IEPA Log No.: **C-0196-13**
CoE appl. #: **LRC-2013-468**

Public Notice Beginning Date: **May 7, 2014**
Public Notice Ending Date: **May 28, 2014**

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: Lake County Public Water District – 500 17th St., Zion, IL 60099

Discharge Location: Near Zion in Section 14 of Township 46N, Range 12E of the 3rd P.M. in Lake County.

Name of Receiving Water: Lake Michigan

Project Description: Proposed installation of 94 bent clamps to support the Lake County Public Water District's raw water intake in lake Michigan.

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 Lake County Public Water District
IEPA Log No. C-0196-13
COE Log No. LRC-2013-468
Contact: Diane Shasteen (217) 558-2012
Public Notice Start Date: May 7, 2014

Lake County Public Water District ("Applicant") has applied for a 401Water Quality Certification for impacts associated with the proposed installation of 94 Bent clamps (over 10 years) to support the Applicant's raw water intake in Lake Michigan. Six Bent clamps are being proposed for this construction season and would be located in Lake Michigan directly east of 17th Street in Zion, Lake County, Illinois (Section 14, Township 46 North, Range 12 East). The raw water intake pipe was originally buried in at least four feet of lake bottom sand; over time the sand has migrated away from the pipeline leaving portions of the pipe exposed. The purpose of the project is to protect the District's only raw water intake pipe from movement or failure and allow the District's treatment plant to provide 30,000 plus customers with drinking water. A marine contractor utilizing a clamshell bucket will excavate approximately 0.75 CY of sediment for each installed Bent clamp (4.5 CY total for 6 clamps). The excavated sediment would be placed adjacent to the Bent clamp installation site and vertical steel supports will be pile-driven on both sides of the pipeline.

Information used in this review was obtained from the applicant in a document entitled, Joint Application Form For Illinois dated June 10, 2013.

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. Lake Michigan Nearshore (QLM-01) is listed as not supporting for Fish Consumption and Aesthetic Quality uses according to the draft 2014 Illinois Integrated Water Quality Report and Section 303(d) List. The causes listed for impairment are Mercury and Polychlorinated biphenyls for Fish Consumption and Phosphorus (Total) for Aesthetic Quality use. Lake Michigan Nearshore is listed as fully supporting Aquatic Life, Public and Food Processing Water Supplies, Primary Contact Recreational, and Secondary Contact uses.

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 dredging of lake bottom and placement of the Bent clamps and vertical steel supports may occur in the lake at the point of construction activity. Supernatant and sediment sampling was conducted on two dates, February 19 and 27, 2014 in three locations located along the proposed pipeline stabilization project. Particle size tests ranged from 0.7 to 12% passing #230 sieve, averaging 4.6% passing. An asbestos analysis was performed on the sediment as well as background water resulting in no detection.

Benthic habitat will be disturbed in the vicinity of the construction area. A clamshell bucket will be used to move the sand from under the pipeline at the proposed Bent clamp locations. The

sand will not leave the water and will be placed next to the pipeline to the west of the proposed Bent clamp locations.

Fate and Effect of Parameters Proposed for Increased Loading.

The increase in suspended solids will be local and temporary. The applicant proposes using a clamshell bucket for the excavation with placement by release of the sand while the clamshell is in the water near the lake bottom. The re-suspension of sediment resulting from the excavation and placement is to be minimized and will not cause violations of water quality standards.

Although the Benthic habitat will be disturbed by the construction activities, it is anticipated to recover and may improve over time due to the placement of Bent clamps providing additional habitat structures in the Lake.

Purpose and Social & Economic Benefits of the Proposed Activity.

The proposed installation of Bent clamps will provide the support needed for the freshwater intake pipe. Without the additional support, the pipe could move and/or break leaving 30,000+ customers without drinking water.

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

Over the years, the sand originally used to bury the raw water intake pipe has migrated to the south causing sections of the pipe to be exposed. The exposure could lead to movement or failure of the pipe. Replacing the lost sand with rock was one alternative considered; however, it was determined the alternative would not be a permanent solution. A Bent clamp placed around the pipe and the use of two piles to hold the Bent clamp system in place is the preferred option. Each Bent clamp system is designed to support up to 32 feet of intake pipe. Seven systems have been installed by a marine contractor to demonstrate that the system will perform as projected. Inspections will be conducted on the entire pipeline to determine the critical locations for installing the next six available pre-fabricated Bent clamps.

Conclusion:
The construction of the proposed project will follow conditions set forth by the Agency and USACE. The least intrusive alternative would be to not complete the project. This is not an acceptable alternative given the need to protect the water intake pipe and the availability of water for 30,000 plus customers of the Lake County Public Water 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 April 25, 2014 to the Illinois Department of Natural Resources resulted in the identification of an INAI protected area and several threatened or endangered species. IDNR has evaluated the EcoCAT information,

concluded that adverse effects are unlikely, and terminated consultation for IDNR Project #1410707 on April 28, 2014.

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 draft 401 Water Quality Certification 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 Applicant and their 30,000 plus customers by providing stabilization to the District's only raw water intake pipe and the continued provision of drinking water for the aforementioned customers. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.