IEPA Log No.: **C-0037-10**
CoE appl. #: **2010-43**

Public Notice Beginning Date: **August 20, 2012**
Public Notice Ending Date: **September 19, 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: Metropolitan Water Reclamation District 100 East Erie Street Chicago, IL 60611

Discharge Location: Sec. 13, T40N, R13E, 3rd P.M., Cook County within Chicago

Name of Receiving Water: North Branch Chicago River

Project Description: Repair and Restore 1300 L.F. of the East Bank

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 Keith Runge at 217/782-3362.

KAR:C-0037-10PN.doc

Fact Sheet for Antidegradation Assessment for
RE: Metropolitan Water Reclamation District of Greater Chicago
Repair and Restore 1300 L.F. of the East Bank Cook County
IEPA Log No. C-0037-10
COE Log # 2010-43
Contact: Bob Mosher 217/558-2012
August 20, 2012

Metropolitan Water Reclamation District of Greater Chicago ("Applicant or MWRDGC") has applied for Section 401 water quality certification for stabilization work on the east stream bank of the North Branch of the Chicago River ("River"), from Montrose Avenue to Berteau Avenue, within the City of Chicago. The work will be done specifically in Section 12, Township 40 North, Range 13 East. The proposed work involves 1,330 linear feet of stream bank stabilization improvements, which include the construction of low sheetpile wall at the tow of the existing bank and the placement of 1,055 linear feet of riprap and 275 linear feet of articulated concrete block mats on the bank slope above the new wall. Openings in the articulated blocks will be filled with top soil and seeded. Clusters of shrubs and/or native plantings will be installed at select locations in clearings in the riprap and the articulated concrete block mats. The sheetpile wall will be installed along almost the entire length of the project; except for approximately 100 feet of the bank where a new fish lunker will be installed. The existing 80 foot long fish lunker structure will be replaced by this new 100 foot long fish lunker. No dredging within the River is anticipated. The contractor will be doing the majority of the work from a barge. Approximately half of the waterway will remain open to navigation during the one year construction time table.

Identification and Characterization of the Affected Water Body.

The North Branch of the Chicago River is General Use Water with a 7Q10 flow of approximately 14cfs at this location. The River, Waterbody Segment IL-HCC-07 is listed in the Illinois Integrated Water Quality Report and Section 303(d) List-2010 as impaired for aquatic life, primary contact recreation and fish consumption uses. The potential causes of impairment to aquatic life use include Aldrin, Chloride, DDT, Hexachlorobenzene, Phosphorus (Total), TSS, and also dissolved oxygen and alterations in stream-side or littoral vegetation (both non-pollutants). The potential cause for fish consumption use is PCB's. The potential cause for primary contact recreation impairment is Fecal Coliform Bacteria. Using the 2008 Illinois Department of Natural Resources Publication *Integrating Multiple Taxa in a Biological Stream Rating System*, the river is not listed as a biologically significant stream; however, it has received an integrity rating of "D". The river at this location is also not an enhanced dissolved oxygen stream. The River has a drainage area of approximately 149.7 square miles at the project site.

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 suspended solids ("SS") during the construction of the project. Erosion control measures will be utilized to minimize any increase in suspended solids. There will be no permanent impact to the River.

Fate and Effect of Parameters Proposed for Increased Loading.

The increase in suspended solids will be local and temporary. Erosion control measures will be utilized to minimize any increase in suspended solids and prevent further impact to the stream. A sediment and erosion control plan will be followed that will receive approval from the North Cook County Soil and Water Conservation District. Aquatic life uses of this portion of the river that will be disturbed during construction may be negatively impacted, but in time, they will recover and support the same community structure as is now found in the existing channel.

Purpose and Social & Economic Benefits of the Proposed Activity.

Applicant has stated the following concerning the need for this project:

> "The east riverbank slope at the project site has deteriorated over the years due to hydraulic erosion, slope failures, and sloughing of the original river channel excavation, thus potentially compromising the slopes and residential structures that are within 20 feet of the bank rim…The overall purpose of the project is to stabilize the eastern bank of the North Branch between Montrose Avenue and Berteau Avenue, to provide long-term erosion protection and slope stability, and to protect nearby residential structures."

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 and USACE. Erosion control measures will need to be implemented to prevent additional impacts to the stream. The Applicant has stated that several alternatives were considered but dismissed. In discussing the different alternatives in more detail the Applicant has stated the following:

- Regrade Slopes: Space limitations along this narrow streambank corridor eliminated the possibility for entirely regrading the streambank. In addition removal of existing trees and shrubs in order to be able to regrade the slope could promote slope instability.
- Biotechnology: Space limitations, steep slopes, channel geometry, and an urban watershed that contributes to rapidly changing water levels together eliminated the biotechnology option from consideration.
- Tall Sheetpile Wall: This option was deemed to carry the greatest safety hazard and would require safety ladders and chains…Therefore; this option was eliminated from consideration.
- Rockfill Alternative: Would require a 3 foot wide key trench in the river bottom which was determined to be more of an adverse impact then the preferred option.
- No Build Action: Inaction will allow continued slope failure and erosion, which will continue to degrade the water quality in the River.

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

In a report generated through IDNR's EcoCAT system dated July 12, 2012, the Illinois Natural Heritage Database contains no record of State-listed Threatened or endangered species, Illinois Natural Area Inventory sites, dedicated Illinois Nature Preserves, or registered Land & Water Reserves 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 this antidegradation review summary 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 waters 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 more stable River bank, beautification of the River bank, and reduce SS discharges into the River. Comments received during the 401 Water Quality Certification public notice period will be evaluated before a final decision is made by the Agency.