

IEPA Log No.: **C-0077-15**

CoE appl. #: **2015-105**

Public Notice Beginning Date: **April 24, 2015**

Public Notice Ending Date: **May 15, 2015**

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

### **Section 401 Water Quality Certification to Discharge into Waters of the State**

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

Illinois Environmental Protection Agency  
Bureau of Water  
Division of Water Pollution Control  
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, St. Louis District, 1222 Spruce Street, St. Louis, Missouri 63103-2833

**Discharge Location:** Along the Mississippi River between river miles 160 and 162.5 in Monroe County.

**Name of Receiving Water:** Mississippi River

**Project Description:** Weir and dike construction.

The Illinois Environmental Protection Agency (IEPA) has received an application for a Section 401 water quality certification to discharge into the waters of the state associated with an application received from 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 Thaddeus Faught at 217/782-3362.

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Fact Sheet for Antidegradation Assessment  
U.S. Army Corps of Engineers – Mississippi River – Monroe County  
IEPA Log # C-0077-15  
COE # CEMVS-OD-F-2015-105  
Contact: Diane K Shasteen (217) 558-2012  
April 24, 2015

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The U.S. Army Corps of Engineers (Corps), St. Louis District (District), (“Applicant”) has applied for a 401 Water Quality Certification for impacts associated with the proposed construction of four bendway weirs (right descending bank; Missouri) and three rootless dikes (left descending bank; Illinois) on the Middle Mississippi River (MMR) between river mile (RM) 160.0 and 162.5 near Oakville, Missouri. The Mosenthein Reach-Ivory Landing Phase V Regulating Works Project is located in St. Louis County, Missouri and in Monroe County, Illinois in Sections 27, 33, and 34, Township 1 South, Range 11 West and Sections 4 and 5, Township 2 South, Range 11 West. The District is responsible for maintaining the navigation channel on the MMR to allow for the transport of commodities in accordance with the River and Harbor Act of 1930. The Regulating Works Project utilizes the placement of revetments for bank stabilization and dikes for sediment management to maintain bank stability and ensure adequate navigation depth and width. Approximately 125,000 tons of Graded A-stone will be used in the construction of the rootless dikes and extensions on the Illinois side of the river. The approximate length (in linear feet) of the dikes will be 615 (RM 161.7), 500 (RM 161.5), and 330 (RM 161.10) with top elevations of 385’ (NAVD88) for the upstream dike and 384’ (NAVD88) for the two downstream dikes. Stone will be transported to placement sites by barges and placed into the river via a track hoe or dragline crane as river stages allow for construction. The four bendway weirs will be located at RM 162.00 through 162.30 on the Missouri side of the river. The purpose of this project is to reduce the need for frequent channel maintenance dredging required to maintain the MMR navigational channel to allow for the transport of commodities, avoid disruption to the transportation of those commodities, and to avoid channel closures and subsequent groundings of barges.

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

The Mississippi River (IL\_ J-36) is a General Use Water with estimated 7Q10 flows of 46,600 cfs at RM 161.0. According to the draft 2014 Illinois Integrated Water Quality Report and Section 303(d) List, the Mississippi River at the above location has been assessed by Illinois EPA and is listed as fully supporting Aquatic Life, Primary Contact Recreation, and Secondary Contact uses and not supporting Fish Consumption use with causes of impairment listed as Mercury and Polychlorinated biphenyls (PCBs). The Mississippi River, in the project area, is not listed as a biologically significant stream in the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*; nor is it given an integrity rating in that document. The Mississippi River between approximately RM 160 to 162.5 is designated as an **enhanced** water pursuant to the dissolved oxygen water quality standard.

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

The pollutant load increases that would occur from this project include some possible increases in total suspended solids. These increases, a normal and unavoidable result of the placement of stone in the river, may occur at the point of construction activity.

Aquatic life uses in the portion of the river that will be disturbed during construction may be negatively impacted, but in time, they will recover and support approximately the same community structure as is now found in these areas. Due to the size of the river, impacts to aquatic communities should be negligible.

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

The increase in suspended solids will be local and temporary. Sediments in the construction area are typically sand with little associated fines; therefore, are not expected to release contaminants into the water column at concentrations that alone or in combination with other contaminants in the water would cause toxic effect to aquatic organisms.

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

The primary purpose of this project is to reduce the amount of repetitive dredging in the MMR between RM 160 and 162.5 to maintain the navigational channel of not less than 9' in depth and 300' in width, as set forth by the River and Harbor Act of 1930. Maintaining the navigational channel allows for the transport of commodities, avoids disruption to the transportation of those commodities, avoids channel closures and subsequent groundings of barges, and maintains the river for recreational uses including boating and fishing. A secondary purpose of the work is to enhance or improve aquatic habitat diversity by constructing rootless dikes which will split the flow and guide a portion of the flow toward the secondary channel and channel border area.

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

The Applicant conducted a Hydraulic Sediment Response (HSR) model investigation of the mouth of the Meramec River reach on the MMR between RM 165.00 and 156.00. The flow and sediment transport response study was conducted to analyze various river engineering measures that would reduce or eliminate the amount of maintenance dredging required between RM 162.00 and 160.00 while improving the existing natural habitat. Sixteen alternatives were evaluated based on the following criteria:

The chosen alternative should-

- Reduce or eliminate sedimentation from RM 162.00 to 160.00
- Maintain the navigation channel requirements of at least 9' of depth and 300' of width
- Not significantly impact environmental features within the reach

Alternatives 3, 4, 6, 14, 15, and 16 were shown to reduce the amount of dredging while ensuring there were no negative environmental impacts. Alternatives 3, 4, and 6 did not reduce the elevations in the repetitive dredging location as much as the chosen alternative (16) and alternatives 14 and 15 were not chosen due to negative impacts to Ameren which is located near RM 161.5. The alternatives were evaluated by St. Louis District Corps personnel along with personnel from the Illinois Department of Natural Resources, U.S. Fish and Wildlife Service, Missouri Department of Conservation, American River Transportation Company, Kirby Inland Marine, and Ameren. A full discussion of the HSR Model study can be found at [http://mvs-wc.mvs.usace.army.mil/arec/Documents/HSR\\_Models/Mouth\\_of\\_the\\_Meramec\\_Hoppies\\_Marina/M68\\_Mouth\\_of\\_Meramec.pdf](http://mvs-wc.mvs.usace.army.mil/arec/Documents/HSR_Models/Mouth_of_the_Meramec_Hoppies_Marina/M68_Mouth_of_Meramec.pdf)

The construction of the dikes in the MMR will follow conditions set forth by the Agency and USACE. The least intrusive alternative would be to not construct the bendway weirs and rootless dikes. This is not an acceptable alternative given the need to reduce the amount of repeated dredging to maintain a navigable channel in the MMR in accordance with the River and Harbor Act of 1930. The addition of the river structures will have the least overall impacts to the environment, will not result in significant adverse effects on human health and welfare, and will be operationally and economically feasible for the District.

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

An EcoCAT endangered species consultation submitted on February 12, 2015 to the Illinois Department of Natural Resources resulted in no records of state-listed threatened or endangered species or other protected resources in the vicinity of the proposed project and consultation for IDNR Project #1509176 was immediately terminated.

### **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 District and the MMR region by reducing the amount of repetitive dredging, maintain the navigational channel, allow for the movement of commerce, avoid channel closures, and reduce the risk of subsequent groundings of barges in the river. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.