



DEPARTMENT OF THE ARMY  
CORPS OF ENGINEERS, NORTHWESTERN DIVISION  
PO BOX 2870  
PORTLAND OR 97208-2870

CENWD-RBT

11 AUG 2015

MEMORANDUM FOR Commander, Kansas City District (CENWK-PM-CJ /Michael Chirpich)

SUBJECT: Review Plan (RP) Approval for the Clinton Dam Water Supply Barrier Fabrication and Stop Log Rehabilitation Project.

1. References:

a. Review Plan for the Clinton Dam Water Supply Barrier Fabrication and Stop Log Rehabilitation Project.

b. EC 1165-2-214 Civil Works Review, 15 December 2012.

2. Reference 1.a. above has been prepared in accordance with reference 1.b. above.

3. The RP has been coordinated with the Business Technical Division, Northwestern Division, U.S. Army Corps of Engineers, which is the Review Management Organization for the plan. The Review Plan includes District Quality Control and Agency Technical Review.

4. I hereby approve this RP, which is subject to change as circumstances require, consistent with the study development process and the Project Management Business Process. Subsequent revisions to this RP or its execution will require written approval from this office.

5. For further information, please contact Mr. Douglas Putman, P.E. at (503) 808-3883.

A handwritten signature in black ink, appearing to read "Scott A. Spellmon".

SCOTT A. SPELLMON  
BG, USA  
Commanding

Encl



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
**CORPS OF ENGINEERS, KANSAS CITY DISTRICT**  
**635 FEDERAL BUILDING**  
**601 E 12<sup>TH</sup> STREET**  
**KANSAS CITY MO 64106-2824**

CENWK-ED

31 March 2015

MEMORANDUM FOR Commander, Northwestern Division, USACE, ATTN: Mr. Douglas Putman.

SUBJECT: Clinton Dam Water Supply Barrier Fabrication and Stop Log Rehabilitation Project Review Plan (P2#450723)

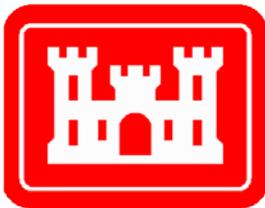
1. The review plan for the Clinton Dam Water Supply Barrier Fabrication and Stop Log Rehabilitation Project is attached for Northwestern Division's review and approval. The review plan was prepared in accordance with EC\_1165-2-214 and uses RMC's review plan template for ATR for implementation documents and other work products in accordance with the EC policy memo dated 15 December 2012.
2. The point of contact for this memorandum is the project manager, Michael Chirpich at (816) 389-3452.

A handwritten signature in black ink, appearing to read "David L. Mathews".

DAVID L. MATHEWS, P.E.  
Chief, Engineering Division  
Kansas City District

**Review Plan  
U.S. Army Corps of Engineers  
Kansas City District  
Northwest Division**

**Clinton Dam Water Supply Barrier  
Fabrication and Stop Log  
Rehabilitation**



**US Army Corps  
of Engineers®**

*30 March 2015*

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## 1. Purpose and Requirements

### **a. Purpose**

This Review Plan is intended to ensure a quality engineering project is developed by the Corps of Engineers. This Review Plan has been developed for the Clinton Dam Water Supply Barrier Fabrication and Stop Log Rehabilitation project at Clinton Lake, Lawrence, KS. This Review Plan was prepared in accordance with EC 1165-2-214, "Civil Works Review Policy". The Review Plan shall layout a value added process that assures the correctness of the information shown. It is imperative that the vertical teaming efforts are proactive and well coordinated to assure collaboration of the report findings, conclusions, and recommendations, and that there is consensus at all levels of the organization with the recommended path forward. This Review Plan describes the scope of review for the current phase of work, and is included in the Project Management Plan (P2 #450723). All appropriate levels of review (DQC, ATR, IEPR, BCOES, and Policy and Legal Review) will be included in this Review Plan as appropriate, and any levels not included will require documentation in the Review Plan of the risk-informed decision not to undertake that level of review. The RP identifies the most important skill sets needed in the reviews and the objective of the review and the specific advice sought, thus setting the appropriate scale and scope of review for the individual project. This Review Plan will be provided to PDT, DQC, ATR and IEPR Teams.

### **b. Guidance and Policy References**

- ER 5-1-11, USACE Business Process
- EC 1165-2-214, Civil Works Review Policy, 15 December 2012
- ER 1110-2-1156, Safety of Dams – Policy and Procedure, 31 Mar 2014
- ER 1110-1-12, Quality Management, 31 Mar 2011

**c. Requirements.** This review plan was developed in accordance with EC 1165-2-214, which establishes an accountable, 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 (OMRR&R). The EC outlines four general levels of review: District Quality Control/Quality Assurance (DQC), Agency Technical Review (ATR), Independent External Peer Review (IEPR), and Policy and Legal Compliance Review.

## **2. Review Management Organization**

The USACE Northwest Division (NWD) is the Review Management Organization (RMO) for this project. Contents of this review plan have been coordinated with the RMC and the Northwestern Division, Major Subordinate Command (MSC).

## **3. Project Description and Information**

Clinton Dam is located at Wakarusa River mile 22.2, approximately 1 mile west of Lawrence, Kansas. Construction of Clinton Dam was initiated by the Corps of Engineers in November 1970, closure of the dam was made in August 1975 and storage of water in the reservoir began in November 1977. The dam includes approximately 9550 feet of rolled earth fill embankment with a maximum height above the stream bed of 85 feet. The intake tower consists of a trash fender structure and working platform, streamlined inlets, gate passages, a transition from the gate passages to the conduit, a multilevel intake for the water supply/low flow within the trash fender structure, two wet wells for a single cable-hoist operated emergency gate, a dry well for two hydraulically operated service gates, an operating room, a service deck, and an entrance house. The water supply intake is located above the flood control passageway. Water is taken from the dam for the City of Lawrence, Kansas.

Water leakage has been an issue with the stoplogs for at least 15 years.

Documentation of the water leakage is extensive. The most recent documentation of water leakage is provided in Periodic Inspection Report 10. The water leakage is significant enough to prohibit entry into the dewatered areas created by the stoplogs. Both leaf springs were missing on each stoplog except for stoplog 4 (one leaf spring) and 6 (both leaf springs present). The seal bars were missing on several of the stoplogs. These conditions are prompted in part by the wave action when the stoplogs are installed in the water passage way slot and contribute to the excessive water leakage. Periodic Inspection Report No. 11 noted that the stoplogs should not be used for providing a dewatered area until repair actions are taken on the stoplogs. In accordance with the Periodic Inspection Report recommendations, the design team was tasked with the following:

- Rehabilitate the existing stoplogs that will be used to provide dewatered areas in the intake structure during maintenance and inspection only.
- Rehabilitate the existing apertures that will be deployed in the City water supply passageway slot.
- Design a set of water supply barriers that will be deployed in the City water supply passageway slot.

It has been determined that the stoplogs cannot be used to dewater the intake structure until an effort has been made to rehabilitate them. The water supply line has no secondary means of providing water shut-off through the dam embankment without the stoplogs. Dam safety could be jeopardized if the stoplogs are not able to be deployed in the event that the water supply gate has to be repaired and if the water supply conduit has to be shut-off to eliminate the pressurized pipe in the embankment.

The work in this contract involves fabricating stop logs without J-bulb seals (which will be referred to as water supply barriers), rehabilitating existing stoplogs and an aperture A, and installing springs on an existing (unused) Aperture B. Fabricating the water supply barriers, in this contract will require (but is not limited to): weldment fabrication by a certified welder meeting AWS D1.1 standards, weldment inspection by a certified weld inspector, and vinyl painting. Precision machining of these structures will be allowed if necessary. The water supply barriers are designed to be 8'-3" by 3'-4" by 1'- 1" wide steel structures with an estimated weight of about 1800 lbs each. The rehabilitated stoplogs will require (but are not limited to) the following: removal of galvanized coating, possibly some precision machining for an 8'-3" by 3'-4" by 1'- 1" wide steel structures weighing about 2500 lbs each, Jbulb seal replacement, weldment inspection by a certified weld inspector, weld repair to AWS D1.1 standards using prequalified weld procedures, and hot-dip galvanizing. The rehabilitated aperture is 8'-3" by 2'-7" by 1'-1" wide steel structure weighing about 1000 lbs. It will require (but is not limited to) the following: removal of galvanized coating, weldment inspection by a certified weld inspector, weld repair to AWS D1.1 standards using prequalified weld procedures, and vinyl painting. Removal and/or installation, by crane, of all steel structures mentioned above is required.

The design drawings, specifications, and design documentation report were fully developed in 2009. Due to funding shortfalls the entire packaged was shelved until a point in time where funds would be available. Funds have been received and are programmed for the current fiscal year of 2015 in the amount of \$450,000. The scope of this review plan and effort will represent the design team updating the current set of drawings and specifications to the current standards and conducting a DQC and ATR review of the plans and specifications. It is anticipated that a very minimal amount of effort will be required to update the documents.

#### **4. District Quality Control (DQC)**

All implementation documents (including supporting data, analyses, environmental compliance documents, etc.) shall undergo DQC. 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). The home district shall manage DQC. Documentation of DQC activities is required and should be in accordance with the Quality Manual of the District and the home MSC. 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. 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, they should not be performed by the same people who performed the original work, including managing/reviewing the work in the case of contracted efforts. Additionally, the PDT is responsible to ensure consistency and effective coordination across all project disciplines during project design and construction management. Peer, interdisciplinary, and BCOES reviews will all be conducted on the work products. Peer reviews will be conducted as the work is progressing during the design. Interdisciplinary reviews will take place as the work progresses and at major review milestones. The BCOES review will take place at the 95% review and have a final BCOES certification prior to advertisement. See Attachment 2 for PDT and DQC members and disciplines. DrChecks review software will be used to document DQC comments.

## **5. Agency Technical Review (ATR)**

ATR is mandatory for all implementation documents (including supporting data, analyses, environmental compliance documents, etc.). The objective of ATR is to ensure consistency with established criteria, guidance, procedures, and policy. The ATR will assess whether the analyses presented are technically correct and comply with published USACE guidance, and that the document explains the analyses and results in a reasonably clear manner for the public and decision makers. Management of ATR reviews is dependent upon the phase of work and the reviews are conducted by a qualified team from outside the home district that is not involved in the day-to-day production of the project/product. Determine and obtain an ATR agreement on key data such as hydraulic and geotechnical parameters early in design process. The goal is to have early involvement of ATR team, especially when key decisions are made. The ATR Lead should be invited virtually to all PDT meetings, in order to understand the design efforts and to know when to engage other ATR members for key decisions. Value added Lessons Learned from the ATR team should be shared early on to have the best chance of being adopted by the PDT. Most of the ATR effort should be accomplished midway through the design effort; after completion of design the ATR effort will check that the effort agreed to at mid point was accomplished. This is consistent with the requirement that the ATR members shall not be involved in the day-

to-day production of the project/product. ATR teams will be comprised of senior USACE personnel and may be supplemented by outside experts as appropriate. The ATR team lead will be from outside the home MSC. A site visit will not be scheduled for the ATR Team. See Attachment 2 for ATR members.

The draft charge questions for the ATR team are: Does the implementation documents adhere to the USACE Hydraulic Steel Structures (HSS) design, fabrication and inspection program requirements as described in ETL 1110-2-584 Design of Hydraulic Steel Structures and EM 1110-2-6054 Evaluation and Repair of Hydraulic Steel Structures?

DrChecks review software will be used to document all ATR comments, responses and associated resolutions accomplished throughout the review process. Comments will be limited to those that are required to ensure adequacy of the product. The four key parts of a quality review comment will normally include:

- (1) The review concern – identify the product’s information deficiency or incorrect application of policy, guidance, or procedures;
- (2) The basis for the concern – cite the appropriate law, policy, guidance, or procedure that has not been properly followed;
- (3) The significance of the concern – indicate the importance of the concern with regard to its potential impact on the plan selection, recommended plan components, efficiency (cost), effectiveness (function/outputs), implementation responsibilities, safety, Federal interest, or public acceptability; and
- (4) The probable specific action needed to resolve the concern – identify the action(s) that the reporting officers must take to resolve the concern.

In some situations, especially addressing incomplete or unclear information, comments may seek clarification in order to then assess whether further specific concerns may exist. The ATR documentation in DrChecks includes the text of each ATR concern, the PDT response, a brief summary of the pertinent points in any discussion, including any vertical team coordination (the vertical team includes the district, RMO, MSC, and HQUSACE), and the agreed upon resolution. If an ATR concern cannot be satisfactorily resolved between the ATR team and the PDT, it will be elevated to the vertical team for further resolution in accordance with the policy issue resolution process described in either ER 1110-1-12 or ER 1105-2-100, Appendix H, as appropriate. Unresolved concerns can be closed in DrChecks with a notation that the concern has been elevated to the vertical team for resolution. Certification of ATR should be

completed, based on work reviewed to date, for the final report. A draft certification is included in Attachment 1.

At the conclusion of each ATR effort, the ATR team will prepare a Review Report summarizing the review. Review Reports will be considered an integral part of the ATR documentation and shall:

- Identify the document(s) reviewed and the purpose of the review;
- Disclose the names of the reviewers, their organizational affiliations, and include a short paragraph on both the credentials and relevant experiences of each reviewer;
- Include the charge to the reviewers;
- Describe the nature of their review and their findings and conclusions;
- Identify and summarize each unresolved issue (if any); and
- Include a verbatim copy of each reviewer's comments (either with or without specific attributions), or represent the views of the group as a whole, including any disparate and dissenting views.

**Required ATR Team Expertise:** The ATR team will be chosen based on each individual's qualifications and experience with similar projects. Specifically for this project someone who is familiar with the design and fabrication of stop logs under the USACE Hydraulic Steel Structures (HSS) design, fabrication and inspection program is requested to be part of the ATR team.

**ATR Lead:** The ATR team lead is a senior professional with extensive experience in preparing Civil Works documents and conducting ATRs. The lead has the necessary skills and experience to lead a virtual team through the ATR process. The ATR lead may also serve as a reviewer for a specific discipline, in this case Structural Engineering. It is anticipated that the team lead will be a structural engineer and perform both as a reviewer and team lead. No other disciplines are needed as part of the review team.

ATR may be certified when all ATR concerns are either resolved or referred to the vertical team for resolution and the ATR documentation is complete. The ATR Lead will prepare a Statement of Technical Review certifying that the issues raised by the ATR team have been resolved (or elevated to the vertical team). A sample Statement of Technical Review for the plans and specifications is included in Attachment 1.

## 6. Independent External Peer Review (IEPR)

IEPR may be required for implementation documents under certain circumstances. 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 USACE is warranted. A risk-informed decision, as described in EC 1165-2-214, is made as to whether IEPR is appropriate. IEPR panels will consist of independent, recognized experts from outside of the USACE in the appropriate disciplines, representing a balance of areas of expertise suitable for the review being conducted.

**Decision on Type II IEPR.** A Type II IEPR will not be performed during the Implementation Phase on the design and construction activities associated with this project. A risk-informed decision was made as to whether IEPR is appropriate based on the factors that are outlined in EC 1165-2-214, Appendix E, Section 2 (a) thru (c). After reviewing these items it was determined that this project does not pose a significant threat to human life (public safety) since it involves the fabrication of water control barriers and rehabilitation of the existing stop logs and a water control aperture. The existing stop logs will not be removed until the water barriers have been fabricated and aperture B is ready for install. This project will not use innovative materials or techniques, require redundancy, resiliency, and robustness, or a unique construction sequencing.

## 7. Policy and Legal Compliance Review

All implementation documents will be reviewed throughout the project for their compliance with law and policy. Guidance for policy and legal compliance reviews is addressed in Appendix H, ER 1105-2-100. These reviews culminate in determinations that the recommendations in the reports and the supporting analyses and coordination comply with law and policy, and warrant approval or further recommendation to higher authority by the home MSC Commander. DQC and ATR augment and complement the policy review processes by addressing compliance with pertinent published Army policies.

## 8. Review Schedule and Costs

To the extent practical reviews should not extend the design schedule but should be embedded in the design process. Reviewers should be involved at key decision points and are encouraged to provide timely over the shoulder comments.

a. **ATR Schedule and Cost.** The preliminary review schedule is listed in the table below. The cost for the ATR is approximately \$5000. Reference the monthly P2 schedule for updates to the schedule and cost of the ATR throughout the project. Provided is an overall review schedule that shows timing and sequence of all reviews.

<b>Project Phase / Submittal</b>	<b>Review Start</b>	<b>Review Complete</b>
DQC Review	<b>6 April 2015</b>	<b>17 April 2015</b>
ATR Review	<b>27 April 2015</b>	<b>8 May 2015</b>
Revisions and Backcheck	<b>11 May 2015</b>	<b>22 May 2015</b>
Certification of ATR		<b>5 June 2015</b>

### 9. Public Participation

As required by EC 1165-2-214, the approved Review Plan will be posted on the District public website (<http://www.nwk.usace.army.mil/Missions/CivilWorks/CivilWorksProgramsandProjects/CivilWorksReviewPlans.aspx>). Information will be conveyed to the public through the use of press releases and media interviews, as necessary, and through the use of posting information to the Kansas City District’s website. There is no formal public review planned for the plans and specifications under development .

### 10. Review Plan Approval and Updates

The MSC for this project is the Northwestern Division. The MSC Commander is responsible for approving this Review Plan. The Commander’s approval reflects vertical team input (involving the St. Paul District, MSC, RMC and HQUSACE members) as to the appropriate scope and level of review for the study and endorsement by the RMC. Like the PMP, the Review Plan is a living document and may change as the study progresses. The District is responsible for keeping the Review Plan up to date. Minor changes to the review plan since the last MSC Commander approval will be documented in an Attachment to this plan. Significant changes to the Review Plan (such as changes to the scope and/or level of review) should be re-endorsed by the RMC and re-approved by the MSC Commander following the process used for initially approving the plan. The latest version of the Review Plan, along with the Commanders’ approval memorandum, will be posted on the Kansas City District’s webpage and linked to the HQUSACE webpage. The latest Review Plan should also be provided to the RMO and home MSC.

## 11. Models

The use of certified or approved models for all activities to ensure the models are technically and theoretically sound, compliant with USACE policy, computationally accurate, and based on reasonable assumptions. The responsible use of well-known and proven USACE developed and commercial engineering software will continue the professional practice of documenting the application of the software and modeling results will be followed. The selection and application of the model and the input and output data is still the responsibility of the users and is subject to DQC, ATR, and IEPR (if required). The following engineering models are anticipated to be used:

<b>Model</b>	<b>Status</b>
No Models were used in the development of the Plans and Specifications.	

## ATTACHMENT 1 COMPLETION OF AGENCY TECHNICAL REVIEW

The Agency Technical Review (ATR) has been completed for the [implementation documents](#) for [Clinton Dam Water Barrier Fabrication and Stop Log Rehabilitation](#). The 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 DrChecks<sup>sm</sup>.

*SIGNATURE*

Name  
 ATR Team Leader  
Office Symbol/Company

\_\_\_\_\_  
 Date

*SIGNATURE*

Name  
 Project Manager (home district)  
Office Symbol

\_\_\_\_\_  
 Date

*SIGNATURE*

Name  
 Architect Engineer Project Manager<sup>1</sup>  
Company, location

\_\_\_\_\_  
 Date

*SIGNATURE*

Nathan Snorteland  
 CEIWR-RMC

\_\_\_\_\_  
 Date

### CERTIFICATION OF AGENCY TECHNICAL REVIEW

Significant concerns and the explanation of the resolution are as follows: [Describe the major technical concerns and their resolution](#). As noted above, all concerns resulting from the ATR of the project have been fully resolved.

*SIGNATURE*

Name  
 Chief, Engineering Division (home district)  
Office Symbol

\_\_\_\_\_  
 Date

*SIGNATURE*

Name  
 Dam Safety Officer<sup>2</sup> (home district)  
  
Office Symbol

\_\_\_\_\_  
 Date

<sup>1</sup> Only needed if some portion of the ATR was contracted  
<sup>2</sup> Only needed if different from the Chief, Engineering Division.

**ATTACHMENT 2: TEAM ROSTERS**

Review Plan Points of Contact

<b>Name/Title</b>	<b>Organization</b>	<b>Email/Phone</b>
Michael Chirpich	CENWK-PM-CJ	<a href="mailto:Michael.C.Chirpich@usace.army.mil">Michael.C.Chirpich@usace.army.mil</a> / 816-389-3452

<b>PDT MEMBER</b>	<b>DISCIPLINE</b>	<b>District / Agency</b>	<b>Phone</b>
Michael Chirpich	Project Manager	CENWK-PM-CJ	816-389-3452
Sue Gerht	Project Office	CENWK-OF-CL	816-389-3635
John Giacomo	Cost Estimating	CENWK-ED-DC	816-389-3228
Frank Pierce	Real Estate	CENWK-RE-C	816-389-3772
Ken Olson	Structural Design	CENWK-ED-DS	816-389-2243
Mark Little	Mechanical Design	CENKW-ED-DM	816-389-3561
Zach Warren	Mechanical Design	CENWK-ED-DM	816-389-2221
Rona Parker-Anderson	Specifications	CENWK-ED-DT	816-389-3525

The DQC Team will be performed by the following individuals:

<b>DQC MEMBER</b>	<b>DISCIPLINE</b>	<b>District / Agency</b>	<b>Phone</b>
Sue Gehrt	Clinton Lake OPM	CENWK-OF-CL	816-389-3635
Mike Scott	Mechanical Engineer	CENWK-OD-TM	816-389-3639
Clint Mason	Structural Engineer	CENWK-OD-TM	816-389-3619
Jim Mehnert	Dam Safety	CENWK-ED-GD	816-389-3538
John Benson	Dam Safety Program Manager	CENWK-ED-GD	816-389-3215

The ATR Team will be performed by the following individual:

<b>ATR MEMBER</b>	<b>DISCIPLINE</b>	<b>District / Agency</b>	<b>Phone</b>
Tony Fares	ATR Lead / Structural Design	CEMVP-EC-D	651-290-5568

**ATTACHMENT 3: REVIEW PLAN REVISIONS**

<b>Revision Date</b>	<b>Description of Change</b>	<b>Page / Paragraph Number</b>

## ATTACHMENT 4: ATR Decision Process

From EC 1165-2-214 (15 Dec 12)

Applicability of ATR to Clinton Lake Water Supply Barrier Fabrication and Stop Log Rehabilitation.

Section 15 Risk Informed Decisions on Appropriate Reviews:

**(1) Does it include any design (structural, mechanical, hydraulic, etc)?**

Contract includes design of new water control barriers which will not be used to provide a dewatered area for entry by personnel. Design is performed under the Hydraulic Steel Structures ETL 1110-2-584.

**(2) Does it evaluate alternatives?**

NA

**(3) Does it include a recommendation?**

NA

**(4) Does it have a formal cost estimate?**

Yes

**(5) Does it have or will it require a NEPA document?**

NA

**(6) Does it impact a structure or feature of a structure whose performance involves potential life safety risks?**

The current stop logs are being used for water control yet they leak excessively and personnel are unable to safely enter behind them at any time. Thus the Stop Logs will be refurbished and then placed into storage. The water barriers will be fabricated and used to control the water intake for the water supply to the city of Lawrence Kansas. The new fabricated barriers will not be used for inspection or maintenance purposes to provide a dewatered area for personnel.

**(7) What are the consequences of non-performance?**

Continued excessive leakage behind the stop logs and the noted prohibition for personnel to not enter the area behind the current stop logs. The water supply line has no secondary means of providing water shut-off through the dam embankment without the stoplogs. Dam safety could be jeopardized if the stoplogs are not able to be deployed in the event that the water supply gate has to be repaired or if the water supply conduit has to be shut-off to eliminate the pressurized pipe in the embankment.

**(8) Does it support a significant investment of public monies?**

NA

**(9) Does it support a budget request?**

Yes, this was part of the work plan for FY15 at Clinton Lake

**(10) Does it change the operation of the project?**

No

**(11) Does it involve excavation, subsurface investigations (drilling or sampling or both), or placement of soil?**

NA

**(12) Does it affect any special features, such as cultural resources, historic properties, survey markers, etc, that should be protected or avoided?**

NA

**(13) Does it involve activities that trigger regulatory permitting such as Section 404 or stormwater/NPDES related actions?**

NA

**(14) Does it involve activities that could potentially generate hazardous wastes and/or disposal of materials such as lead based paints or asbestos?**

NA

**(15) Does it reference use of or reliance on manufacturers' engineers and specifications for items such as prefabricated buildings, playground equipment, etc?**

NA

**(16) Does it reference reliance on local authorities for inspection/certification of utility systems like wastewater, stormwater, electrical, etc?**

NA

**(17) Is there or is there expected to be any controversy surrounding the Federal action associated with the work product?**

No