

IEPA Log No.: **C-0235-13**
CoE appl. #: **LRC-2013-462**

Public Notice Beginning Date: **April 28, 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: Louis Kenter & Leslie Graham – 94 Mary Street, Winnetka, IL
60093

Discharge Location: Near Winnetka in SE 1/4 of Section 8 of Township 42N, Range 13E of the 3rd
P.M. in Cook County.

Name of Receiving Water: Lake Michigan

Project Description: Proposed construction of stone breakwater island and groin toe protection for
beach protection.

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.

DRG:C-0235-13_401 PN and FS_13Jun13.docx

Fact Sheet for Antidegradation Assessment
For Louis Kenter & Leslie Graham
IEPA Log No. C-0235-13
COE Log No. LRC-2013-462
Contact: Diane Shasteen (217) 558-2012
Public Notice Start Date: April 28, 2014

Louis Kenter and Leslie Graham (“Applicant”) have applied for a 401 Water Quality Certification for impacts associated with the construction of a new quarystone breakwater island and quarystone groin toe protection along Lake Michigan in Section 8, Township 42 North, Range 13 East, Cook County, Illinois. The project site is located at 94 Mary Street in Winnetka and will extend across two adjacent properties to the north at 91 Mary Street and 115 Mary Street. The proposed breakwater island will be approximately 100 feet in length and run parallel to the shoreline, extending lakeward to a distance of 125’ from the existing seawall and will have a crest elevation of 582’. A short breakwater spur will be added to the lakeward end of the northerly steel groin to provide groin toe protection and reduce the gap between the island and existing steel groin in an effort to reduce wave energy and stabilize the sand on the beach. An existing, deflated quarystone revetment on the subject property will be rebuilt and a short quarystone extension will be added. The purpose of the revetment is to provide a shoreline protection system to protect the property during all lake levels, reduce wave action energy, and move the locus of wave action further offshore to reduce lakebed downcutting. The Applicant will use approximately 1,325 tons of clean quarried stone for construction of the breakwater and place approximately 2,550 tons of clean sand on the existing beach, as well as beaches to the north and south, as sand mitigation required by IDNR.

Information used in this review was obtained from the applicant in a document entitled, Kenter-Graham Permit Application: 94 Mary Street, Winnetka dated June 10, 2013 and revised March 19, 2014.

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 placement of the steel and quarystone breakwater, may occur in the lake at the point of construction activity. Benthic habitat will also be disturbed in the vicinity of the construction area. In accordance with IDNR requirements, all fill material will be clean and from inland quarries. The fill includes

clean quarried stone for construction of the breakwater and clean sand to be placed on the subject beach and on beaches to the north and south as sand mitigation.

Fate and Effect of Parameters Proposed for Increased Loading.

The increase in suspended solids will be local and temporary. Lakebed downcutting has resulted in the loss of sand in this section of the coastline. Although the benthic habitat will be disturbed by the construction activities, it is anticipated to recover and improve over time due to the placement of sand over the downcut clay substrates.

Purpose and Social & Economic Benefits of the Proposed Activity.

The proposed breakwater system will help retain the sandy beach area, reduce the impacts of wave energy on the revetment and shoreline, protect benthic habitats by reducing lakebed downcutting, prevent the destabilization of the seawall and bluff face which could lead to the loss of land and infrastructure, and provide access for pedestrians and watercraft to Lake Michigan.

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

The Applicant has inspected the site and options for shoreline protection were determined using desktop coastal engineering, a bathymetric survey of site conditions, and three years of observations of the deteriorating shoreline conditions at the site. Five design options were considered for the proposed project.

Option 1:

Do nothing:

- Leaves currently eroding beach in existing state, which has frequently been a non-existent sand beach
- Storm waves will continue to overtop revetment
- Will lead to increased erosion of bluff during high lake levels
- Limits safe access to lake

Option 2:

Enhance revetment only:

- Provides protection of the bluff
- Does not prevent erosion of the lakebed which will ultimately destabilization the revetment toe
- Raises the bluff which reduces views of the lake
- Reduces the amount of beach at the site

Option 3:

Design a Shore-Connected Breakwater Extending 125 Feet Offshore

- Dissipates wave energy
- Prevents lakebed erosion
- Stabilizes the revetment toe
- Provides groin toe protection
- Would not meet approval of adjacent landowners for beach access

Option 4:

Design a Shore-Connected Breakwater Extending Less than 125 Feet Offshore

- Would not adequately provide shore protection
- Would not meet approval of adjacent landowners for beach access

Option 5: Preferred Option

Design a Quarystone breakwater Island 125 Feet offshore

- Provides protection to lakebed, beach and bluff
- Maintains pedestrian access across beach with no obstruction

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 bluff and lakebed from additional erosion during storm surges. Below average lake levels over the past few years has led to extreme beach erosion and greater lakebed downcutting. Completion of the proposed project will allow for protection of the Lake Michigan shoreline and nearby infrastructure and provide residents safe access to the lake.

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 18, 2014 to the Illinois Department of Natural Resources resulted in the identification of two INAI protected areas, Glencoe Botanical Area and Hubbard Woods. IDNR has evaluated the EcoCAT information, concluded that adverse effects are unlikely, and terminated consultation for IDNR Project #1410467 on April 21, 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 Lake Michigan shoreline by providing a breakwater system that reduces the impacts of wave energy, protects

benthic habitats by reducing lakebed downcutting, prevents the destabilization of the seawall and bluff face which could lead to the loss of land and infrastructure, retains the sandy beach area, and provides access for landowners and their watercraft to 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.