

IEPA Log No.: **C-0473-15**  
CoE appl. #: **LRC-2015-706**

Public Notice Beginning Date: **September 9, 2016**  
Public Notice Ending Date: **September 26, 2016**

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:** Robert Berman – 1 North Breakers Row, Apt 224, Palm Beach, Florida 33480

**Discharge Location:** Near Glencoe in SE 1/4 of Section 6 of Township 42N, Range 13E of the 3rd P.M. in Cook County.

**Name of Receiving Water:** Lake Michigan

**Project Description:** Proposed beach stabilization project that includes a steel sheet pile, quarystone breakwater, quarystone revetment and beach sandfill.

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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The applicant is proposing to construct a new steel groin and quarystone breakwater within Lake Michigan at the southern property line. The steel groin would extend 95 feet from the toe of the slope with a landward crest elevation of 588 feet tapering to 584 feet. The quarystone breakwater would encapsulate the end of the steel groin and extend 90 feet to the north with a crest elevation of 584 feet tapering to 583 feet, south to north. The groin and breakwater collectively would extend less than 125 feet from the toe of the bluff.

The site currently contains a revetment along all but the southernmost end of the shoreline. The revetment would be extended south approximately 10 feet up to the proposed steel groin.

The quarystone breakwater is designed to help reduce incident wave energy from eroding the sand and clay lakebed, to create a sustainable sand cover over the clay lakebed which helps reduce lakebed down-cutting (deepening of the water) and to help improve water quality caused by colloidal fines from the eroding clay being suspended in the water during storms.

The purpose of the breakwater is to retain sand beach cover over the clay lakebed to reduce the incidence of lakebed down-cutting which could ultimately impact the stability of the bluff. The revetment extension would provide additional protection for the toe of the bluff. The placement of sand along the breakwater includes the 20% overfill required by the Corps and the IDNR. This would be done in an effort to compensate for the capture of sand from the littoral system over time caused by the construction of the breakwater.

Additionally, a deteriorated steel boat lift on the property to the south, 21 Lakewood, will be removed from Lake Michigan and a stone stairway for pedestrian access over the proposed steel groin is proposed.

No mitigation is proposed for this project as total impact to waters of the U.S. totals 0.08 acres (area of quarried stone for breakwaters). Fill material exceeding the 0.10 acre threshold requires mitigation.

### **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 Fish Consumption and Aesthetic Quality uses according to the draft 2016 Illinois Integrated Water Quality Report and Section 303(d) List. The causes listed for impairment are Mercury and Polychlorinated biphenyls for Fish Consumption Use 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 Recreation, and Secondary Contact uses. A Total Maximum Daily Load (TMDL) Report has been prepared and approved by the USEPA for 51 beaches along Illinois' Lake Michigan shoreline to address Primary Contact Use Recreation impairments due to excess bacteria. The proposed activity occurs within an area

identified by the report “Shoreline Segments in Suburban Cook County, Illinois” May 15, 2013 as a Beach Protection Area subject to that TMDL.

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

The construction of a new steel groin and quarystone breakwater will fill 0.08 acres. No mitigation is proposed for this project as total impact to waters of the U.S. totals 0.08 acres (area of quarried stone for breakwaters) is less than the threshold of 0.1 acres requiring mitigation.

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

The increase in suspended solids, from the construction of the quarystone breakwater and quarystone revetment, will be local and temporary. No mitigation is proposed for this project as total impact to waters of the U.S. totals 0.08 acres (area of quarried stone for breakwaters) is less than the threshold of 0.1 acres requiring mitigation.

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

The quarystone breakwater is designed to help reduce incident wave energy from eroding the sand and clay lakebed, to facilitate a sustainable sand cover over the clay lakebed which helps reduce lakebed down-cutting (deepening to the water) and to help improve water quality caused by colloidal fines from the eroding clay being suspended in the water during storms. The revetment extension would provide additional protection for the toe of the bluff.

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

The applicant evaluated using only a stone groin. However, the sand retention capacity is not enough to reduce lakebed down-cutting to protect the bluff and revetment. The cost does not justify the end result.

A breakwater island only concept was evaluated. Since this section is very open and does not hold much sand, a breakwater island in these conditions will not likely maintain a sandy deposition along the shoreline. As the sand will not be as stable, the shoreline will not be as protected as it would with a shore connected breakwater to reduce the size of the beach cell.

A quarystone breakwater only beach system was evaluated. This system would hold the largest beach to protect the lakebed and the property. This option was not selected due to permitting regulations and cost.

None of these options will prevent erosion as well as the proposed option.

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

An Eco-CAT endangered species consultation request was submitted to the Illinois Department of Natural Resources and resulted in the identification of protected resources in vicinity of the proposed project. IDNR has further evaluated the EcoCAT information and concluded that adverse effects to the endangered species are unlikely and terminated consultation for IDNR Project #1611522 on June 28, 2016.

**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 permit 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 erosion control to the Lake Michigan shoreline. Comments received during the NPDES permit public notice period will be evaluated before a final decision is made by the Agency.