Great Lakes and Ohio River Division

REGIONAL
ROUTINE OPERATIONS AND MAINTENANCE
REVIEW PLAN

US Army Corps of Engineers

October 2012

Definitions

Decision Document – Analytical document used to facilitate the support and justification for the selection of an alternative to address a problem. EC 1165-2-209 uses this term to characterize the many potential documents that would fall under the WRDA Section 2034 umbrella. Practically speaking, if alternatives are developed (or should be) for the purpose of decision making, it is a decision document.

Implementation Document – Those documents generated subsequent to the decision document as recommended plan that leads to implementation of the action selected as recommended plan from the decision document.

Other Work Products (OWP) – Those products that are neither a decision document nor an implementation document.

1. Overview. This document is to serve as the Great lakes and Ohio River Division (LRD) Review Plan for routine Operations and Maintenance (O&M) products as promulgated by EC in the Water Resources Development Act of 2007 (P.L.110-114) and Engineering Circular 1165-2-209 (Civil Works Review Policy). The purpose of this Review Plan is to define the requirements, procedures, and specific details of how District Quality Control (DQC) will be conducted for routine O&M products.

2. Applicability. This document only applies to all other work products (OWP) related to routine O&M products within LRD that only require a DQC. This Review Plan does not apply to Decision or Implementation documents, or OWPs that require Agency Technical Review (ATR) or Independent External Peer Review (IEPR).

Appendices A-D includes routine O&M OWP types that are covered by this Review Plan. The appendices define what office(s) must be involved in the District Quality Control review for each OWP type. (Each routine O&M OWP must be evaluated to ensure an ATR and/or an IEPR is not required.) Refer to Appendix E for a decision matrix on the process to determine if an ATR and/or an IEPR are required. The Routine O&M Work Product Determination Checklist must be completed for each work product. If an ATR and/or an IEPR are required, that OWP must have a separate review plan submitted to CELRD-PDO for approval.

3. District Quality Control/Quality Assurance. Quality checks and reviews occur during the development process and are carried out as a routine management practice. Quality checks may be performed by staff responsible for the work, such as supervisors, work leaders, team leaders, designated individuals from the senior staff, or other qualified personnel. However, to assure independence the checks and reviews will not be performed by the same people who performed the original work, including managing/reviewing the work in the case of contracted efforts. All DQC/QA efforts will include the necessary expertise to address compliance with published Corps policy. . All routine O&M OWPs require DQC/QA and will follow the process below:

a. Each routine O&M OWP must have a designated OWP responsible person. This person shall distribute the OWP documents to the proper offices for review as identified in the appendices. The offices identified in the appendices are the offices required for review of the OWP. Districts may elect to include additional offices for review as necessary.

b. If multiple offices are required to review the OWP, the reviewers for each office shall be identified and become members of the OWP Review Team. This Review Team is responsible for only the review of the OWP's.

c. The Review Team shall review the OWP documents and provide written comments to the OWP responsible person.

d. The OWP responsible person shall resolve all comments provided by the Review Team prior to completion and/or release of the OWP. If all attempts to resolve any

conflicts with the Review Team have been made, the District Chief, Operations Division shall ultimately make the decision. When policy and/or legal concerns arise during DQC efforts that are not readily and mutually resolved by the Review Team and the OWP responsible person, the district will seek issue resolution support from the MSC.

e. All steps of this process shall be documented and kept in the project files for internal audits to check for proper DQC implementation.

4. <u>Coordination</u>. This Review Plan has been fully coordinated throughout the region and is hereby approved for implementation.

District Operations Chiefs will review and signify approval by signing, without delegation, a list of routine line items by project and that list will be attached to this document with Approval Signatures for approval by the Chief of Operations Division Great Lakes and Ohio River Division.

_____ _____

William R. Chapman III, P.E. Date
Chief, Operations Division
Great Lakes and Ohio River Division

5. <u>Updates and Approvals of this Review Plan</u>. Modifications to this Review Plan may be made by submitting a request through the appropriate LRD Business Line Manager. The approval of this review plan has been delegated by the Division Commander to the Chief, Operations Division, Great Lakes and Ohio River Division.

_____ _____

Margaret W. Burcham Date
Brigadier General, US Army
Commanding

Appendix A

Hydropower
Routine O&M Products

Other Work Product	Review Team			
	District BLM	District Offices	LRD	HDC
Project Operation Plans – e.g. Black Start	X	X		
Maintenance Plans	X	X	X	
Testing Plans and Procedures	X	X		
Equipment and System Repairs and Direct Component Replacement for Hydropower Equipment*	X	X		
Equipment and System Repairs and Direct Component Replacement for balance of Plant and non-Hydropower Equipment	X	X	X	
Protective Relaying – Replacements or Setting Changes	X	X		X
Changes to Control System, SCADA Systems, PLC Based Systems and Other Software Configurable Devices	X	X		
Changes to Telecommunications Systems that are Used for SCADA/Control Systems	X	X		
Development/Update of Drawings and Manuals	X	X		

***** As defined in ER 1110-2-109
BLM – Local District's Hydropower Business Line Manager
LRD – LRD Hydropower Program Manager
HDC – Hydroelectric Design Center
EN – Engineering Division

Appendix B

Navigation
Routine O&M Products

Other Work Product	Review Team			
	BLM	**District Offices**	**LRD**	**MDC**
Project Operation Plans (Locks & Dams and Dredging)	**X**		**X**	
Maintenance Plans (Locks & Dams and Dredging)	**X**		**X**	
In-Place Repairs on Major Components*	**X**	**EN**	**X**	
In-Place Repairs on Minor Components*	**X**	**EN**		
Lock Closure Plan	**X**	**X, NAV CX**	**X**	
Major Floating Plant Repairs**	**X**		**X**	**X**
Minor Floating Plant Repairs	**X**	**X**		
Floating Plant Procurement	**X**		**X**	**X**
Emergency Dredging Requests	**X**	**PD**	**X**	
Funding Agreements	**X**	**OC, PD**	**X**	

* In-Place repairs are limited to repairs that do not require a formal design effort by a qualified Engineer.
** Items requiring PRIP funding are considered major.
BLM – Local District's Navigation Business Line Manager
LRD – LRD Navigation or Maintenance Program Manager
MDC – Marine Design Center
EN – Engineering Division
PD – Planning Division
OC – Office of Counsel
NAV CX – Navigation Regional Center of Expertise

Appendix C

Natural Resource Management
Routine O&M Products

Other Work Product	Review Team		
	REC or ES BLM	District Offices	LRD
Operational Management Plans and annual updates	X		X
Fee schedules/Comparability	X		X
Park Closure/Significant Operational Change Plans	X	PA	X
OMB Approved Surveys	X		X
Shoreline Mgt Plans and Updates	X	OC, PD, RE	X
Master Plans and Updates	X	OC, PD, RE	X
Cultural Resources Management Plan and Updates	X	PD	

BLM – Local District's REC or ES Business Line Manager (Includes Internal NRM Office Coordination)
EN – Engineering Division
OC – Office of Counsel
PA – Public Affairs
PD – Planning Division
RE – Real Estate
RM - Resource Management
SO – Safety Office
LRD – Regional Business Line Manager

Appendix D

Other Miscellaneous O&M Products

Other Work Product	Review Team		
	District OPS	**District Offices**	**LRD**
Facility and Equipment Maintenance (FEM) Program Activities	**X**		**RMM**
Communications Plans	**X**	**PA**	
Routine Contracts*	**X**	**CT**	
PRIP Requests	**X**	**RM**	**X**

* District contracting procedures must be followed including BCOE review if applicable
BLM – Local District's Business Line Manager for the Work Product
LRD – LRD Business Line or Maintenance Program Manager
PA – Public Affairs Office
CT – Contracting
RMM – Regional Maintenance Program Manager

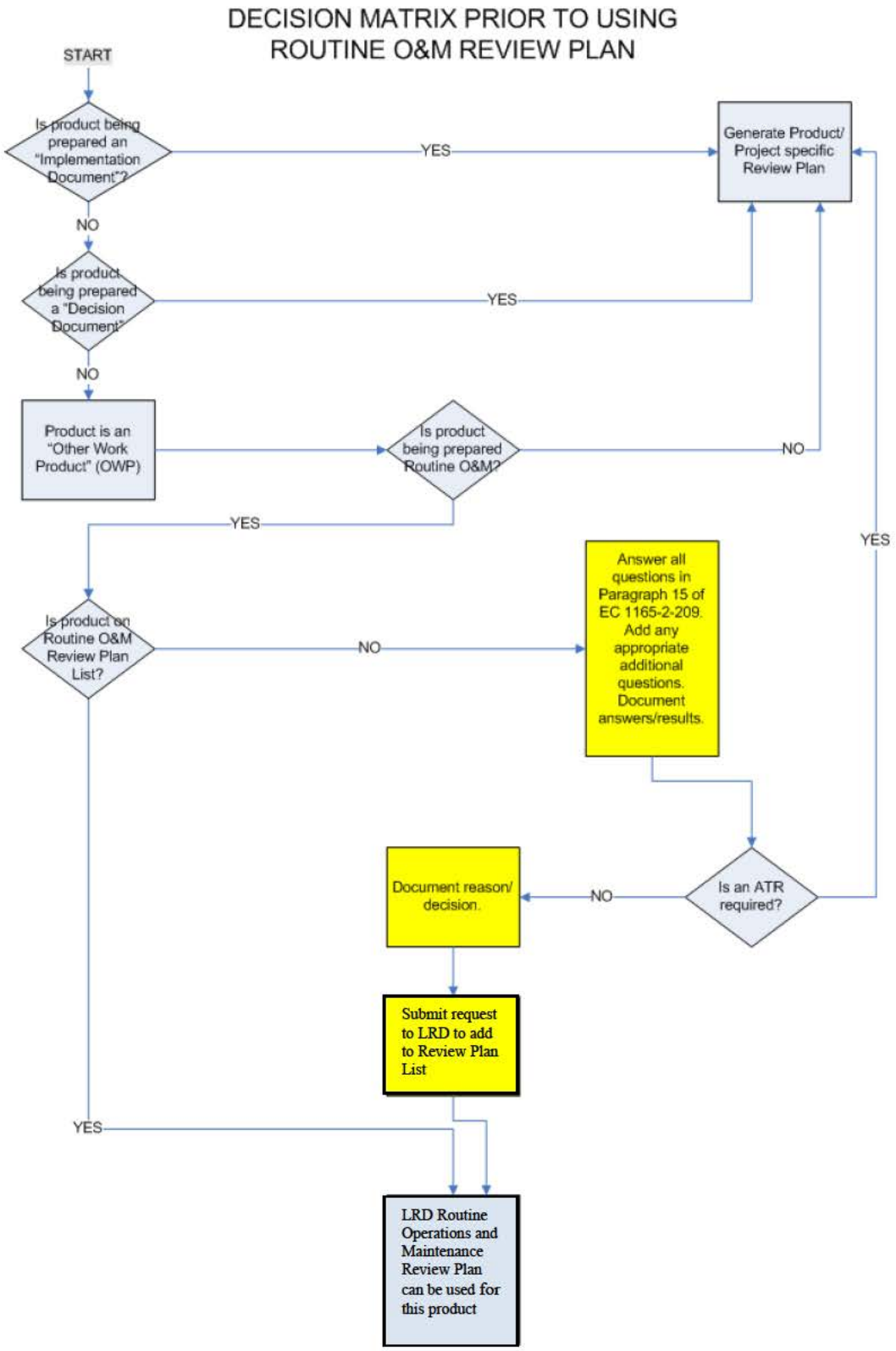
Appendix E

Flood Risk Management
Routine O&M Products

Other Work Product	Review Team			
	BLM	**District Offices**	**LRD**	**FRM CX**
Project Operation Plans (Dams)	**X**		**X**	
Maintenance Plans (Dams)	**X**		**X**	
In-Place Repairs on Major Components*	**X**	**EN**		
In-Place Repairs on Minor Components*	**X**			
Closure Plan	**X**	**X**	**X**	**X**
Major Plant Repairs**	**X**		**X**	**X**
Minor Plant Repairs	**X**	**X**		
Communications Plans	**X**	**EN**	**X**	**X**
Routine Inspections	**X**	**PD**		
Funding Agreements	**X**	**OC, PD**		
Bridge Inspections/HSS Inspections	**X**	**EN**	**X**	
Water Control plans	**X**	**EN**	**X**	
Interim Risk Reduction Measures	**X**	**EN**	**X**	**X**
Surveillance of Northern Boundary Waters	**X**	**EN**	**X**	
Inspections of Completed Works	**X**	**EN**	**X**	

* In-Place repairs are limited to repairs that do not require a formal design effort by a qualified Engineer.
** Items requiring PRIP funding are considered major.
BLM – Local District's FRM Business Line Manager
LRD – LRD FRM Program Manager
EN – Engineering Division
PD – Planning Division
OC – Office of Counsel
FRM CX – FRM Regional Center of Expertise

Appendix F


DECISION MATRIX PRIOR TO USING
ROUTINE O&M REVIEW PLAN
START
Is product being prepared an "Implementation Document"?
YES
Generate Product/ Project specific Review Plan
NO
Is product being prepared a "Decision Document"?
YES
NO
Product is an "Other Work Product" (OWP)
Is product being prepared Routine O&M?
NO
YES
YES
Answer all questions in Paragraph 15 of EC 1165-2-209. Add any appropriate additional questions. Document answers/results.
Is product on Routine O&M Review Plan List?
NO
Document reason/ decision.
NO
Is an ATR required?
Submit request to LRD to add to Review Plan List
YES
LRD Routine Operations and Maintenance Review Plan can be used for this product

Appendix G

Routine O&M
Work Product Determination Checklist

Work Product Description: _____

Facility: _____

This work product is an Other Work Product per EC 1165-2-209 **Y / N**

This work product is Routine O&M **Y / N**

Does not require an ATR per EC 1165-2-209 paragraph 15 **Y / N**

Justification: _____

_____

_____

This work product is listed in the Routine O&M Review Plan **Y / N**

Note: If any of the above are no, the Routine O&M Review Plan cannot be used.

Printed Name: _____

Signature: _____

Date: _____