

**Review Plan**  
**Lake Marion Regional Water System:**  
**Calhoun, Clarendon, Dorchester,**  
**Orangeburg and Sumter Counties**  
**South Carolina**



**US Army Corps of Engineers, Charleston District**

**US Army Corps of Engineers**  
**Charleston District**  
**September 2011**

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Revision History:

Original September 2011

**REVIEW PLAN**  
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**South Carolina**

**1. Purpose and Requirements.**

This document outlines the Review Plan for the Lake Marion Regional Water System, South Carolina, Environmental Infrastructure Assistance Program. Engineer Circular (EC) 1165-2-209 dated 31 January 2010, “Civil Works Review Policy,” 1) establishes a comprehensive life-cycle review strategy for Civil Works products by providing a seamless process for review of all Civil Works projects from initial planning through design, construction, and Operation, Maintenance, Repair, Replacement and Rehabilitation (OMRRR); and 2) establishes the appropriate level of independence of reviews as well as detailed requirements, including documentation and dissemination. This circular complies with Section 515 of Public Law 106-554 (Information Quality Act”) and the Final Information Quality Bulletin for Peer Review by the Office of Management and Budget (OMB Peer Review Bulletin). It also provides guidance for the implementation of both Sections 2034 and 2035 of the Water Resources Development Act (WRDA) 2007 (Public Law (P.L.) 110-114).

The circular outlines the requirements of three review approaches, 1) district quality control (DQC); 2) agency technical review (ATR); and 3) Independent External Peer Review (IEPR). This document addresses review of documents as it pertains to these approaches as well as policy and legal compliance review and if applicable, safety assurance review and model certification/approval along with planning coordination with the appropriate center, as required.

- (a) **District Quality Control (DQC).** DQC is the review of basic science and engineering work products focused on fulfilling the project quality requirements defined in the Project Management Plan (PMP). It is managed in the home district and may be conducted by staff in the home district as long as they are not doing the work involved in the study, including contracted work that is being reviewed. Basic quality control tools include a Quality Management Plan providing for seamless review, quality checks and reviews, supervisory reviews, Project Delivery Team (PDT) reviews, etc. Additionally, the PDT is responsible for a complete reading of the documents to assure the overall integrity of the documents, including plans, specifications, etc. and recommendations before approval by the District Engineer. The District quality management plan addresses the conduct and documentation of this fundamental level of review. DQC is required for this project.
  
- (b) **Agency Technical Review (ATR).** ATR is an in-depth review, managed by the appropriate Planning Center of Expertise (PCX) within the U.S. Army Corps of Engineers (Corps), and conducted by a qualified team outside of the

home district that is not involved in the day-to-day production of the project/product. ATR is not required for this project.

- (c) **Independent External Peer Review (IEPR).** IEPR is the most independent level of review, and is applied in cases that meet certain criteria where the risk and magnitude of the proposed project are such that a critical examination by a qualified team outside of the Corps is warranted. IEPR is not required for this project.
- (d) **Policy and Legal Compliance Review.** Documents will be reviewed throughout the process for their compliance with law and policy. These reviews culminate in determinations that the design and specifications and the supporting analyses and coordination comply with law and policy, and warrant approval. Guidance for policy and legal compliance reviews is addressed further in Appendix H, ER 1105-2-100, Planning Guidance Notebook. When policy and/or legal concerns arise during DQC or ATR that are not readily and mutually resolved by the PDT and the reviewers, the District will seek issue resolution support from the MSC and HQUSACE in accordance with the procedures outlined in Appendix H, ER 1105-2-100. IEPR teams are not expected to be knowledgeable of Army and administration polices, nor are they expected to address such concerns. The home district Office of Counsel is responsible for the legal review of each decision document and signing a certification of legal sufficiency. Policy and legal compliance review is required for this project.
- (e) **Model Certification/Approval.** EC 1105-2-407 requires certification (for Corps models) or approval (for non-Corps models) of planning models used for all planning activities. Model Certification/Approval is not required for this project.
- (f) **Planning Centers of Expertise (PCX).** The Corps PCX are responsible for the accomplishment and quality of ATR and IEPR for decision documents covered by the Circular. PCX are not required for this project.

2. **Project Description.** The Lake Marion Regional Water Agency (LMRWA) serves as the non-Federal Sponsor for construction of the Lake Marion Regional Water System Project located in Calhoun, Clarendon, Dorchester, Orangeburg and Sumter counties, South Carolina.

In the mid 1990's, a consortium of county officials and industry leaders came together and developed a plan to provide clean potable water to the central portion of South Carolina, near the I-26/I-95 corridor area. Subsequently, a steering committee was established and LMRWA was formed. The agency is a fully constituted public body, which was issued a certificate of incorporation as a public body corporate and politic under the Joint Municipal Water Systems Act by the Secretary of State (South Carolina) on 16 April 1998. By the aforementioned Act, the LMRWA was comprised

of a named representative from the towns of Elloree, Holly Hill, Manning, Santee, St. George and Summerton, and each of the following five counties: Calhoun, Clarendon, Dorchester, Orangeburg and Sumter counties. With respect to the formal admission of Berkeley County to the LMRWA, the South Carolina Secretary of State issued an Amended Certificate of Incorporation for the Lake Marion Regional Water Agency, dated September 6, 2006, by which the Secretary certified the membership of Berkeley County. By that same Amended Certificate of Incorporation, the Secretary certified the membership of the City of Sumter, the Town of Harleyville, and the Town of Turbeville. These counties and municipalities are primarily contained within South Carolina's sixth Congressional District, represented by James E. Clyburn.

3. **General Site Description.** The Lake Marion Regional Water System is located in Calhoun, Clarendon, Dorchester, Orangeburg and Sumter Counties of South Carolina. When completed, it will consist of water and wastewater components, including over 70 miles of water lines and over 20 miles of wastewater lines, elevated water storage tanks, and water and wastewater treatment facilities.
4. **Project Scope.** The Corps became involved with this project late in the process. When the Corps received an initial appropriation in FY 01, Santee Cooper (South Carolina Public Service Utility), serving as the agency's technical advisor, was already well underway with design contracts with two private engineering consultants. Since the Corps' authority was to provide planning, engineering, design, and construction assistance, the Corps executed a Design Agreement, and then executed an amendment to the Design Agreement, which would allow the Corps to accept donated goods and services (i.e., the design) for the project.

The Corps' responsibilities include: preparation of environmental documents, real estate certification, design review of plans and specifications, value engineering studies and construction contract procurement, administration and oversight.

5. **Project Delivery Team (PDT).** The PDT is comprised of those individuals directly involved in the project. Attachment 1 provides the PDT roster.
6. **DQC Plan.**

The home District is responsible for managing the DQC. The DQC is an internal review process of basic science and engineering work products focused on fulfilling the project quality requirements defined in the Project Management Plan (PMP). DQC reviews will be conducted by district personnel who did not perform the original work. All DQC activities will be conducted in accordance with district and MSC quality manuals to ensure proper DQC implementation.
7. **ATR Plan.**

ATR Plan is not required for this project.
8. **IEPR Plan.**

IEPR Plan is not required for this project.

**9. Public and Agency Review.**

Public review is required for NEPA environmental compliance and is executed under NEPA requirements for this project.

**10. PCX Coordination.**

PCX Coordination is not required for this project.

**11. Approvals.**

The home district is responsible for approving the review plan. Approval is provided by the District Engineer. The District Engineer's approval should reflect project delivery team (PDT) input as to the appropriate scope and level of review for the documents. Like the PMP, the review plan is a living document and may change as the project progresses. Changes to the review plan should be approved by following the process used for initially approving the plan. In all cases the home district will review the decision on the level of review and any changes made in updates to the project. Attachment 2 provides District approvals.

**12. Review Plan Point of Contact.**

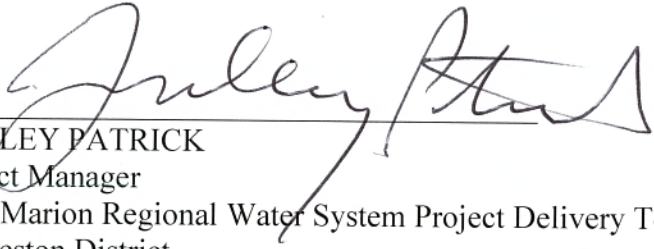
Questions and/or comments on this review plan can be directed to the following point of contact at the home district:

Dudley Patrick  
Civil Works Project Manager  
(843) 329-8160 office  
[dudley.patrick@usace.army.mil](mailto:dudley.patrick@usace.army.mil)


ATTACHMENT 1: PDT ROSTER

NAME	RESPONSIBILITY
Dudley Patrick	Project Manager
Alan Shirey	Environmental Engineer
Kevin Widner	Resident Construction Office Engineer
John Hinely	Real Estate Specialist
Clarence Hutto	Structural Engineer
Kerri Thomas	Project Analyst
Brian Nutter	Counsel
Jackie Cotton	Engineering Technician
Greg Wahl	Biologist
Jeff Fersner	Cost Engineer
George Ebai	Economist
William Wallace	Contracts Specialist


ATTACHMENT 2: DISTRICT APPROVALS

  
\_\_\_\_\_  
DUDLEY PATRICK  
Project Manager  
Lake Marion Regional Water System Project Delivery Team  
Charleston District

9/20/11  
(Date)

  
\_\_\_\_\_  
LISA A. METHENEY  
Programs and Project Management Division  
Charleston District

9/20/11  
(Date)

  
\_\_\_\_\_  
EDWARD P. CHAMBERLAYNE, P.E.  
Lieutenant Colonel, EN  
Commander, U.S. Army Engineer District, Charleston

22 SEP 11  
(Date)