



REPLY TO
ATTENTION

DEPARTMENT OF THE ARMY

MISSISSIPPI VALLEY DIVISION, CORPS OF ENGINEERS

P.O. BOX 80

VICKSBURG, MISSISSIPPI 39181-0080

CEMVD-PD-SP

16 Nov '15

MEMORANDUM FOR Commander, St. Louis District

SUBJECT: Request for Approval of the Upper Mississippi River Restoration Harlow and Open River Islands Habitat Rehabilitation and Enhancement Project Review Plan

1. References:

- a. Memorandum, CEMVS-PM-F, 21 July 2015, subject as above (encl 1).
- b. Memorandum, CEMVD-RB-T, 19 October 2015, subject: Approval of Upper Mississippi River Restoration Harlow and Open River Islands Habitat Rehabilitation and Enhancement Project Review Plan (encl 2).
- c. Memorandum, CECW-MVD, 16 May 2012, subject: Request for Approval of a Model Peer Review Plan for the Upper Mississippi River System Environmental Management Program (encl 3).
- d. EC 1165-2-214, 15 December 2012, subject: Civil Works Review Policy.

2. The enclosed Review Plan (RP) (encl 4) is a combined decision document and implementation document review plan. It includes the MVD Review Plan Checklist for Environmental Management Program and has been prepared in accordance with EC 1165-2-214. The RP has been coordinated with the Upper District Support Team and the Business Technical Division, who concurred with the plan in reference 1.b.

3. MVD hereby approves the RP for Harlow and Open River Islands Habitat Rehabilitation and Enhancement Project, which is subject to change as circumstances require, consistent with study development under the Project Management Business Process. Any subsequent revisions to this RP or its execution will require new written approval from this office. Non-substantive changes to this RP do not require further approval. The District should post the approved RP to its web site.

CEMVD-PD-SP

SUBJECT: Request for Approval of the Upper Mississippi River
Restoration Harlow and Open River Islands Habitat Rehabilitation and
Enhancement Project Review Plan

4. The MVD point of contact for this action is [REDACTED],
CEMVD-PD-SP, at [REDACTED].

4 Encls

Major General, USA
Commanding



DEPARTMENT OF THE ARMY
ST LOUIS DISTRICT CORPS OF ENGINEERS
1222 SPRUCE STREET
ST LOUIS MO 63103-2833

REPLY TO
ATTENTION OF:

CEMVS-PM-F

JUL 21 2015

MEMORANDUM FOR Commander, U.S. Army Corps of Engineers, Mississippi Valley Division (CEMVD-PD-SP [REDACTED]), P.O. Box 80, 1400 Walnut Street, Vicksburg, MS 39181-0080

SUBJECT: Request for Approval of the Upper Mississippi River Restoration Harlow and Open River Islands Habitat Rehabilitation and Enhancement Project Review Plan.

1. The purpose of this memorandum is to request approval for the subject Review Plan with the MVD Upper Mississippi River Restoration Review Plan Checklist (Encl 1) for Harlow and Open River Islands Habitat Rehabilitation and Enhancement Project. The Review Plan includes both the feasibility report (decision document) and Plans and Specification documentation (implementation product). An electronic copy of the subject Review Plan with MVD UMRR Review Plan Checklist has been sent to [REDACTED] CEMVD.

2. The point of contact is [REDACTED] Project Manager, at [REDACTED] or email: [REDACTED]

Sincerely,

[REDACTED]

Encl

COL, EN
Commanding

Encl 1



DEPARTMENT OF THE ARMY

MISSISSIPPI VALLEY DIVISION, CORPS OF ENGINEERS
P.O. BOX 80
VICKSBURG, MISSISSIPPI 39181-0080

REPLY TO
ATTENTION OF:

CEMVD-RB-T

19 Oct 15

MEMORANDUM FOR CEMVD-PD-SP [REDACTED]

SUBJECT: Approval of Upper Mississippi River Restoration Harlow and Open River Islands Habitat Rehabilitation and Enhancement Project Review Plan.

1. Reference memorandum, CEMVS-PM-F, subject as above.
2. This office concurs with subject review plan.
3. RB-T point of contact is [REDACTED].

[REDACTED]
Chief, Business Technical
Division

Enc 12



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
U.S. ARMY CORPS OF ENGINEERS
WASHINGTON, D.C. 20314-1000

CECW-MVD

MAY 16 2012

MEMORANDUM FOR Commander, U.S. Army Corps of Engineers, Mississippi Valley
Division (ATTN: CEMVD-PD-SP)

SUBJECT: Request for Approval of a Model Peer Review Plan for the Upper Mississippi River
System Environmental Management Program

1. HQUSACE has reviewed the draft model peer review plan for the Upper Mississippi River System Environmental Management Program. The model peer review plan is consistent with programmatic review plans developed and in use for the Continuing Authorities Program. The model Peer Review Plan is to be used for all projects within the program except those that include an Environmental Impact Statement or that meet the mandatory triggers for Type I IEPR as stated in EC 1165-2-209.

2. Questions or concerns should be directed to [REDACTED] Deputy Chief, Mississippi Valley Division Regional Integration Team, at [REDACTED]

FOR THE COMMANDER:

[REDACTED]
Chief, Planning and Policy Division
Directorate of Civil Works

Encl 3

**Upper Mississippi River Restoration (UMRR)
and**

Referencing the UMRR Programmatic Review Plan

**Harlow and Open River Islands
Jefferson and Perry Counties, Missouri; Randolph and Jackson Counties, Illinois
River Miles 88-144
Mississippi River
St. Louis District**

**MSC Approval Date: Pending
Last Revision Date: None**



**US Army Corps
of Engineers ®**

Encl 4

**Review Plan
Using the MVD Model Review Plan**

**Harlow and Open River Islands HREP
Jefferson and Perry Counties, MO; Randolph and Jackson Counties, IL
RM 88-144 Mississippi River**

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Harlow and Open River Islands HREP Jefferson and Perry Counties, MO; Randolph and Jackson Counties, IL. Mississippi River Miles 88-144

1. Purpose and Requirements

a. Purpose

This Review Plan defines the scope and level of peer review for the *Upper Mississippi River Restoration (UMRR), Harlow and Open River Islands Habitat Rehabilitation and Enhancement Project (HREP) Feasibility Study with integrated Environmental Assessment (EA), Mississippi River Miles 88 to 144, Jefferson and Perry counties, Missouri; Randolph and Jackson counties, Illinois. Public Law 99-662, 1986 WRDA, as amended, authorizes the US Army Corps of Engineers (USACE) to study, design, and construct HREP's on the Upper Mississippi River system without specific Congressional authorization.*

This Review Plan is for the Harlow and Open River Islands HREP Feasibility Report with integrated environmental assessment as well as the Harlow and Open River Islands HREP Plans and Specifications (P&S) implementation document and the Design Documentation Reports (DDR's). Products included for review consist of the following:

- Draft Feasibility Report: The purpose of the feasibility report with integrated Environmental Assessment (EA) is to document the planning process for ecosystem restoration of the Harlow and Open River Islands study area on the Mississippi River, to provide the opportunity for participation in the planning process for river management partners and the public, to meet USACE planning guidance and to meet NEPA requirements. The Feasibility Report and EA will document existing and predict future habitat conditions and deficiencies; identify problems and opportunities; define measureable habitat goals and objectives to meet project goals and objectives; document the effects of the alternatives in accordance with NEPA and other environmental laws and regulations; and recommend a selected plan for habitat restoration and enhancement. The Draft Feasibility Report will undergo DCQ and ATR.
- Final Feasibility Study Report: A supplemental Agency Technical Review (ATR) will be completed as estimated costs exceed [REDACTED]. This ATR will be conducted on the Final Draft Feasibility Study Report, subsequent to public review.
- Implementation Documents (Plans and Specification): Implementation Documents will undergo DQC and ATR. An ATR will be completed on 95% documents for Plans and Specifications.
- Design Documentation Reports (DDR's): DDR's will undergo DQC and ATR at 95% Draft.

This Review Plan is a component of the Harlow & Open River HREP Project Management Plan. The Upper Mississippi River Restoration (UMRR), study and construction authority is contained in the UMRR Programmatic Review Plan (UMRR PRP), Section IV.

b. Applicability

This review plan is based on the MVD Model Review Plan, which is applicable to projects that do not require Independent External Peer Review (IEPR), as defined by the mandatory Type I IEPR triggers contained in EC 1165-2-214, Civil Works Review Policy. HQ approval for a programmatic IEPR exclusion for the Upper Mississippi River Restoration program was granted on 22 February 2012. No other existing policy waiver request is anticipated.

REVIEW PLAN

Harlow and Open River Islands HREP Jefferson and Perry Counties, MO; Randolph and Jackson Counties, IL. Mississippi River Miles 88-144

The applicability regarding the UMRR is contained in the Programmatic UMRR PRP, Section II.

c. References

Reference materials are shown in the UMRR PRP.

Harlow and Open River Islands HREP Project Management Plan, approved 10 February 2015.

2. Review Management Organization (RMO) Coordination

RMO coordination will be in accordance with the EMP PRP, Sections I, III, VI, and VIII. The RMO for the ATR will be MVD in lieu of ECO-PCX. The PCX will continue to serve in its advisory role.

3. Project Information

a. Decision and/or Implementation document

The Harlow and Open River Islands HREP decision document will be prepared in accordance with ER 1105-2-100, Appendix F, Amendment #2. The approval level of the decision document (if policy compliant) is the MVD Commander. An Environmental Assessment (EA) will be prepared along with the decision document. Implementation documents (Plans and Specifications) and Design Documentation Reports will also be prepared and will undergo DQC and ATR Review.

b. Study/Project Description

Harlow and Open River Islands HREP covers three island complexes within the Middle Mississippi River National Wildlife Refuge. Harlow Island (1,225 acres) is located on the right descending bank of the Mississippi River between river miles 140.5 and 144.0. Wilkinson Island (2,700 acres) is located on the left descending bank of the Mississippi River between river miles 88.5 and 95.0. Crains Island (553 Acres) is located on the right descending bank of the Mississippi River between river miles 103.5 and 105.5. These islands are owned and managed by the U.S. Fish and Wildlife Service.

The primary resource problems include: accretion of the islands to the mainland resulting in loss of important island-side channel habitat which historically occurred within the open river ecosystem; fragmented forest habitat with low diversity; and non-native invasive plant species. These problems have led to degraded aquatic and wetland ecosystem structures and functions. Potential project features to address these problems may include, but not limited to: excavation of secondary channel/slough habitat; notching of existing stone dikes and/or berms; installation of water control structures; construction of river training structures; construction of sediment deflection berm; and reforestation. The estimated cost of construction is [REDACTED]. All project features are located on federally owned lands managed as a National Wildlife Refuge by the U.S. Fish & Wildlife Service. Accordingly, under the provisions of Section 906(e) of Water Resources Development Act of 1986, as amended, the project first costs are 100% Federal. The project sponsor, U.S. Fish & Wildlife Service, is responsible for operations, maintenance,

REVIEW PLAN

Harlow and Open River Islands HREP Jefferson and Perry Counties, MO; Randolph and Jackson Counties, IL. Mississippi River Miles 88-144

repair, rehabilitation, and replacement costs. The estimated annual operations and maintenance cost is [REDACTED]

For further information on the Study/Project Area, see the approved Harlow & Open River Islands HREP Project Management Plan.

c. Factors Affecting the Scope and level of Review

The factors affecting the scope and level of review are discussed in the UMRR PRP, Section V.

d. In-Kind Contributions

Products and analyses provided by non-Federal sponsors as in-kind services are subject to District Quality Control (DQC) and ATR, similar to any products developed by USACE. No in-kind products are anticipated for this project.

4. District Quality Control (DQC)

District Quality Control (DQC) will be conducted in accordance with the UMRR PRP, Section III.A. DQC will be an ongoing process throughout the project and managed by the St. Louis District. Although DQC is an iterative process, formal DQC reviews will be performed on the Pre-AFB Feasibility Report and the Final Draft Feasibility Report. DQC will be performed at 95% on Implementation Documents and Design Documentation Reports. A certificate of quality control will be completed at completion of DQC and provided to the ATR team lead. DQC will use Dr. Checks for tracking comments

5. Agency Technical Review (ATR)

The Agency Technical Review (ATR) will be conducted in accordance with the UMRR PRP, Section III.B and VI.C. An initial ATR will be conducted before the Alternative Formulation Briefing. A supplemental ATR will be completed on the Final Feasibility Study Report as estimated costs exceed \$10million dollars. The supplemental ATR will be conducted on the Final Draft Feasibility Study Report, subsequent to public review. ATRs will also be conducted on Implementation Documents and Design Documentation Reports.

To assure independence, the ATR will be managed by MVD and the ATR team shall be from outside the home MSC. ATR will use Dr. Checks for tracking comments.

6. Independent External Peer Review (IEPR)

A programmatic waiver for the Upper Mississippi River Restoration program was approved 22 February 2012.

7. Policy And Legal Compliance Review

The Policy and Legal Compliance Reviews will be conducted in accordance with the UMRR PRP,

REVIEW PLAN

Harlow and Open River Islands HREP Jefferson and Perry Counties, MO; Randolph and Jackson Counties, IL. Mississippi River Miles 88-144

Section III.D. Policy and Legal Compliance Review will be completed prior to the Alternatives Formulation Briefing of the Draft Report. An additional Policy and Legal Compliance Review will be done prior to Final Report submittal.

8. Cost Engineering Directory of Expertise (DX) Review And Certification

Applicable to Decision Documents, Cost Engineering Directory of Expertise (DX) Review and Certification will be conducted in accordance with the UMRR PRP, Section VIII.D. *If the final feasibility report costs are greater than 1 year old (based on when the Mississippi Valley Division Commander will sign the final report), then the costs will be updated and reviewed by the Cost MCX.*

9. Model Certification And Approval

Approval of planning and engineering models used in UMRR projects will be in accordance with the UMRR PRP, Section III.E, and Section VII. See Table 1.

Table 1. Planning and Engineering Models That May Be Used in the Development of the Harlow and Open River Islands HREP

Model Name and Version	Brief Description of the Model and How it Will be Applied in the Study	Certification/Approval Status
IWR-Plan	<p>The IWR-Plan was developed by the Institute of Water Resources as accounting software to compare habitat benefits among alternatives.</p> <p>This model will be used to determine best buy alternatives and incremental cost analysis of alternatives. Low risk and uncertainty using this planning model.</p>	Certified
USFWS Habitat Suitability Index Models (HEP or Bluebooks)	<p>The Habitat Evaluation Procedure (HEP) is a species-habitat approach to impact assessment using selected evaluation species documented with an index, the Habitat Suitability Index (HSI). This value is derived from an evaluation of the ability of key habitat components to compare existing habitat conditions and optimum habitat conditions for the species of interest. There are over 150 models for invertebrates, fish, amphibians, reptiles, birds, mammals, and communities.</p> <p>As the project progresses, a determination will be made as to which HEP models are most appropriate for use.</p> <p>Low risk and uncertainty using these planning models</p>	Approved for use, pending review of spreadsheets or other accounting software
Micro-Computer Aided Cost Engineering System (MCACES) MII Version 3.0	<p>MCACES is a cost estimation model.</p> <p>This model will be used to estimate costs for the Harlow-Wilkinson Islands HREP.</p>	Certified

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Harlow and Open River Islands HREP Jefferson and Perry Counties, MO; Randolph and Jackson Counties, IL. Mississippi River Miles 88-144

HEC-RAS 4.0	Low risk and uncertainty using this engineering model The Hydrologic Engineering Center's River Analysis System (HEC-RAS) program provides the capability to perform one-dimensional steady and unsteady flow river hydraulics calculations. The program will be used for steady flow analysis to evaluate the future without- and with-project conditions along the Mississippi River.	HH&C CoP Preferred Model
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10. Review Schedules And Costs

- A. **District Quality Control (DQC) Schedule and Cost.** The DQC team will provide a review of the feasibility and P&S documents. DQC team roster is provided in Attachment 1. Dr. Checks will be used to document all DQC reviews.

1) DQC Estimated Schedule

Event	Kick-off	Reviewer Comments End	PDT Evaluation	Back Check	Complete
First 4 Chapters	11/9/15	TBD	TBD	TBD	11/23/15
Pre-AFB	10/27/16	TBD	TBD	TBD	11/26/16
Final Draft Feasibility Report	05/25/17	TBD	TBD	TBD	6/24/17
P&S 95%	TBD	TBD	TBD	TBD	TBD
DDRs 95%	TBD	TBD	TBD	TBD	TBD

2) DQC Estimated Cost

Reviewer	First 4 Chapters	Pre-AFB	Final Draft Feasibility Report	P&S 95%	DDRs 95%	Total Cost
Real Estate						
Plan Formulation						
Geotechnical Engineer						
Regulatory						
Environmental						
Civil Engineer						
H&H Engineer						
Cultural Resources						
Structural Engineer						
Mechanical Engineer						
Economics						
Cost						

REVIEW PLAN

Harlow and Open River Islands HREP Jefferson and Perry Counties, MO; Randolph and Jackson Counties, IL. Mississippi River Miles 88-144

TOTAL	
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- B. **Agency Technical Review (ATR) Schedule and Cost.** The ATR team will provide a review of the feasibility and P&S documents. ATR team roster is provided in Attachment 1. After DQC, the ATR team will provide a review of the Draft Feasibility Report prior to Alternative Formulation Briefing (AFB). Dr. Checks will be used to document ATR review. Following MSC concurrence of the AFB conference call, the ATR team will continue to review any changes that occur as feasibility documents are prepared. The ATR Lead will participate in the original AFB discussions with the MSC. The ATR team will provide ATR certification (Attachment 4). ATR shall be performed after the DQC on the project plans and specification (P&S) and any supporting design documentation and prior to BCOE sign-off. ATR will also be conducted on the Final Draft DDRs. The ATR team will be from outside the MSC.

1) ATR Estimated Schedule

Event	Kick-off	Reviewer Comments End	PDT Evaluation	Back Check	Complete
<i>Pre-AFB</i>	11/27/16	TBD	TBD	TBD	12/27/16
<i>Final Draft Feasibility Report</i>	07/01/17	TBD	TBD	TBD	07/31/17
<i>P&S 95%</i>	TBD	TBD	TBD	TBD	TBD
<i>DDR 95%</i>	TBD	TBD	TBD	TBD	TBD

REVIEW PLAN

Harlow and Open River Islands HREP Jefferson and Perry Counties, MO; Randolph and Jackson Counties, IL. Mississippi River Miles 88-144

2) ATR Estimated Cost

Reviewer	Pre AFB	Final Draft Feasibility Report	P&S 95%	DDRs 95%	COST
ATR Team Lead					
Civil Engineer					
Environmental					
Plan Formulation					
Model Reviewer					
Cultural					
Economist					
Geotechnical Engineer					
H&H Engineer					
Real Estate					
Structural Engineer					
Mechanical Engineer					
Cost					
TOTAL					

11. Public Participation

Public review will be in accordance with the UMRR PRP, Section VI.F

12. Review Plan Approval And Updates

The Review Plan approval process will be in accordance with the UMRR PRP, Section VIII.B.

13. Review Plan Points Of Contact

Questions and/or comments on this review plan can be directed to the following points of contact:

- [REDACTED] St. Louis District, Project Manager 314-331-8368 - MVS
- [REDACTED] St. Louis District UMRR Program Manager , 314-331-8455- MVS
- [REDACTED] St. Louis Program Manager, 601-634-5293- MVD

REVIEW PLAN

Harlow and Open River Islands HREP Jefferson and Perry Counties, MO; Randolph and Jackson Counties, IL. Mississippi River Miles 88-144

Attachment 1: Team Rosters

Major Subordinate Command Roster – 2015

Name	Title	Contact
	St. Louis Program Manager	
	Acting Deputy Chief DST	

Project Delivery Team Roster – 2015

Name	Discipline/Title	Contact Information
	Sponsor- USFWS	
	UMRR Regional Program Manager	
	UMRR District Program Manager	
	Project Manager	
	Plan Formulator	
	Environmental Planning	
	Civil Engineer	
	Hydrology & Hydraulics Engineer	
	Hydrology & Hydraulics Engineer	
	Cultural Resources	
	Tribal Coordination	
	Economics	
	Geotechnical Engineer	
	Forestry/Wildlife Biologist	
	Civil Engineer	
	Geographer	
	Cost Estimate	
	Real Estate	
	HTRW	
	Regulatory	

REVIEW PLAN

Harlow and Open River Islands HREP Jefferson and Perry Counties, MO; Randolph and Jackson Counties, IL. Mississippi River Miles 88-144

District Quality Control Roster – 2016

The DQC Roster will be determined by size and complexity of the product under review. DQC team members will be comprised of senior level subject matter experts (e.g., section chief or senior subject matter expert for a given discipline)

Name	Discipline/Title	Contact Information	District	Education/ Qualifications	Years of Experience
TBD	Civil Engineer	TBD	TBD	Section Chief	5
TBD	Plan Formulation	TBD	TBD	Section Chief	5
TBD	Model Review	TBD	TBD	Section Chief	5
TBD	Environmental	TBD	TBD	Section Chief	5
TBD	Cultural	TBD	TBD	Section Chief	5
TBD	Cost	TBD	TBD	Section Chief	5
TBD	Economist	TBD	TBD	Section Chief	5
TBD	Geotechnical Engineer	TBD	TBD	Section Chief	5
TBD	H&H Engineer	TBD	TBD	Section Chief	5
TBD	Real Estate	TBD	TBD	Section Chief	5

REVIEW PLAN

Harlow and Open River Islands HREP Jefferson and Perry Counties, MO; Randolph and Jackson Counties, IL. Mississippi River Miles 88-144

Agency Technical Review Roster – 2016

The ATR Roster will be determined by size and complexity of the product under review. ATR team members will be comprised of senior level subject matter experts and will be ATR certified, if applicable.

Name	Discipline/Title	Contact Information	District	Education/ Qualifications	Years of Experience
TBD	ATR Team Lead	TBD	TBD	Bachelor's Degree and Professional Certification	10
TBD	Civil Engineer	TBD	TBD	Bachelor's Degree and P.E.	10
TBD	Plan Formulation	TBD	TBD	Branch Chief or SME	10
TBD	Model Review	TBD	TBD	Branch Chief or SME	10
TBD	Environmental	TBD	TBD	Branch Chief or SME	10
TBD	Cultural	TBD	TBD	Branch Chief or SME	10
TBD	Cost	TBD	TBD	Bachelor's Degree and P.E	10
TBD	Economist	TBD	TBD	Branch Chief or SME	10
TBD	Geotechnical Engineer	TBD	TBD	Bachelor's Degree and P.E	10
TBD	H&H Engineer	TBD	TBD	Bachelor's Degree and P.E	10
TBD	Real Estate	TBD	TBD	Branch Chief or SME	10

REVIEW PLAN

Harlow and Open River Islands HREP Jefferson and Perry Counties, MO; Randolph and Jackson Counties, IL. Mississippi River Miles 88-144

Attachment 2: Review Plan Revisions

Revision Date	Description of Change	Page/Paragraph Number

REVIEW PLAN

Harlow and Open River Islands HREP Jefferson and Perry Counties, MO; Randolph and Jackson Counties, IL. Mississippi River Miles 88-144

ATTACHMENT 3: UMRR Review Plan Checklist

MVD UMRR Review Plan Checklist

Date: July 2015
Originating District: MVS
Project/Study Title: Harlow and Open River Islands HREP
P2# and AMSCO#: 329837, 076150
District POC: [REDACTED]
PCX Reviewer:

Please fill out this checklist and submit with the draft Review Plan when coordinating with the MSC. Any evaluation boxes checked "No" may indicate the project may not be able to use the MVD Model Review Plan. Further explanation may be needed or a project specific review plan may be required. Additional coordination and issue resolution may be required prior to MSC approval of the Review Plan. Checklist may be limited to Section I or Section II or Both, depending on content of review plan (or subsequent amendments).

Section I - Decision Documents

REQUIREMENT	EVALUATION
1. Is the Review Plan (RP) for an UMRR Project?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
a. Does it include a cover page identifying it as following the Model RP and listing the project/study title, originating district or office, and date of the plan?	a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
b. Does it include a table of contents?	b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
c. Is the purpose of the RP clearly stated?	c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
d. Does it reference the Project Management Plan (PMP) of which the RP is a component?	d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
e. Does it succinctly describe the levels of review: District Quality Control (DQC), and Agency Technical Review (ATR)?	e. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
f. Does it include a paragraph stating the title, subject, and purpose of the decision document to be reviewed?	f. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
g. Does it list the names and disciplines of the Project Delivery Team (PDT)?*	g. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<i>*Note: It is highly recommended to put all team member names and contact information in an appendix for easy updating as team members change or the RP is updated.</i>	

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Harlow and Open River Islands HREP Jefferson and Perry Counties, MO; Randolph and Jackson Counties, IL. Mississippi River Miles 88-144

Comments: Additional names will be added as the PDT team develops	
2. Is the RP detailed enough to assess the necessary level and focus of the reviews?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
3. Does the RP define the appropriate level of review for the project/study?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
a. Does it state that DQC will be managed by the home district in accordance with the MVD and district Quality Management Plans? b. Does it state that ATR will be managed by MVD?	a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
Comments:	
4. Does the RP explain how ATR will be accomplished?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
a. Does it identify the anticipated number of reviewers? b. Does it provide a succinct description of the primary disciplines or expertise needed for the review (not simply a list of disciplines)? c. Does it indicate that ATR team members will be from outside the home district? d. Does it indicate where the ATR team leader will be from? e. If the reviewers are listed by name, does the RP describe the qualifications and years of relevant experience of the ATR team members?	a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> e. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
<i>*Note: It is highly recommended to put all team member names and contact information in an appendix for easy updating as team members change or the RP is updated.</i> Comments: ATR team members to include the ATR team lead, once identified, will be from outside the home district. Qualifications and years of relevant experience have been added based on the requirements of the project.	
5. Does the RP address review of sponsor in-kind contributions?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

REVIEW PLAN

Harlow and Open River Islands HREP Jefferson and Perry Counties, MO; Randolph and Jackson Counties, IL. Mississippi River Miles 88-144

6. Does the RP address how the review will be documented?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
a. Does the RP address the requirement to document ATR comments using Dr Checks? Comments:	a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
7. Does the RP address Policy Compliance and Legal Review?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
8. Does the RP present the tasks, timing and sequence (including deferrals), and costs of reviews?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
a. Does it provide a schedule for ATR including review of the Alternative Formulation Briefing (AFB) materials and final report? b. Does it include cost estimates for the reviews?	a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
9. Does the RP indicate the study will address Safety Assurance factors? Factors to be considered include: <ul style="list-style-type: none"> • Where failure leads to significant threat to human life • Novel methods\complexity\ precedent-setting models\policy changing conclusions • Innovative materials or techniques • Design lacks redundancy, resiliency of robustness • Unique construction sequence or acquisition plans • Reduced\overlapping design construction schedule 	Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/> Comments:
10. Does the RP address opportunities for public participation?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
11. Does the RP indicate ATR of cost estimates will be conducted by pre-certified district cost personnel who will coordinate with the Walla Walla Cost DX?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
12. Has the approval memorandum been prepared and does it accompany the RP?	Yes <input type="checkbox"/> No <input type="checkbox"/>

REVIEW PLAN

Harlow and Open River Islands HREP Jefferson and Perry Counties, MO; Randolph and Jackson Counties, IL. Mississippi River Miles 88-144

Section II - Implementation Documents

Please fill out this checklist and submit with the draft Review Plan or subsequent Review Plan amendments when coordinating with the MSC. For DQC, the District is the RMO; for ATR and Type II IEPR, MVD is the RMO. Any evaluation boxes checked "No" indicate the RP possibly may not comply with MVD Model Review Plan and should be explained. Additional coordination and issue resolution may be required prior to MVD approval of the Review Plan.

REQUIREMENT	EVALUATION
1. Are the implementation documents/products described in the review or subsequent amendments?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
2. Does the RP contain documentation of risk-informed decisions on which levels of review are appropriate?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
3. Does the RP present the tasks, timing, and sequence of the reviews (including deferrals)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
a. Does it provide an overall review schedule that shows timing and sequence of all reviews?	a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
b. Does the review plan establish a milestone schedule aligned with the critical features of the project design and construction?	b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
4. Does the RP address engineering model review requirements?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
a. Does it list the models and data anticipated to be used in developing recommendations?	a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
b. Does the RP identify any areas of risk and uncertainty associated with the use of the proposed models?	b. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
c. Does it indicate the certification/approval status of those models and if review of any model(s) will be needed?	c. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
d. If needed, does the RP propose the appropriate level of review for the model(s) and how it will be accomplished?	d. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
5. Does the RP explain how and when there will be opportunities for the public to comment on the study or project to be reviewed?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
6. Does the RP address expected in-kind contributions to be provided by the sponsor?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
If expected in-kind contributions are to be provided by the sponsor, does the RP list the expected in-kind contributions to be provided by the sponsor?	Yes <input type="checkbox"/> No <input type="checkbox"/> n/a <input checked="" type="checkbox"/>

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7. Does the RP explain how the reviews will be documented?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
a. Does the RP address the requirement to document ATR comments using Dr Checks published comments and responses pertaining to the design and construction activities summarized in a report reviewed and approved by the MSC and posted on the home district website?	a. Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>
8. Has the approval memorandum been prepared and does it accompany the RP?	Yes <input type="checkbox"/> No <input type="checkbox"/>

ATTACHMENT 4: STATEMENT OF TECHNICAL REVIEW FOR DECISION & IMPLEMENTATION DOCUMENTS TEMPLATE

REVIEW PLAN

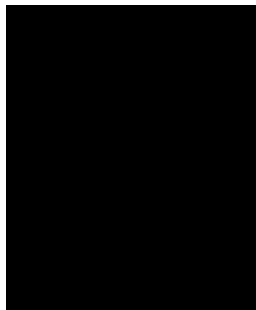
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STATEMENT OF QUALITY CONTROL COMPLETION OF DISTRICT QUALITY CONTROL

CERTIFICATION OF DISTRICT QUALITY CONTROL

District Quality Control (DQC) review has been completed for this project. The DQC was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-214. During the DQC, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of assumptions, methods, procedures and material used in analyses, alternatives evaluated, the appropriateness of data used and level obtained, and reasonableness of the results, including whether the product meets the customer's need consistent with law and existing US Army Corps of Engineers policy.

The DQC review was accomplished by the following review team which was independent of the PDT. All comments resulting from the DQC have been resolved and the comments have been closed in DrChecks. DrChecks summary report and/or comments are attached.



Environmental	CEMVP-PD
Plan Formulation	CEMVP-PD
H & H	CEMVS-EC-H
Cost and Specs	CEMVS-EC-D
Civil (Lead)	CEMVS-EC-D
Geotechnical	CEMVS-EC-G

Name
DQC Team Leader
CEMVP-PD

Date

Name
Project Manager
CEMVS-PM

Date

ATTACHMENT(S):
DrChecks Summary Report for the DQC Review(s)

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STATEMENT OF TECHNICAL REVIEW COMPLETION OF AGENCY TECHNICAL REVIEW

CERTIFICATION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the *Feasibility Report with Integrated Environmental Assessment for the Harlow and Open River Islands HREP* ATR was conducted as defined in the project's Review Plan to comply with the requirements of EC 1165-2-214. During the ATR, compliance with established policy principles and procedures, utilizing justified and valid assumptions, was verified. This included review of: assumptions, methods, procedures, and material used in analyses, alternatives evaluated, the appropriateness of data used and level obtained, and reasonableness of the results, including whether the product meets the customer's needs consistent with law and existing US Army Corps of Engineers policy. The ATR also assessed the District Quality Control (DQC) documentation and made the determination that the DQC activities employed appear to be appropriate and effective. All comments resulting from the ATR have been resolved and the comments have been closed in DrCheckssm.

TBD
ATR Team Leader
TBD

Date

Chief, Project Management Division
CEMVS

Date

Chief, Engineering and Construction Division
CEMVS

Date

Chief, Planning and Environment Division North
CEMVP- RPEDN

Date

Review Management Office
Representative, CEMVD-PD-SP

Date