

Process Control System

Process Name: Conduct Value Engineering Study **Product/Service:** Completed VE Analysis with a report documenting the findings of the team **Primary Customers:** Management, DVE **Customer's Valid Requirement(s):** Follow the VE Job Plan to produce quality recommendations that can be implemented. **Regulator's Valid Requirement(s):** Follow the widely recognized systematic problem solving analysis process that is used throughout private industry and governmental agencies.

Input(s): Project Information Supplier(s): Project Manager		Flow Chart			Process and Quality Measures		Checking / Measure Monitoring			Miscellaneous Information		
Dept / Person	DISTRICT VALUE ENGINEER	VALUE ENGINEERING TEAM			Process Measures	Control Limits	Checking Item	Timeframe (Frequency)	Responsibility	QAR	- Abbreviations - Procedure Reference - Notes, etc.	
Step / Time				Quality Measures	And Specs / Targets	What is to be checked?	When to check?	Who will check?	Date of Last Review			
NEED	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; display: inline-block;">Conduct VE Study</div>					Q1 Adoption Rate	40%-60%	VER	Quarterly	SVE	D1: 01/2009 C	Federal Regulation 23 CFR 627 VE Procedure 625-030-002 AASHTO Guidelines for VE
INVESTIGATION	<div style="border: 1px solid black; padding: 5px;"> Information Phase - Gather information about the present design from engineering reports, design plans, estimates, alternatives, right of way maps etc. - Gather information about project from Project Manager, Designer and anyone else familiar with the project. </div>										D2: 01/2009 C	
ANALYSIS	<div style="border: 1px solid black; padding: 5px;"> Function Analysis Phase: - Team identifies the elements with the greatest potential for value improvement. - Function Analysis </div>										D3: 01/2009 C	
SPECULATION	<div style="border: 1px solid black; padding: 5px;"> Creative Phase: - Team generates alternatives to the proposed design by using brainstorming techniques </div>										D4: 01/2009 C	
EVALUATION	<div style="border: 1px solid black; padding: 5px;"> Evaluation Phase: - Team evaluates the alternatives and determines which offer the greatest potential for savings and approval. Advantages and disadvantages are considered at this point. </div>										D5: 01/2009 C	
DEVELOPMENT	<div style="border: 1px solid black; padding: 5px;"> Development Phase: - Team develops the alternatives selected. Sketches, cost estimates, validation of data and other technical work are done at this point. </div>										D6: 01/2009 C	
PRESENTATION	<div style="border: 1px solid black; padding: 5px;"> Presentation Phase: - Team presents its recommendations to management and appropriate staff with time allocated for question and answer. - VE Study report is developed during the study as a step-by-step record. </div>										D7: 01/2009 C	
RESULTS	<div style="border: 1px solid black; padding: 5px;"> Post Study Surveys of Team, Project Manager and Management. Feedback results to Project Selection and Team Selection Processes & Team Leader. </div>										TPK: 01/2009 C	
NEED MET	<div style="border: 1px solid black; border-radius: 15px; padding: 5px; display: inline-block;">VE Study Completed</div>										CODES: C - Compliance NC- Noncompliant BP- Best Practices	

Approved: _____ **Date:** _____ **Process Owner:** VE Team Leader **Rev #:** 1.5 **Rev Date:** 2/2009