



US Army Corps
of Engineers

ENGINEERING AND CONSTRUCTION BULLETIN

No. 2010-1

Issuing Office: CECW-CE / CECW-B / CEMP-I

Issued: 14 Jan 2010

Subject: FY10 Value Management/ Engineering (VM/E) Execution Guidance

Applicability: Guidance

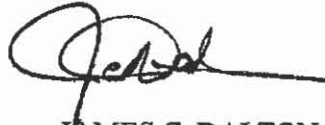
Note: ER 11-1-321, Army Value Engineering is currently being updated for release later this FY. As such, this ECB modifies and takes precedence.

1. The subject VM/E guidance is attached and issued for immediate implementation.
2. The Office of Federal Procurement Policy Act (41 U.S.C. 432), requires each executive agency to establish and maintain cost-effective Value Engineering procedures and processes. The WRDA 1986 (PL 99-662) requires VM/E on Corps Water Resources Projects. The Office of Management and Budget (OMB) Circular A-131 requires Federal agencies to apply VM/E procedures to all projects with estimated costs of \$1 million or more (\$2 million for Construction), with annual reporting to Army, Defense, and OMB.
3. Value Engineering is inherent to the Corps' business process. Since its inception, the Corps has stretched over \$5.9 billion in precious taxpayer funds via its Value Management program. In 2009, the Corps invested \$9.2 million in the program, performed 376 workshops, and had a return on investment of over 43 to 1. The net USACE VM/VE savings and cost avoidance for FY09 was a total of \$388 million.
4. The Office of the Secretary of Defense (OSD) sets annual goals based on 1.5% of the Agency's Total Obligation Authority (TOA) per OMB. The FY10 USACE TOAs are \$21.6 Billion for Military, \$11.4 Billion for Civil Works. The associated goals are as follows:
 - a. Cost Avoidance/Savings. \$323 million for Military, \$171 million for Civil Works.
 - b. Program Coverage. 506 Studies for Military, and 268 Studies for Civil Works. (USACE MSC Goals are in the Enclosure).
5. VM/E must be incorporated early into the Project Management Plan (PMP) for all required projects, including resources, unless a formal exception/waiver has been granted. The FY10 goals are extremely challenging, we recommend that offices utilize the VM/E Officers & Program Managers as a critical part of their staff in order to ensure effective implementation.

CBCW-CE / CECW-B / CEMP-I (1100)

SUBJECT: FY10 Value Management/ Engineering (VM/E) Execution Guidance


6. For more information, please contact Mr. Jeffery T. Hooghouse, HQ, Chief of Value Management/Engineering, 202-761-5533.



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DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
FY10
CW/MP VALUE MANAGEMENT EXECUTION GUIDANCE

1. References.

- a. USACE Business Process Manual, Value Management Plan (REF8023G)
- b. USACE Consolidated Command Guidance (CW12, CW13, MP13, MP14)
- c. ER 11-1-321, Value Engineering for Army Programs
- d. Tab E (Value Management) To Appendix 1 (Army Military Construction, Army Family Housing and Army Reserve Military Construction) To OPORD 2009-30 (FY10 Military Programs Execution).
- e. Value Management COP- Program Management Plan

2. Purpose. The purpose of the Corps of Engineers Annual Value Management /Engineering (VM/E) Execution Guidance is to assign responsibility for annual program execution, to assign VM/E Targets/Goals, and to stimulate positive action for the Corps mission accomplishment within available resources. This guidance provides a means for measuring progress toward assigned DOD goals. ER 11-1-321, Army Value Engineering is currently being updated for release later this FY. As such, this ECB modifies and takes precedence.

3. Scope. The USACE VM/E Program is integrated in the U.S. Army Corps of Engineers (USACE) PMBP (Reference A above) and is applicable to all USACE organizational elements, installations and activities. The VM/E program is applicable to all work performed by the Corps of Engineers for other DOD Departments and Executive Branch Agencies as part of standard USACE services.

4. Objectives. The Annual VM/E Execution Guidance seeks to improve overall value by reducing costs and improve operations through sound application of value methodology. Program goals and objectives emphasize that VM/E studies shall avoid costs while maintaining and/or improving design quality.

5. Responsibilities.

a. The DCG for Military and International Operations, and the DCG for Civil and Emergency Operations are responsible to establish an effective Agency VM/E Program. The HQUSACE, Chief of Engineering and Construction COP, in concert with the Chiefs of Program Integration Division (MP and CW), are responsible to support and implement the program. The HQUSACE Chief of VM/E (CECW-CE) serves as the agency's senior management official responsible for program execution per DOD & OMB regulation, and establishes/maintains VM/E programs, procedures and processes to provide for the aggressive, systematic development and maintenance of the most effective, efficient, economical and environmentally-sound solutions,

b. Commanders of Divisions, Districts and Engineering Centers are responsible to establish and maintain an aggressive VM/E program that includes the development of a

comprehensive Value Program Management Plan for application within their AOR. They will ensure that VE studies are performed on all major projects with projected total project cost exceeding \$2,000,000 and on supply, service and O&M projects with current working estimates exceeding \$1,000,000. Their performance will be monitored at the Directorate Management Review and Command Management Review.

c. Directors and Chiefs of other Divisions and/or Communities of Practice at Headquarters USACE will assist the Chief of Engineering and Construction in achieving command goals and objectives by supporting and requiring field offices to undertake VM/E studies of all projects having potential for quality/performance improvement and/or construction cost reductions.

6. FY 10 VM/E Goals and Objectives.

a. Monetary (Savings and Cost Avoidance). Monetary goals are assigned to Division Commanders by HQUSACE. Civil Works and Military VM/E goals are based on 1.5 percent of current year Total Obligation Authority (TOA) as established by OSD. Annual VM/E Program goals (by MSC) are attached.

ANNUAL: Green > 95%, Amber >80%, Red <80% of goal.

b. Study (Program Coverage). All procurement acquisitions that are Federally funded and managed by the Corps of Engineers including, but not limited to, Civil Works (CW) and Military Programs (MP) and projects with total project cost of \$1 million or more (\$2 million for construction projects) regardless of the number of phases to accomplish the project. All construction projects with CWE exceeding \$2,000,000 will be included in the CW goal. All other service, supply and O&M acquisitions exceeding \$1 million dollars will be provided studies as required. All military construction projects with CWE exceeding \$2,000,000 will be included in MP goal.

ANNUAL: Green is 95% or greater, Amber is 85% to 95%, and Red is less than 85%..

c. Projected Savings. Measurement of potential study success will be by reporting potential VE savings offered from acceptable VE proposals including cost avoidance, gauged against the project/program CWE and the actual cost of VM/E study. This will yield a gauge of potential study effectiveness and return on investment (ROI). $ROI = \text{Forecast Study Savings} / \text{Study Costs}$.

ANNUAL: Green = $ROI > 20$, Amber $ROI > 10$, Red $ROI < 10$

d. Qualitative Improvements. Non-monetary project or process enhancements produced by VE efforts will be reported quarterly. This will include items such as value added project/program improvements, added sustainability, schedule improvements, quality improvements, functional improvements, advanced construction items, plan validation, etc.

e. Waivers. Waivers should be kept to a minimum and requested only in unusual cases. Requests must contain detailed/adequate justification. The goals established by OMB & OSD are extremely ambitious, and require maximum application of VM/E in order to achieve.

- i. Waiver requests should be generated by the Project Manager with the District Value Engineering Manager/Officer (VEM/O), and forwarded to the DDPM & District Commander for concurrence.
- ii. If concurrence received by District Commander, the waiver request will be forwarded to the Division Value Program Manager/Officer (VPgM/O) for coordination with the Programs Director and concurrence by the Division Commander.
- iii. Upon concurrence of the Division Commander, the Division VPgM/O will forward to the Chief of Value Management/Engineering (HQUSACE), through the Regional Integration Team, for final decision.
- iv. If approved, the waiver request will be added to VM/E program record and reported to OSD with annual reports. Disposition will be returned through the same VM/E Chain as above.
- v. Failing to conduct a required VM/E study will be recorded by VEM/O as a "Study Missed", not Waived. If a study is waived, District/Division targets will be adjusted accordingly. However, if a Project Team fails to conduct a required study, it is likely that the District will fail to meet their required target.

DDPM's and District Commanders are responsible for VE Program success within their AOR.

f. Upward Reporting of Study Results. Program Goals and performance will be monitored at the Directorate Management Review and Command Management Review. Mechanism for reporting is through the Value Engineering Reporting System (VERS) which pulls project data directly from P2. Additionally, project study reports will be loaded to the VM/E COP Sharepoint site, along with a study executive summary document (see following SharePoint site link for sample Template in folder "Sample VM/E Study Executive Summary".) in order for the study to count towards Program Goals.
https://kme.usace.army.mil/VE/USACE_VE_Teamsite/default.aspx

g. Contractor VE Change Proposals (VECP). The Value Engineering Incentive Clauses of the Corps of Engineers Construction Contract General Provisions encourage contractors to submit VECPs. The U.S. Army Corps of Engineers districts, divisions and contracting activities are requested to emphasize the use of VE incentive provisions in construction contracts and motivate contractors to increase VECP submissions. The Notice of Award letter from the contracting office shall have a statement about the VECP program and the procedures and goals. The Corps-wide goal for FY10 is to receive 50 VECPs. To achieve this goal, the following initiatives must be taken:

(1) During visits to construction sites, division and district commanders and representatives should encourage contractors to submit VECP.

(2) When a contractor submits five or more VECPs, or when the net Government savings from the contractor's submissions exceed \$100,000, the division and/or district engineer will recognize the contractor's contribution with a letter of appreciation, a certificate of achievement or other appropriate award. A copy of each letter of appreciation or award recognition will be forwarded to HQ, Chief of Value Management/Engineering (CECW-CE).

(3) Assure that each VECP submitted receives prompt and objective evaluation. Promote contractor submission of VECP during preconstruction conferences and at local chapter meetings of the Associated General Contractors of America.

(4) Copies of all VECPs submitted (regardless of and including disposition) will be placed in Sharepoint VM/E CoP-- Value Engineering Change Proposal (VECP) Information folder (FY10 VECPs) for Agency Program record. (Link: https://kme.usace.army.mil/VE/USACE_VE_Teamsite/default.aspx)

h. In-House VE Proposals. Management at every level will encourage Corps personnel to promote VM/E study efforts and ensure that VM/E studies are provided on all eligible projects. VM/E is an integral part of the planning design cycle and will be applied early. This will place emphasis on improving design quality and reducing life cycle costs. Additional focus of VM/E Studies will include validation of /recommendations for Energy / Sustainability quality improvements, Life Cycle Cost improvements, Materials/Methods improving durability, constructability, and maintainability of project, etc.

i. Review. All VE studies and VECPs shall receive the same level of technical and management review as any other design or technical modification. Rejections of individual proposals with gross savings of \$1,000,000 or more (or multiple concurrent proposals from the same contractor which total this amount) must be approved by the MSC Commander and forwarded to HQ, Chief of VM/E (through District VEM/O / MSC VPgM/O) for Agency Program record. When the total gross VECP proposal rejection exceeds \$1,000,000, these proposals will be submitted to the MSC Commander for review/concurrence with district decision, with final decision being forwarded to HQ, Chief of VM/E (through District VEM/O / MSC VPgM/O) for Agency Program record.

j. Funding. Program/Project managers are directed to budget for VM/E study funds for each project with an estimated construction cost of \$2,000,000 or greater. On supply and service contracts exceeding \$1,000,000, the project managers shall budget for VE Studies.

k. Training. The Corps of Engineer's goals for FY 10 is to train 50 engineers and other professionals in the USACE 40-hour VE workshop or alternative VE training. Corps personnel should receive VM/E training if their expertise or position has potential to assist in VE success. District/operating division sponsored workshops are encouraged as a rapid means for performing multiple VM/E studies in a short time and expand local VE capability. The Corps of Engineers also will train at least 50 individuals in introductory VE seminars of VM/E (through District VEM/O / MSC VPgM/O) for Agency Program record.

k. Personnel. ER 11-1-321 requires Corps activities to appoint full-time District/Center Value Engineering Managers/Officers (VEM/O) and authorizes an Assistant when the workload warrants. Intent is to manage VM/E program regionally and VEM/Os as regional assets, to cover regional workload verses managing at the District level. This provides VM/E professionals residing at District/Centers with needed experience, while distributing expertise/workload across the Division. Close coordination with DDPM/ District Commander will ensure program success. To improve programs results, further consideration will be given to:

(1) Increasing the use of interns, newly hired engineers and technical staff to assist VEM/O by assigning them to the VE office and to study teams when possible.

(2) Contracting for VE services (ie., CVS Facilitator) where USACE in-house or Community of Practice personnel are not available.

(3) Increasing use of VE Training Workshops (at least one workshop per year for each division) or until all eligible untrained personnel have attended.

(4) Utilizing VE-trained personnel from other districts, divisions or centers for VE study teams.

(5) Adequate resources will be assigned to ensure continuous productive VE effort.

7. FY 10 VE Additional Initiatives:

a. Training. The VM/E COP will develop a Value Program Manager/Officer Introduction course, Extensive Mentoring Plan, and QA/QC Training for VEM/Os this FY, for release upon completion.

b. USACE Regional IDIQ Contracts: MSC VPgM/O's will work within their AOR to put in place an IDIQ contract for VM/E Services. The Capacity for these contracts will be adequate for their planned Regional Program, plus additional capacity for project adds and other USACE-wide access/use. (See VM/E COP Sharepoint site for sample IDIQ Template – folder titled "Sample IDIQ Solicitation").
https://kme.usace.army.mil/VE/USACE_VE_Teamsite/Shared%20Documents/Forms/AllItems.aspx

c. SAVE Certification: District VEM/Os & Division VPgM/Os will pursue Specialization within the VM Industry through SAVE International as an Associate Value Specialist (AVS) at a minimum, within this FY, and will pursue qualification and certification as a Certified Value Specialist within two years of appointment to VM/E position. (http://www.value-eng.org/education_certification.php). Additionally, VEM/Os and VPgM/Os will ensure that they indicate the Annual SAVE Conference (w/ Government Conference) on their IDP's to obtain the required LUs/CEUs to maintain/obtain specialty certifications.

d. QA of VM/E Studies/Reports: MSC VPgM/Os will audit/evaluate periodically the studies/reports being performed within their AOR for strict adherence to the VM Standards (http://www.value-eng.org/about_vmstandard.php) as identified by SAVE International. Additionally, ensure that Study Reports and Summaries are posted to the VM/E COP Sharepoint site (https://kme.usace.army.mil/VE/USACE_VE_Teamsite/default.aspx) before project can be counted within program metrics on Quarterly reports.

7. For additional information POC for this guidance is, Jeffery T Hooghouse, AIA, DBIA, CVS, Chief of Value Management/Engineering, HQUSACE. (202-761-5533).

**FY10
USACE MSC PROGRAM COVERAGE GOALS
As of January 2010**

DIVISION	No. OF PROJ*		CW 290****
	MP**	CW 140&300***	
HNC	0	0	0
LRD	69	85	16
MVD	0	49	15
NAD	80	23	3
NWD	59	99	23
POD	29	7	0
SAD	114	25	0
SPD	12	46	7
SWD	90	48	4
TAD	128	0	0
TOTAL	581	268	68

* To be adjusted for Congressional Additions/Deletions

** Projects with CC800 milestone dates in current FY for MP.

*** Projects with CW140 and CW300 milestone dates in current FY for CW. Projects less than \$2M have not been eliminated due to limited data in P2.

**** Projects with CW290 milestone date in current FY

**FY10
USACE MSC PROGRAM COVERAGE GOALS**

	MP TOA (K)*	MP Goal (K)	CW TOA (K)**	CW Goal (K)
HNC	\$ 57,460	\$ 862	\$ 0	\$ 0
LRD	\$ 1,505,163	\$ 22,577	\$ 1,308,821	\$ 19,632
MVD	\$ 0	\$ 0	\$ 5,142,579	\$ 77,139
NAD	\$ 5,554,827	\$ 83,322	\$ 580,656	\$ 8,710
TAD	\$ 2,135,788	\$ 32,037	\$ 0	\$ 0
NWD	\$ 1,143,873	\$ 17,158	\$ 970,367	\$ 14,556
POD	\$ 756,075	\$ 11,341	\$ 92,160	\$ 1,382
SAD	\$ 3,298,647	\$ 49,480	\$ 1,385,718	\$ 20,786
SPD	\$ 915,029	\$ 13,725	\$ 724,613	\$ 10,869
SWD	\$ 577,900	\$ 8,669	\$ 1,175,530	\$ 17,633
TOTAL	\$ 15,944,762	\$ 239,171	\$ 11,380,444	\$ 170,707

* FY10 CEFMS Estimated Obligations Dec 09 - To be adjusted Quarterly

**FY10 Scheduled Obligations a/o 16 December 2009

Subject: Additional Directives and Clarifications for ER 11-1-321, Value Engineering for Army Programs

Applicability: Directive

Reference:

a. ER 11-1-321, Value Engineering for Army Programs, Dated

1. The purpose of this ECB is to provide additional directive and clarifications to ER 11-1-321, Value Engineering for Army Programs.
2. Attached are specific modifications to ER 11-1-321 effective 30 Sep 2009.
3. Point of contact for this ECB and the Value Engineering Program is Jeffery T Hooghouse, Chief, Value Management/Engineering, HQUSACE, 202-761-5533, Jeffery.T.Hooghouse@usace.army.mil.

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