

CHAPTER 1

INTRODUCTION

1-1. Purpose. This engineer regulation (ER) provides policy, guidance, principles, practices and tools for delivering quality products and services to customers of the U.S. Army Corps of Engineers (USACE).

1-2. Applicability. This regulation applies to (USACE) commands responsible for providing products and services in all program areas.

1-3. Distribution. Approved for public release; distribution is unlimited.

1-4. References. Appendix A lists referenced documents.

1-5. Definitions. A glossary of definitions is at Appendix. B.

1-6. Quality Management System. All USACE organizations and functional areas must regularly employ effective, documented quality management systems per [ER 5-1-11](#).

1-7. Roles and Responsibilities. Roles and responsibilities for quality management activities are stated [ER 5-1-11](#) and the USACE PMBP Manual.

1-8. Project Quality Documents. Delivery of quality products and services requires an understanding of the important quality management documents, including the following:

a. Project Management Plan (PMP). In accordance with ER 5-1-11, a PMP is required for the execution of all work. The PMP identifies the scope, schedule, and resources needed to accomplish the work. It has sections that detail how the project work items will be accomplished. The customer/local sponsor participates in development of the PMP and endorses it once completed.

b. Quality Management Plan (QMP). The QMP is the quality component of the PMP. Its purpose is to document the project-specific quality control and quality assurance procedures appropriate to the size, complexity, and nature of the project. The QMP will identify customer quality objectives, and their thresholds, and project specific requirements determined by the command. The QMP will include Quality Control Plans and Quality Assurance Plans required for product deliverables and identify quality control and quality assurance requirements for the overall project, including work performed by contractors. The QMP must be consistent with the organizational QM unless otherwise documented.

c. Quality Control Plan (QCP). The QCP is the quality control component of the QMP and defines how quality control will be executed for products and services. Refer to Chapters 2 and 3 for further guidance.

d. Quality Assurance Plan (QAP). The QAP the quality assurance component of the QMP and defines how quality assurance will be executed for products and services that are

completed by outside resources, including architect-engineer (A-E) contractors as well as other USACE Districts and Centers. Refer to Chapters 2 and 5 for further guidance.

e. Contractor Quality Control Plan (CQCP). The CQCP is a written plan, provided by an A-E contractor that defines how quality control will be executed on products and services that are completed with A-E resources. Refer to Chapters 2 and 3 for further guidance.

1-9. Plan-Do-Check-Act Cycle. The ‘Plan-Do-Check-Act’ (PDCA) Cycle (commonly referred to in industry as the Deming Cycle) is the guiding quality management procedure for USACE business processes. The quality management policies and procedures of this regulation are organized and presented by their associated PDCA phase. The PDCA cycle is illustrated in Figure 1-1. The purpose of each PDCA step is summarized as follows.

- a. Plan - design the Project Management Plan to achieve customer requirements and provide for high quality products and services.
- b. Do - implement the PMP, including the quality control and quality assurance procedures.
- c. Check – evaluate the project results.
- d. Act - identify and implement process changes for continual improvement.

Figure 1-1. Plan-Do-Check-Act Cycle

