



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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BRUCE RAUNER, GOVERNOR ALEC MESSINA, DIRECTOR

December 5, 2017

Colonel Craig S. Baumgartner, Commander
Rock Island District
U.S. Army Corps of Engineers
Clock Tower Building
P.O. Box 2004
Rock Island, IL 61204

Re: Illinois Environmental Protection Agency Comments To:
U.S. Army Corps of Engineers GLMRIS - Brandon Road Draft Integrated Feasibility
Study and Environmental Impact Statement

Dear Colonel Baumgartner:

The Illinois Environmental Protection Agency ("IEPA") submits the following comments on the Great Lakes & Mississippi River Interbasin Study ("GLMRIS") – Brandon Road Draft Integrated Feasibility Study and Environmental Impact Statement ("Brandon Road Study") and the Tentatively Selected Plan ("TSP") set forth therein that was published by the U.S. Army Corps of Engineers, Rock Island District ("USACE") in August 2017.

IEPA notes that these comments are provided in conjunction with the entirety of the State of Illinois' comments, provided by Illinois Lieutenant Governor Evelyn Sanguinetti, the Illinois Department of Natural Resources/Office of Resource Conservation, the Illinois Department of Natural Resources/Office of Water Resources, the Illinois Department of Transportation, and the Illinois Department of Commerce and Economic Opportunity.

IEPA also notes that these comments are not exhaustive and Illinois does not waive future additional comments, concerns or objections, whether on factual, policy or legal issues. As the IEPA is a state agency which may have regulatory jurisdiction over aspects of the TSP, IEPA's comments are preliminary and informal in nature. Future IEPA regulatory review and decisions will be performed independently of these comments.

The IEPA comments on the USACE Brandon Road Study and TSP are as follows:

Any activities performed as part of the Brandon Road Project that involve discharge of pollutants into waters of the United States must comply with the requirements of the Clean Water Act

The Clean Water Act (“CWA”) establishes a permitting structure for regulating discharges of pollutants into the waters of the United States and requires states to adopt water quality standards (“WQS”) for waters of the United States within their jurisdiction. Under the CWA, a person is prohibited from discharging pollutants through a point source into a water of the United States unless the person has a National Pollutant Discharge Elimination System (“NPDES”) permit.

Based on the information provided in the Brandon Road Study, IEPA does not have any water quality concerns associated with the treatment options in the USACE’s current TSP. However, it is IEPA’s understanding that under adaptive management, additional treatment technologies may be used in the future. The USACE may be required to obtain an NPDES permit if these treatment technologies involve discharge of pollutants into a water of the United States. Also, as mentioned in the Brandon Road Study, any construction work done in the waterway may require USACE to obtain a certification pursuant to Section 401 of the CWA (“401 certification”). To obtain an NPDES permit and 401 certification from IEPA, the permittee must demonstrate that the proposed activity would meet both the numeric and narrative water quality standards. Also, the permittee must meet the anti-degradation requirements found at Section 302.105 of Title 35 of the Illinois Administrative Code (35 Ill. Adm. Code 302.105). Among other requirements, Section 302.105 requires that all technically and economically reasonable measures to avoid or minimize the extent of the proposed increase in pollutant loading have been considered by the permittee.

Though the USACE did not include the use of carbon dioxide (“CO₂”) and total residual chlorine (“TRC”) in its current TSP, it has considered and evaluated use of these control methods in the past. IEPA has the following concerns with the use of these methods:

- The CO₂ application would deter fish from swimming past the CO₂ application. IEPA has concerns with the application of CO₂ due to its potential impacts on the pH level and dissolved oxygen concentration in the receiving stream. The addition of CO₂ could lower the pH to below 6.5, whereas the water quality standard requires the pH to be in the range of 6.5 to 9.0, except for natural causes. Also, the addition of CO₂ could replace the oxygen in the receiving stream and violate the dissolved oxygen water quality standard. IEPA recommends that the USACE continue to perform studies to address IEPA’s concerns related to the application of CO₂. As mentioned above, the addition of CO₂ in the approach channel may require an NPDES permit from IEPA.
- The USACE also evaluated TRC to provide a lethal concentration in the lock chamber followed by dechlorination to ensure that live fish could not go through the locks with the barges. IEPA has concerns with the application of TRC because of the potential production of chlorinated byproducts. Chlorinated byproducts, which are potentially carcinogenic, are formed when chlorine reacts with organic matter. Additionally, if the USACE does apply chlorine in the lock chamber, any fish present would die and need to be disposed of. The addition of TRC in the chamber may require an NPDES permit.

DNR is authorized to use piscicides to control Asian carp

The IEPA issued its current General NPDES Permit ILG87 for Pesticide Application Point Source Discharges on October 14, 2016. This permit covers the discharge of pesticides to, over, or near water, in accordance with the requirements of the CWA. In November 2016, the Illinois Department of Natural Resources ("IDNR") received permit coverage under ILG87. This permit coverage authorizes the application of pesticides from all permitted use patterns statewide. One of the pesticide use patterns that IDNR is authorized for is the Animal Use Pattern. This use pattern includes the application of pesticides, including piscicides such as Rotenone, into waters of the State to control a range of animal pests for purposes such as fisheries management, invasive species eradication, or equipment operation and maintenance.

IDNR has a contingency plan to treat a portion of the upstream waters with piscicides in case Asian carp are discovered upstream of the Brandon Road Lock & Dam. IEPA has evaluated IDNR's contingency plan and does not object to the limited use of piscicides in accordance with that plan.

If you have any questions or comments regarding IEPA's comments, please contact Sanjay Sofat of my staff at 217-782-1654.

Cordially,

A handwritten signature in black ink, appearing to read "Alec Messina". The signature is fluid and cursive, with a long horizontal stroke at the end.

Alec Messina
Director

