

IEPA Log No.: **C-0033-18**  
CoE appl. #: **CELRL-PMC-PL**

Public Notice Beginning Date: **May 7, 2018**  
Public Notice Ending Date: **May 28, 2018**

Section 401 of the Federal Water Pollution Control Act  
Amendments of 1972

### **Section 401 Water Quality Certification for Discharge of Dredged or Fill Material**

#### **Public Notice/Fact Sheet Issued By:**

Illinois Environmental Protection Agency  
Bureau of Water  
Permit Section  
1021 North Grand Avenue East  
Post Office Box 19276  
Springfield, Illinois 62794-9276  
217/782-3362

**Name and Address of Discharger:** U.S. Army Corps of Engineers, Louisville District – 600 Dr. Martin Luther King Pl., Louisville, KY 40202

**Discharge Location:** Near Olmstead in SW 1/4 of Section 18 of Township 15S, Range 2E of the 3rd P.M. in Pulaski County.

**Name of Receiving Water:** Ohio River

**Project Description:** Proposed phase 1 demolition and removal of Lock and Dam no. 53.

The Illinois Environmental Protection Agency (IEPA) has received an application for a Section 401 water quality certification to discharge dredged or fill material into the waters of the State associated with a Section 404 permit application received by the U.S. Army Corps of Engineers. The Public Notice period will begin and end on the dates indicated in the heading of this Public Notice. The last day comments will be received will be on the Public Notice period ending date unless a commenter demonstrating the need for additional time requests an extension to this comment period and the request is granted by the IEPA. Interested persons are invited to submit written comments on the project to the IEPA at the above address. Commenters shall provide their names and addresses along with comments on the certification application. Commenters may include a request for public hearing. The certification and notice number(s) must appear on each comment page.

The attached Fact Sheet provides a description of the project and the antidegradation assessment.

The application, Public Notice/Fact Sheet, comments received, and other documents are available for inspection and may be copied at the IEPA at the address shown above between 9:30 a.m. and 3:30 p.m. Monday through Friday when scheduled by the interested person.

If written comments or requests indicate a significant degree of public interest in the certification application, the IEPA may, at its discretion, hold a public hearing. Public notice will be given 30 days before any public hearing. If a Section 401 water quality certification is issued, response to relevant comments will be provided at the time of the certification. For further information, please call Darren Gove at 217/782-3362.

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Fact Sheet for Antidegradation Assessment  
For U.S. Army Corps of Engineers, Louisville District  
IEPA Log No. C-0033-18  
COE Log No. CELRL-PMC-PL  
Contact: Abby Brokaw 217/558-2012  
Public Notice Start Date: May 7, 2018

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U.S. Army Corps of Engineers Louisville District (“Applicant”) has applied for a 401 Water Quality Certification for impacts associated with the demolition of Lock and Dam (L&D) 53 at Ohio River mile 962.6 in Section 18, Township 15 South, Range 2 East, Pulaski County, Illinois. The purpose of the proposed project is to aid in completing construction of the Olmsted L&D Project. Olmsted L&D is now capable of maintaining a navigable pool, which renders L&D 53 ineffective and an obstacle to safe navigation

The proposed project would impact both Illinois and Kentucky waters and includes demolition and removal of all elements of the dam above elevation 280 feet (except for piers 2-5 and a fixed stone weir); demolition of the 600-foot locks and associated approach and river walls; demolition of the 1,200-foot locks and associated chamber cells and approach walls; and removal of pier number 1 and the steel and wooden wickets from the dam’s navigable pass. The Applicant proposes to dispose of a portion of the demolition debris inside the 600-foot lock chamber located in Illinois waters. The remaining debris will be recycled (metal) or disposed of in mooring cells constructed in Kentucky waters.

The fill material consists of approximately 50,232 cubic yards of sand and gravel; 20,506 cubic yards of broken concrete; and 13,918 cubic yards of stone rip-rap. Sand, gravel, concrete and rock will fill approximately 3.5 acres in Illinois waters. There should be no disposal of metal components within Illinois waters other than for imbedded reinforcement. Sand and other fines that may be placed within the 600-foot lock chamber consist of alluvial sand and soils which were used to fill structural cells for the 1,200-foot lock chamber and approach walls. These materials were obtained from the river bed when the 1,200-foot temporary lock was constructed.

The demolition work would be completed from the river using barge mounted excavators with impact breakers and vibrating hammers. Explosives may be used for demolition of the 600-foot lock river wall if water levels are sufficiently low. Two low water seasons (June through November) may be needed to complete the work.

Information used in this review was obtained from the Joint Application Form and CWA Section 404(B)(1) Evaluation for “Demolition of Lock & Dam 53 and Associated Fill” submitted to the Agency on March 28, 2018.

### **Identification and Characterization of the Affected Water Body**

The proposed project will impact the Ohio River (IL\_A-920-981), a General Use water, at a point where 53,940 cfs of flow exists upstream of L&D 53 during 7Q10 low-flow conditions. The Ohio River is not listed as biologically significant in the 2008 Illinois Department of Natural Resources publication *Integrating Multiple Taxa in a Biological Stream Rating System*, or given an integrity rating in that document. The Ohio River, Waterbody Segment IL\_A-920-981, is listed in the draft 2016 Illinois Integrated Water Quality Report and Section 303(d) List as

impaired for fish consumption use with potential causes given as mercury, polychlorinated biphenyls and dioxin (including 2, 3, 7, 8 – TCDD) and primary contact use with a potential cause given as fecal coliform. Aquatic life and public and food processing water supply uses are fully supported. This segment of the Ohio River is subject to enhanced dissolved oxygen standards.

### **Identification of Proposed Pollutant Load Increases or Potential Impacts on Uses**

A temporary and localized increase in suspended particulates and turbidity levels are a normal and unavoidable result of demolition and fill material placement at the project site. The majority of fill originates from the demolished dam and the river bottom. Fill materials consist of sand and gravel (50,232 cubic yards), concrete (20,506 cubic yards), and rock cover #205 stone (13,918 cubic yards). All the aforementioned fill material will be relocated to the 600-foot lock area, totaling 3.5 acres in Illinois waters. The remaining debris will be recycled (metal) or disposed of in mooring cells constructed in Kentucky waters. No contaminated materials would be released during implementation of the proposed project. No significant negative impacts are expected to water quality where fill material is placed.

Benthic habitat will also be disturbed in the area of construction, but impacts to aquatic life uses of this area are not anticipated. Due to the heavily eroded conditions of the project area and the exposure of lakebed clay and loss of sand, the project may improve water quality and aquatic habitat by minimizing erosion.

Impacts to surface water and physical substrates from demolition will be minimized by using appropriate construction best management practices and limiting disturbance of the substrates.

### **Fate and Effect of Parameters Proposed for Increased Loading**

The increase in suspended solids will be local and temporary. Fines or pollutant dispersal is expected during concrete demolition or blasting, but would not contribute to long-term or widespread water quality impairments.

Temporary and localized impacts to benthic organisms and their habitats would occur in the immediate areas of construction; however, benthic organisms are expected to quickly rebound from the short-term impacts of material placement. The substrate of the project area is dynamic, because of local dredging and navigation-related activities. The biota inhabiting these shifting sand substrates are adapted to unstable conditions. The disturbed area would be expected to recolonize rapidly after completion of the project.

### **Purpose and Social & Economic Benefits of the Proposed Activity**

The Olmstead L&D is now capable of providing a navigable pool, therefore L&D 53 is obsolete and a hazard to navigation. Currently, tows must avoid submerged obstructions at L&D 53 and clear the lock's nose pier before initiating a turn. Tows must take shallow turns or risk the

possibility that a barge could break loose from a tow and strike the locks or dam. Additional hazards may include barge accidents resulting in the release of pollutants into the waterway.

### **Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation**

The proposed project is the result of thorough evaluation of four alternatives (including the no-action alternative) which were documented in previous USACE Environmental Impact Statements in 1985 and 1993 (not available for this review). The least intrusive alternative would be to not complete the project. This is not an acceptable alternative given the safety and navigation issues caused by L&D 53. For a variety of reasons related to constructability, economics, navigation and environmental concerns, the proposed alternative was selected by the Applicant and represents the most practicable alternative with the least adverse impact on the aquatic ecosystem. The proposed project would follow conditions set forth by the Agency and USACE.

### **Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities**

On March 6, 2018, an IDNR EcoCAT endangered species consultation, Project #1803749, was initiated and resulted in the Illinois Natural Heritage Database indicating that an INAI site, a nature preserve, and four endangered or threatened species are in the vicinity of the project location. The review results noted that an IDNR staff member will evaluate this information and contact the Applicant to request additional information or to terminate consultation, if adverse effects are unlikely. The Applicant will obtain final determination from IDNR prior to demolition and disposal.

### **Agency Conclusion**

This preliminary assessment was conducted pursuant to the Illinois Pollution Control Board regulation for Antidegradation found at 35 Ill. Adm. Code 302.105 (antidegradation standard) and was based on the information available to the Agency at the time this assessment was written. We tentatively find that the proposed activity will result in the attainment of water quality standards; that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been incorporated into the proposed activity; and that this activity will benefit the safety and navigability of the Ohio River. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.