given at least a four-hour indoctrination course in VE. New employees will be indoctrinated as soon as practicable.

b. The VEO and an adequate number of engineers will be given at least 40 hours of training in VE. If practicable VE teams will be comprised of at least one member who has received 40 hours training in VE techniques.

* 10. General Guidelines. When a VE study involves a change in approved design memorandum, the Engineering or Planning Division will be responsible for obtaining approval by higher authority. After approval is received, the VEO will be notified. *

11. Reports. The VEO will be responsible for preparation of all reports required by higher authority in accordance with OCE Supplement 1 to AR 5-4. This includes:

- Summary of In-House Value Engineering Actions, ENG Form 4518-R,
- Summary of VECP's submitted by Contractors, ENG Form 4519-R,
- and Value/Management Improvement Action, ENG Form 4607-R.



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Commanding

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