

IEPA Log No.: **C-0272-11**  
CoE appl. #: **N/A**

Public Notice Beginning Date: **June 29, 2011**  
Public Notice Ending Date: **July 29, 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  
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, Chicago District – 111 North Canal Street, Suite 600, Chicago, IL 60606-7206

**Discharge Location:** Near Chicago in SE 1/4 of Section 32 of Township 38N, Range 15E of the 3rd P.M. in Cook County.

**Name of Receiving Water:** Lake Michigan

**Project Description:** Proposed repair of the Calumet Harbor breakwater

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 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, Chicago District  
IEPA Log No. C-0272-11  
COE Log No. N/A  
Contact: Mark Books; 217/785-6937  
Public Notice Start Date: June 29, 2011

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USACOE – Chicago District (“Applicant”) has applied for 401 water quality certification for proposed repair of the Calumet Harbor Outer Breakwater within Lake Michigan in the City of Chicago, Cook County, Illinois. The project is located in Section 32, Township 38 North, Range 15 East. The existing structure’s timber pile support structure has become exposed due to low lake levels and has started to deteriorate. Also, core material has washed out creating voids which is causing the concrete cap to collapse. In order to repair the structure, the applicant is proposing to drill holes through the existing concrete cap and inject grout to fill the voids. A fast setting grout will be placed along the perimeter to seal it, and a stronger standard grout will be used for the interior. Approximately 10,000 to 18,000 cubic yards of perimeter fast-setting and interior grout will be used. A similar project has been successfully completed by the applicant at the Chicago Harbor Breakwater.

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

Lake Michigan is a large oligotrophic lake subject to the Lake Michigan Basin water quality standards of 35 Ill. Adm. Code 302 Subpart E. The open waters are listed in the Illinois Integrated Water Quality Report and Section 303(d) List – 2010 as impaired for fish consumption use with a causes given as PCB’s and mercury.

The IDNR WIRT System does not list any threatened or endangered species residing in the project area.

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

The construction activities will cause a temporary increase in suspended solids. Habitat will be disturbed in the vicinity of the construction area. The project has been designed to contain all grout materials within the structure.

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

The increase in suspended solids will be local and temporary. The benthic habitat disturbed by the construction activities should be regenerated upon completion of the construction activities. The applicant will monitor both sides of the structure to detect any seepage of the grout materials. The applicant has identified corrective measures to employ if seepage occurs. The Applicant has stated the following:

“Incorporating lessons learned during the Chicago Outer Harbor Breakwater, stone and form containment will not be necessary to conduct the grouting of the breakwater structure. Forms and stone fill used on the Chicago Harbor Outer Breakwater were not necessary to complete the grouting of the structure. Field quality assurance checks confirmed that grouting the breakwater using the two-grout approach was successful and was conducted without impacts to water quality...All waste materials generated during the grouting operation will be managed on barges with no disposition of waste materials to the waters of Lake Michigan or any other waterway. All waste materials generated during the grouting operations will be disposed in accordance with State, Federal, and local laws and regulations”.

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

This project will repair the existing outer breakwater for the Calumet Harbor.

**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. The least intrusive alternative would be to not repair the existing breakwater. This is not an acceptable alternative given that this is a useful project and will repair the deteriorating breakwater that protects the harbor along Lake Michigan. The Applicant also considered Rubble Mound Encapsulation and Sheet Pile Encapsulation Alternatives; however, the Applicant has determined that the selected Alternative is the fastest and most economically repairing option.

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

In a report generated through IDNR system dated June 7, 2011 the Illinois Natural Heritage Database contains no record of State-listed or endangered species in the vicinity of the project location: therefore, consultation was 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 the assessment 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 stream 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 existing outer breakwater for the Calumet Harbor in Lake Michigan. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.