IEPA Log No.: **C-0004-12**
CoE appl. #: **LRC-2011-838**

Public Notice Beginning Date: **August 13, 2012**
Public Notice Ending Date: **September 12, 2012**

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: Joseph Kelley – 233 N. Deere Park Drive E., Highland Park, IL 60035

Discharge Location: Near Highland Park in SE 1/4 Section 31 of Township 43N, Range 13E of the 3rd P.M. in Lake County.

Name of Receiving Water: Lake Michigan

Project Description: Proposed steel and stone breakwater, groin toe protection, sandfill and removal of existing concrete shoreline protection structures

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 Joseph Kelley
IEPA Log No. C-0004-12
COE Log No. LRC-2011-838
Contact: Bob Mosher; 217/785-3950
Public Notice Start Date: August 13, 2012

Joseph Kelley ("Applicant") has applied for 401 water quality certification for proposed work along Lake Michigan consisting of constructing a steel and quarrystone breakwater, adding quarrystone breakwater protection to an existing steel groin, and removal of an old wooden pier and a concrete modular structure near the water line. The project is located in Lake County, Section 31, Township 43 North, Range 13 East. The address is 233 North Deere Park Drive East, Highland Park. This project will also involve a small amount of work at the adjoining properties, 243 and 225 North Deere Park Drive East. The project specifically includes constructing a steel sheet pile groin, and the placement of approximately 1,250 tons of quarrystone to build a new breakwater and stone toe. As part of the proposed project the Applicant will also place 2,500 tons of clean sand onto the existing beach, as beach nourishment, as required by IDNR. The proposed 85 foot long shore perpendicular steel sheet pile groin will be constructed on the south side of the property. The proposed 80 foot long shore parallel quarrystone breakwater will run south to north starting at the lakeward end of the proposed steel groin. The combined structure (groin and breakwater) will extend 135 feet off shore. A steel ladder will be welded to the south side of the proposed groin to provide access. Toe stone will be placed around the lakeward end of an existing groin located on the northern end of the property. Toe stone will also be placed along the entire length of the existing steel bin wall to prevent undercutting. Existing concrete module blocks located on the Applicant's property and the property to the south will be removed and used as core material for the proposed breakwater.

Identification and Characterization of the Affected Water Body.
Lake Michigan is a large oligatrophic 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 with a cause given as PCBs and mercury.

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. All sand placed onto the beach will be clean and from inland quarries.

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 is anticipated to recover to pre-construction conditions over time.

Purpose and Social & Economic Benefits of the Proposed Activity.
The Applicant has stated the following concerning the purpose for this project:

> "Under the current low lake level conditions, 3.5 to 4 feet of sand has eroded causing a scarp near the toe of the bluff. In some areas, the scarp has reached the seawall exposing an additional 3.5 to 4 feet of seawall…The depth of the seawall is unknown but it is plausible that the wall may be undermined if this narrow section of sand is eroded. If the seawall is undermined and fails, it will likely destabilize the bluff and possibly cause catastrophic failure and loss of land…Given the extreme beach erosion to the shoreline over the last two years during below-average lake levels, as well as the uncertainty of future lake levels, it is prudent to engineer and design systems that will anticipate greater lakebed downcutting, higher amounts of beach erosion, more extreme storm events with larger waves, and potential loss of land."

Assessments of Alternatives for Less Increase in Loading or Minimal Environmental Degradation.
The construction of the proposed project will follow guidelines set forth by the Agency and USACE. Erosion control measures need to be implemented to prevent additional impacts. All of the proposed work will be completed using a backhoe that will work from the land to place the materials.

The Applicant stated the following concerning the No-Build Alternative to their proposed project:

> "The first option of 'Do Nothing' results in leaving the currently eroding beach that severely deflated in recent years. Continued deflation of the beach will likely allow stormwaves to impact the existing seawall in the near future."

The Applicant also considered building a smaller and a larger pocket system then what is planned. The Applicant has stated that with the current lake conditions and the narrow beaches during low lake levels a smaller system would not adequately protect the shoreline. The Applicant has actually reduced the overall length of their proposed groin protection system into the Lake from the 150 feet off shore to only 135 feet off shore. The Applicant has stated concerning their revised reduced plans design the following:

> "We feel that the 10-foot beach in the revised system is the minimum width that will prevent undermining of the existing steel bin wall shore protection under stormwave conditions with the addition of toe stone for worse-case conditions."

Summary Comments of the Illinois Department of Natural Resources, Regional Planning Commissions, Zoning Boards or Other Entities
In a letter from Tracy Evans dated March 16, 2012, 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 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 providing a stabilized shoreline along Lake Michigan and reducing suspended solids discharges into the lake. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.