VE REQUIREMENTS NARRATIVE

CONTEXT FOR ANSWERING THE QUESTIONS:
“WHY DO WE HAVE TO DO VE?”
“WHO HAS AUTHORITY OVER VE?”
“…THE CUSTOMER WON’T PAY FOR VE!”


The content of this VE Requirements Narrative, in conjunction with the following references should be reviewed in their entirety by every Value Engineering Officer (VEO) and Value Program Manager (VPgM) and used to answer any program or project level VE questions or issues that might arise regarding “Why do we have to do VE”, “Who has authority over VE” and “The Customer won’t pay for VE” prior to asking for guidance.

1. OMB Circulars A-131 (VE Website (link above) – What’s New)
2. OMB Circular A-11 Capital Programming Guide Appendix 7 Value Management (VE Website – Useful Links)
3. DoDI 4245.14 DoD VE Program (VE Website – What’s New)
4. Historical VE Timeline (VE Website - Useful Links)
5. USACE VE Policy Memos, Chief of Value Engineers Policy Memos (VE Website – Policy Menu - COVEs)
6. Process Maps (VE Website – Policy Menu)
7. Legal Reviews (VE Website – Policy Menu)
8. Frequently Asked Questions (VE Website - VE 101)
9. Link to HQUSACE VE Website above.

OMB Circular A-131 Value Engineering requires each agency to designate a Senior Accountable Official (SAO) to coordinate, oversee and ensure the appropriate consideration and use of VE. General Robert L. Van Antwerp, Commander, HQUSACE assigned Mr. Jeffery T. Hooghouse, Chief Value Officer (CVO), HQUSACE to be the qualified Agency SAO for assigned mission areas. The responsible person for interpreting VE requirements contained in OMB Circular A-131 Value Engineering, DoD Instruction 4245.14 DoD Value Engineering (VE) Program and VE components of AR 5-1 Management of Army Business Operation for USACE is the agency SAO.

Engineering Regulation (ER) 11-1-321 Value Engineering, Change 1 and associated policies are the “implementation” of VE requirements for Department of Army (for USACE assigned mission areas). It is the VEOs’ responsibility to execute according to ER 11-1-321, Change 1 and HQUSACE policies and not in accordance with individual interpretations or interpretations of individual mission areas or offices.

The Value Engineering Officer in each district is delegated limited legal authority by the HQUSACE CVO (SAO) for the determination of appropriate “application” of the VE requirements. The HQUSACE CVO (SAO) is the sole legal authority for interpretation of statutory and regulatory requirements for USACE. Any determination other than by the District VEO or HQUSACE SAO is a clear departure from the legal foundation and authority of the VEO/SAO. The VEO must establish, document and advise Sr. Leaders and Commanders of the legal requirements to ensure due diligence and compliance with public law and OMB policy.

Link to Legal Reviews on HQUSACE VE Website:
https://hq.usace.afpims.mil/ValueEngineering/LegalReview.aspx
Starting with the Public Law that established the requirement for VE and following with the OMB Circular, DoD Instructions, Army Regulation, USACE VE ER and USACE Policy the VEO/VPgM is walked through the VE statutory and regulatory requirements as follows:

- Public Law 111–350 §3, Jan. 4, 2011, 124 Stat. 3718 41 USC 1711 - Value Engineering
- Department of Defense Instruction (DODI) 4245.14, DoD Value Engineering (VE) Program dated Sep 10, 2012
- Army Regulation 5-1 Management of Army Business Operations HQDA 12 Nov 2015
- ER 11-1-321 (Change 1), Army Value Engineering, 01 January 2011
- USACE VE Policy Memorandum Subject: Change to Federal Requirement for Value Engineering (VE), Lower Threshold Limit Feb 13, 2013
- COVE Policy Letter #2015-01 Will Threshold be Raised to $5M for Value Engineering
- COVE Policy Letter #2015-02, USACE VE Workshop Standard and Evaluation Index
- COVE Policy Letter #2015-03, VE Screening/Strategy Selection & Value Management Plan (VMP) Tool
- OSD-ATL (Kendall Memo), Value Engineering (VE) and Obtaining Greater Efficiency and Productivity in Defense Spending, 06 DEC 2011
- COMMANDER’S INTENT: Greater Efficiency and Productivity through Value Engineering (VE) (25 APR 2012)
- Compliance with Federal Requirements for Value Engineering, 22 May 2013, General Walsh DCG USACE for Civil and Emergency Response and General Cox, DCG USACE for Military and International Operations.
- Designation of Senior Management Official Responsible for Value Engineering Feb 2011, General Robert L. VanAntwerp, CG USACE

The public law that repealed WRDA 1986 requirement for Cost Effectiveness review (VE) for water resources projects greater than $10M is addressed along with USACE policy established by the VE ER 11-1-321 requiring VE study during both Feasibility and Design.

- Public Law No: 113-121 Section 1004. Removal of Duplicative Analysis (6/10/2014)

FAR Part 48 prescribes policies and procedures for using and administering value engineering techniques in contracts. FAR Part 48.201 Clauses for Supply or Service Contracts and FAR Part 48.202 Clause for Construction Contracts requires the contracting officer to insert the clauses at 52.248-1 Value Engineering, 52.248-2 Value Engineering Architect/Engineer and 52.248.3 Value Engineering Construction.

- FAR Part 48, Value Engineering

ER 5-1-11 establishes PM responsibilities:

- ER 5-1-11 U.S. Army Corps of Engineers (USACE) Business Process revised 12 Jan 2007
EXPANDED LIST REFERENCES WITH EXCERPTS


“Each executive agency shall establish and maintain cost-effective procedures and processes for analyzing the functions of a program, project, system, product, item of equipment, building, facility, service, or supply of the agency. The analysis shall be -
(1) performed by qualified agency or contractor personnel; and
(2) directed at improving performance, reliability, quality, safety, and life cycle costs.”

http://www.whitehouse.gov/sites/default/files/omb/assets/OMB/circulars/a131/a131-122013.pdf

The Office of Federal Procurement Policy (OFPP) in the President’s Office of Management and Budget is responsible for defining the Value Engineering requirements of 41 U.S.C. 1121, 1711. The OMB Circular A-131 is issued pursuant to 41 U.S.C. 1121, 1711. The OFPP plays a central role in shaping the policies and practices federal agencies use to acquire the goods and services they need to carry out their responsibilities. OFPP was established by Congress in 1974 to provide overall direction for government-wide procurement policies, regulations and procedures and to promote economy, efficiency, and effectiveness in acquisition processes. OFPP is headed by an Administrator who is appointed by the President.

OMB Cir A-131, dated December 26, 2013, is the Federal Directive that “…requires federal agencies to consider and use Value Engineering (VE) as a management tool to ensure realistic budgets, identify and remove nonessential capital and operating costs, and improve and maintain acceptable quality in program and acquisition functions…”

The OMB Circular currently requires VE for new agency projects and programs when the project cost estimate is at least $5 million or such lower dollar threshold as determined by the Senior Accountable Official (SAO) and identified in the agency’s VE guidelines. Also the OMB Circular requires senior agency management to “maintain policies and procedures to ensure VE is considered and integrated, as appropriate, into the planning and development of agency programs, projects, activities, as well as contracts for supplies and services, including performance based, architect-engineering, and construction contracts and to ensure that “agency VE policies and practices support effective, efficient, and environmentally sound arrangements for conducting the work of their agencies and provide a sound basis for identifying and reporting accomplishments.”

https://www.whitehouse.gov/sites/default/files/omb/assets/a11_current_year/capital_programming_guide.pdf

“The value management methodology (also known as value analysis, value engineering, value planning, etc.) should be considered for use in the Planning and Budgeting, Acquisition, and Management-In-Use Phases of capital programming. The value methodology uses a systematic job plan to identify essential functions necessary to accomplish an activity, analyze those functions, and generate alternatives to secure them at their greatest worth on a life-cycle benefit-to-cost basis. By following the process defined in the job plan, the use of the value methodology
will facilitate the selection through evaluation and analysis of the "best value" alternative for those functions. The process provides plans and actions to acquire and implement the selected alternatives. The Integrated Project/Program Teams (IPT) may employ the use of the value management methodology in several ways including a professional value management specialist as a member of the team, using team leaders trained in the value management methodology, or using value specialists (either agency employees or industry consultants) to perform studies.”

IV. Department of Defense Instruction (DODI) 4245.14, DoD Value Engineering (VE) Program dated Sep 10, 2012

Implements section 1711 of title 41, United States Code (Reference (b)) and Office of Management and Budget Circular No. A-131 (Reference (c)) by establishing policy, assigning responsibilities, and defining authorities for the effective administration of the DoD VE Program.

“DoD Components shall implement a VE program to improve military worth or reduce acquisition and ownership costs pursuant to References (b) and (c) wherever it is advantageous. The Component VE senior management official or construction agency VE senior management official (in the case of construction projects) can decide to not require VE in cases deemed not advantageous (financially, scope or schedule wise) to the Government.”

The USD(AT&L) shall: “Establish policy for the DoD VE program and provide guidance on using VE to implement affordability, cost controls, and incentivizing productivity and innovation in accordance with better buying power and designate the qualified Senior VE Management Official for the Department”

The Heads of the DoD Components shall: “Designate a qualified senior VE management official, who will monitor and coordinate DoD Components’ VE efforts in accordance with Reference (c), and establish a VE representative at each subordinate organization engaged in acquisition to include foreign military sales, service, support, construction to include foreign military financing, and operations and support activities and oversee DoD Component implementation of this Instruction.”

V. Army Regulation 5-1 Management of Army Business Operations HQDA 12 Nov 2015

This regulation establishes responsibilities and policy for the management framework of Army business operations by U.S. Army organizations. This regulation emphasizes the importance of managing Army business operations, establishment of a strategic plan, assessing performance, executing continuous improvement and effectively and efficiently executing the responsibilities under Title 10, United States Code, throughout the institutional Army. AR 5-1 directs and explains how to develop and implement sound management principles and practices.

“The Commanding General USACE will … Formulate, implement, manage, evaluate the Value Engineering (VE) Program for the Army’s engineering and construction, real property, and technical policy.”

“Para. 3-4 Business operations innovation Section d. Value Engineering.
(1) AMC and USACE, in accordance with ASA (ALT) delegation of authority, develops Army VE guidance.
(2) **VE** is a systematic approach to analyzing the functions of systems, equipment, facilities, services and supplies to ensure they achieve their essential functions at the lowest life cycle cost consistent with required performance, reliability, quality, and safety. Implementing the VE process on a problem typically increases performance, reliability, quality, safety, durability, effectiveness, or other desirable characteristics.

(3) As a management discipline, VE incorporates the total resources available to an organization to achieve broad management objectives. Thus, VE is a systematic approach for attaining a return on investment by improving what the product or service does in relation to the money spent on it.

(4) The Army program vertically integrates with the DoD VE program and has two components:
   a. An intra-DoD and/or Army effort in which VE is performed by military and civilian personnel, [Before Award] and;
   b. An external effort (VE Change Proposal) in which VE is performed by DoD contractors and applied to contracts after DoD approval [After Award]

(5) The mandatory VE provisions in most DoD contracts encourage contractor participation and thereby realize the full benefits from cost-reduction opportunities and innovations. These contract provisions provide the basis for the contractor to obtain a share of the savings that result from an approve VE effort.

(6) AMC is the office of primary responsibility for VE.”

**VI.** ER 11-1-321 (Change 1), Army Value Engineering, 01 January 2011
http://www.usace.army.mil/Portals/2/docs/Value%20Engineering/ER_11-1-321-Change1_Army_Program-VE.pdf

This regulation provides general policy, procedures, and a framework for the execution of the Value Engineering (VE) elements within the Project Management Business Process (PMBP) of the U.S. Army Corps of Engineers (USACE). Value Management (VM) is integrated through the Value Management Plan (REF8023G) from the U.S. Army Corps of Engineers Business Process Manual.

The Chief of Engineers (COE) and Commander, US Army Corps of Engineers designates the qualified Agency Senior Management Official [retitled Senior Accountable Official (SAO) by OMB Circular A-131] Responsible for Value Engineering…”to the Chief, Office of the Value Engineer (OVE) [Chief Value Officer], HQ, U.S. Army Corps of Engineers for COE assigned mission areas to ensure compliance with applicable Public Laws and OMB directives.”

Thresholds for Waivers:
(1) For Projects/Contracts >$1 Million, but <$10 Million; Waiver Authority for this action is delegated by the Chief, OVE, HQUSACE to the MSC VE Program Manager’s (VEPgM), who recommends disposition to the MSC/ Engineering Center Commander, for signature.

(2) For Projects/Contracts >$10 Million; Civil Works projects/contracts are NOT subject to waiver per PL 99-662 (33 U.S.C. § 2288); For Military Programs and others, waiver authority is the Chief, OVE, HQUSACE. [RESCINDED by WRDA 2014, removing the restriction of waivers above $10M.]

**VII.** USACE VE Policy Memorandum Subject: Change to Federal Requirement for Value Engineering (VE), Lower Threshold Limit Feb 13, 2013
“The current OMB Circular A-131 states the Federal requirement for VE applies to all procurements that have costs greater than $1 million, regardless of the number of phases/contracts, delivery method, or customer.”

In anticipation of the release of the 2013 OMB Circular, “USACE policy is being revised to reflect the new lower threshold limit of $2M. This shall serve as the interim policy until the release of the New ER 11-1-321.”

VIII. COVE Policy Letter #2015-01 Will Threshold be Raised to $5M for Value Engineering


This policy letter advises that the lower VE threshold limit of $2M established by the above USACE VE Policy Memorandum Subject: Change to Federal Requirement for Value Engineering (VE), Lower Threshold Limit Feb 13, 2013 will remain in effect until determined otherwise by the USACE Senior Accountable Official and identified in the agency’s VE guidelines.

1. OSD (AT&L) has not adjusted or accepted a blanket change to the VE threshold.
2. Existing policies/procedures require documentation by the District VEO through the Screening Process & VMP’s for all projects/procurements over $2M; and HQ Chief Value Officer, delegated legal authority for projects/procurements under $10M to the MSC VPgM in 2011.
3. USACE Threshold analysis is performed annually to assess historical/projected workload and performance. Workload analysis of FY14 execution data indicates that current threshold of $2M+ is appropriate (76% of contract dollars are in this 2.5% of contracts). HQ, CVO retains legal authority for projects/procurements $10M+ (approximately 308 contracts or 0.5% hold 46% of USACE contract value).

IX. COVE Policy Letter #2015-02, USACE VE Workshop Standard and Evaluation Index


This policy letter communicates that “The “USACE VE Workshop Standard and Evaluation Index” were developed to establish the expectations of what “must” be accomplished in order to meet and demonstrate compliance with the statutory and Federal requirements for VE.”

“The key requirements of the Standard include a multidisciplinary workshop format; performed by agency/contract personnel qualified in the Value Methodology (i.e. CVS) with the expert application of continuous function analysis; utilization of the Value Methodology Job Plan; and use of the Workshop Evaluation Index to measure performance/compliance with policy, management procedures, workshop effort (including pre/post), and outcomes.”

X. COVE Policy Letter #2015-03, VE Screening/Strategy Selection & Value Management Plan (VMP) Tool


This policy letter provides “an automated VE Screening/Strategy Selection/Value Management Plan tool which identifies “Opportunity for a VE workshop” vs “Low Opportunity”, allows
selection of the level of effort most appropriate if “Opportunity for VE” is determined, and documents the decisions made in the Value Management Plan (VMP). [By the VEO]

XI. **OSD-ATL (Kendall Memo), Value Engineering (VE) and Obtaining Greater Efficiency and Productivity in Defense Spending, 06 DEC 2011**


“The Department's fiscal environment demands that you make every effort to reduce the cost of the products and services we acquire. Please identify a VE senior manager for expanding VE activities within your area of responsibility and your VE targets for FYI2 by January 15, 2012. I would like to track your progress toward these targets on a quarterly basis.”

-FRANK KENDALL, Acting Under Secretary of Defense for AT&L

Chief of Engineers response:

‘Value engineering is a vital part of how the U.S. Army Corps of Engineers' delivers projects and responds to the needs of our customers and our Nation. Through this disciplined approach we have a powerful and effective tool for identifying innovative solutions to these challenges. To demonstrate our commitment we have integrated value engineering into the core business processes that we use to execute our projects. In FYI2, USACE will take steps to strengthen awareness and capabilities within the VE program to ensure the highest levels of efficiency.”

“the designated qualified Agency "Senior Management Official Responsible for Value Engineering" [now SAO] is assigned to Mr. Jeffery T. Hooghouse, Chief, Office of the Value Engineer (OVE), HQ, U.S. Army Corps of Engineers for assigned mission areas.”

-MG MERDITH W.B. TEMPLE, Acting Commander, USACE

XII. **COMMANDER’S INTENT: Greater Efficiency and Productivity through Value Engineering (VE) (25 APR 2012)**


“Value engineering (VE) has been a vital part of how the U.S. Army Corps of Engineers (US ACE) delivers projects and responds to the needs of our customers and our Nation.”

“As the Commander, I am responsible for ensuring USACE maintains a viable VE program, compliant with all statutory and regulatory requirements.”

“In FYI1, our reported performance...was short of this [OSD established] goal.”

“Our path forward starts with performance improvement in the awareness, capability, and application of VE.....The VE Annual Plan shows the established goals...These targets should serve as the baseline for our improvement plan.”

“...I believe that with greater command emphasis across US ACE mission areas...we will not only meet established targets, but exceed efficiency expectations.”

-MG MERDITH W.B. TEMPLE, Acting Commander, USACE

XIII. **Compliance with Federal Requirements for Value Engineering, 22 May 2013, General**
USACE Value Engineering (VE) performance and compliance has slipped substantially over the last five years. In FY 12 the Chief of Engineers reported achievement of 58% of the required OSD goal; and the number of studies executed dropped to less than 10% of those required.

The Chief of E&C (James Dalton) held a webmeeting on 14 Feb 2013 with all MSC's to discuss VE requirements and authorities. Discussion items indicated that continued use of corporate level programmatic VE studies (ie., SRM, HTRW, etc.); increased flexibility of VE efforts through better definition and integration; and working with PM's to develop new "triggers" to ensure VE requirement is addressed early in the procurement life cycle, were key to improving performance. We have asked our HQ Team to continue this dialogue with MSC's and assist with performance improvement.

Compliance with VE statutory and regulatory requirements is critical and accomplished through disciplined adherence to our business processes, policies, and procedures. Commanders shall ensure that the required VE studies are budgeted for, scheduled and resourced, or waived, in accordance with ER 11-1-321 Value Engineering (Change 1), and that MSC's continue to report their progress through the DMR process. Project Managers, Value Engineering Officers, Chiefs of Construction and Contracting Officers must ensure the required "VE Certification" is attached to the BCOES Certificate before projects can be advertised per reference ER 415-1-111, Biddability, Constructability, Operability, Environmental, and Sustainability (BCOES) Reviews.”

-MG MICHAEL J. WALSH, Deputy Commanding General for Civil and Emergency Response, USACE

-MG KENDALL P. COX, Deputy Commanding General for Military and International Operations, USACE

XIV. Designation of Senior Management Official Responsible for Value Engineering Feb 2011, General Robert L. VanAntwerp, CG USACE

I hereby assign Mr. Jeffery T. Hooghouse, Chief, Office of the Value Engineer, as my “Senior Management Official Responsible for VE” for the assigned mission areas of the U.S. Army Corps of Engineers.

This authority shall remain in effect until rescinded in writing, and may be further delegated to qualified Value Engineering professionals at the discretion of the Chief, Office of the Value Engineer.”

-LTG ROBERT L. VAN ANTWERP, Commander, USACE

XV. Public Law No: 113-121 Section 1004. Removal of Duplicative Analysis (6/10/2014)

SEC. 1004. REMOVAL OF DUPLICATIVE ANALYSES.
Section 911 of the Water Resources Development Act 23 of 1986 (33 U.S.C. 2288) is repealed."

Water Resources Development Act (WRDA) 1986 Section 911 Review of Cost Effectiveness of Design (later clarified to be Value Engineering) included below for reference.
https://www.congress.gov/113/plaws/publ121/PLAW-113publ121.pdf

“SEC. 911. REVIEW OF COST EFFECTIVENESS OF DESIGN.
During the design of each water resources project which has a total cost in excess of $10,000,000, which is authorized before, on, or after the date of enactment of this Act and undertaken by the Secretary, and on which construction has not been initiated as of the date of enactment of this Act, the Secretary shall require a review of the cost effectiveness of such design. The review shall employ cost control techniques which will ensure that such project is designed in the most cost-effective way for the life of the project.)”

The repeal of Section 911 of WRDA 1986 DOES NOT revise or remove the VE statutory/regulatory requirements of Public Law 111–350 or OMB Cir. A-131 above. HQUSACE VE implementing policy remains valid application of the intent, that Value Engineering Study(ies) shall be performed in both planning (Feasibility) and design phases of project development. Refer to ER 11-1-321, Change 1 Value Engineering, Appendix C for further guidance (excerpt below).

“2. Civil Works Program.
   a. Construction programs or projects with potential Total Cost equal to or exceeding $10 million. Value Engineering study(ies) shall be performed in both planning (feasibility) and design phases of project development as follows:
      (1) Pre-authorized (Feasibility Phase). At least one VE study oriented toward planning level issues shall be performed during the feasibility phase of the project, as part of the plan formulation process prior to the selection of final alternatives. This is preferably done during the latter part of “Identification of Measures” and the early part of Formulation of Alternative Plans”.”

XVI. FAR Part 48, Value Engineering

“This part prescribes policies and procedures for using and administering value engineering techniques in contracts.

Value engineering is the formal technique by which contractors may (1) voluntarily suggest methods for performing more economically and share in any resulting savings or (2) be required to establish a program to identify and submit to the Government methods for performing more economically. Value engineering attempts to eliminate, without impairing essential functions or characteristics, anything that increases acquisition, operation, or support costs.

As required by 41 U.S.C. 1711, agencies shall establish and maintain cost-effective value engineering procedures and processes. Agencies shall provide contractors a substantial financial incentive to develop and submit VECP’s. Contracting activities will include value engineering provisions in appropriate supply, service, architect-engineer and construction contracts as prescribed by 48.201 and 48.202 except where exemptions are granted on a case-by-case basis, or for specific classes of contracts, by the agency head.”
a. FAR Part 52.248.1, Value Engineering  

“As prescribed in 48.201, insert the following clause: Value Engineering (Oct 2010).

The Contractor is encouraged to develop, prepare, and submit value engineering change proposals (VECP’s) voluntarily. The Contractor shall share in any net acquisition savings realized from accepted VECP’s, in accordance with the incentive sharing rates in paragraph (f) of this clause.”

b. FAR Part 52.248.2, Value Engineering Architect-Engineer  

“As prescribed in 48.201(f), insert the following clause: Value Engineering—Architect-Engineer (Mar 1990).

The Contractor shall (1) perform value engineering (VE) services and submit progress reports as specified in the Schedule; and (2) submit to the Contracting Officer any resulting value engineering proposals (VEP’s). Value engineering activities shall be performed concurrently with, and without delay to, the schedule set forth in the contract. The services shall include VE evaluation and review and study of design documents immediately following completion of the 35 percent design state or at such stages as the Contracting Officer may direct. Each separately priced line item for VE services shall define specifically the scope of work to be accomplished and may include VE studies of items other than design documents. The Contractor shall be paid as the contract specifies for this effort, but shall not share in savings which may result from acceptance and use of VEP’s by the Government.”

c. FAR Part 52.248.3, Value Engineering Construction  


The Contractor is encouraged to develop, prepare, and submit value engineering change proposals (VECP’s) voluntarily. The Contractor shall share in any instant contract savings realized from accepted VECP’s, in accordance with paragraph (f) of this clause.”

XVII. ER 5-1-11 U.S. Army Corps of Engineers (USACE) Business Process revised 12 Jan 2007  

“The PM’s active role as consultant is essential to ensure that the customer's quality objectives are clearly articulated and that the customer understands the essential professional standards, laws, and codes, as well as public trust issues that must be incorporated into the project. In performing these functions, the PMs must operate consistent with their responsibilities as a public servant (federal official).”
“In order to align ourselves with industry standards, and in response to the recognition that all work is NOT a project, this revision of ER 5-1-11 clearly defines the concept of "project," as well as the work that we undertake that is NOT a project. It also dictates the process for managing non-project work as well as our corporate data. The new ER requires consistent, timely and accurate use of corporate AIS. All USACE programs, to include project and non-project work, will be captured in P2, however the level of detail will be dependent upon the specific program and category of work.”