

IEPA Log No.: **C-0408-10**

Public Notice Beginning Date: **February 17, 2011**

Public Notice Ending Date: **March 10, 2011**

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
Facility Evaluation Unit
1021 North Grand Avenue East
Post Office Box 19276
Springfield, Illinois 62794-9276
217/782-3362

Name and Address of Discharger: Chicago District, Corps of Engineers, 111 North Canal Street,
6th Floor Chicago, IL 60606

Discharge Location: Sec.10, T39N, R14E, 3rd P.M., Cook County within Chicago

Name of Receiving Water: Chicago River

Project Description: Repair two scour holes west of the Chicago Lock within Chicago River

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 a project 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 Keith Runge at 217/782-3362.

KAR:PN.0352-08doc

Fact Sheet for Antidegradation Assessment
For: U.S. Army Corps of Engineers - Chicago Lock Repair
IEPA Log #C-0408-10
Contact: Mark T. Books at 217/785-6937
February 17, 2011

The United States Army Corps of Engineers (“Applicant”) has applied for Section 401 water quality certification for impacts associated with repairing two scour holes west of the Chicago Lock within the Chicago River. The Applicant has stated that, “in 2009, USACE performed a Screening Portfolio Risk Assessment (SPRA) for the Chicago Lock, and issued a DSAC II rating which means that repairs are urgent and that the project is considered very high risk” (emphases added). Applicant further states that, “the resulting report outlined four potential failure modes for Chicago Lock, one of which was the failure of the Lock’s western gate abutment from an adjacent scour hole. The scour hole ranges between ten to fifteen feet deep, and its volume has increased by approximately 15% between 2008 and 2010 due to certain larger rainfall events.” The Applicant proposes to install riprap consisting of 915 cubic yards of 3-inch bedding stone in the bottom of the holes and 2925 cubic yards of 15-750 pound armor stone above the bedding stone in order to fill the holes. Riprap will consist of clean materials free of fines (<5% passing the #200 sieve test). The project is located in Section 10, Township 39 North, and Range 14 East in Chicago.

Identification and Characterization of the Affected Water Body.

The Chicago River has a 7Q10 flow of zero cfs at this location and is General Use water. Chicago River Waterbody Segment IL_HCB-01 is listed in the Illinois Integrated Water Quality Report and Section 303(d) List-2010 as impaired for fish consumption, aquatic life and primary contact recreation. The potential causes of impairment for fish consumption are mercury and PCB’s. The potential causes for aquatic life are silver and total phosphorus and the potential causes for primary contact recreation is fecal coliform. The Chicago River at this location is not an enhanced waterbody pursuant to the dissolved oxygen water quality standard. Using the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*, the Chicago River, at this location, is not listed as a biologically significant stream. This portion of the Chicago River has an integrity rating of “E”. The IDNR WIRT system lists Longnose Sucker as a state threatened or endangered aquatic species residing in the project area.

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 suspended solids (SS) during the construction of the project. Aquatic life use of this portion of the Chicago River that may be disturbed during this repair work will be negatively impacted, but is anticipated to recover to pre-construction conditions over time.

Fate and Effect of Parameters Proposed for Increased Loading.

The increase in SS will be local and temporary.

Purpose and Social & Economic Benefits of the Proposed Activity.

The proposed restoration project will repair the scour holes in order to prevent failure of the lock and allow continued use of the lock to maintain water quality in the Chicago Area Waterway System (CAWS). Applicant has stated that, “if lock gate structure failure occurs, either total lock closure, or free unobstructed flow between Lake Michigan and the Chicago River will result. Lock closure could occur if the abutment foundation failure led to the gates being wedged together in a closed position. Alternative scenarios include an inability to close the gates completely, or their total loss...If the lock gates were to fail in an open position, this critical water control function is lost, and unlimited diversion of Lake Michigan into the CAWS would occur...If the lock gates would fail in the closed position, total lock closure would occur, blocking flow, interrupting navigation and preventing water control measures on the CAWS.”

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

The construction of the proposed project will follow conditions set forth by the Agency and USACE. In order to reduce the amount of SS added to the environment the Applicant has stated that, “the fill will be placed by the USACE crane-barge Manitowoc, using a clam-shell bucket for the finer material at the bottom, and an orange-peel bucket for the armor layer. The stone will be placed with the bucket resting at the bottom, rather than dumped or dropped. No subsequent mechanical leveling is anticipated”. Not repairing these scour holes is an unacceptable alternative because it could lead to lock failure.

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

In a letter from Tracy Evans dated January 10, 2011, IDNR stated that an initial report submitted through the EcoCAT website indicated the potential presence of protected resources in the vicinity of the project location. The letter further states that the IDNR has evaluated this information and concluded that adverse impacts to the protected resources are unlikely; therefore, consultation is 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 antidegradation review summary was written. We tentatively find that the proposed activity will result in the attainment of water quality standards; that all existing uses of the receiving waters will be maintained; 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 community at large by repairing the scour holes which will prevent a lock failure from happening. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.