BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)	
)	
WATER QUALITY STANDARDS AND)	
EFFLUENT LIMITATIONS FOR THE)	R08-9 (D)
CHICAGO AREA WATERWAY SYSTEM)	(Rulemaking – Water)
AND LOWER DES PLAINES RIVER:)	
PROPOSED AMENDMENTS TO 35 ILL.)	
ADM_CODE 301_302_303_AND 304)	

NOTICE OF FILING

TO: Mr. John T. Therriault
Assistant Clerk of the Board
Illinois Pollution Control Board
100 West Randolph Street
Suite 11-500
Chicago, Illinois 60601
(VIA ELECTRONIC MAIL)

Ms. Marie E. Tipsord
Hearing Officer
Illinois Pollution Control Board
100 West Randolph Street
Suite 11-500
Chicago, Illinois 60601
(VIA FIRST CLASS MAIL)

(SEE PERSONS ON ATTACHED SERVICE LIST)

PLEASE TAKE NOTICE that I have today filed with the Office of the Clerk of the Illinois Pollution Control Board the PRE-FILED QUESTIONS OF THE ILLINOIS ENVIRONMENTAL REGULATORY GROUP FOR THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY, a copy of which is herewith served upon you.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL REGULATORY GROUP,

Dated: June 24, 2013

By: /s/ Alec M. Davis

Alec M. Davis

Alec M. Davis General Counsel Illinois Environmental Regulatory Group 215 East Adams Street Springfield, Illinois 62701 (217) 522-5512

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)	
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WATER QUALITY STANDARDS A	AND)	
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ADM. CODE 301, 302, 303 AND 304	4)	

PRE-FILED QUESTIONS OF THE ILLINOIS ENVIRONMENTAL REGULATORY GROUP FOR THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

NOW COMES the ILLINOIS ENVIRONMENTAL REGULATORY GROUP ("IERG") by and through its attorney, Alec M. Davis, and pursuant to the April 11, 2013 Hearing Officer Order, hereby submits the following pre-filed questions for the Illinois Environmental Protection Agency ("Illinois EPA" or "Agency") for presentation at the July 29, 2013, hearing in the above-referenced matter.

- 1. At page 175 of the Board's First-Notice Opinion and Order in Subdocket C, under "Concerns in Determining Appropriate Aquatic Life Uses," the Board notes that while the Agency had three categories of uses it did not make any distinctions among those uses with respect to the proposed water quality standards. Further, the amended proposal, filed on May 24th by the Agency, only makes distinctions with respect to temperature and dissolved oxygen, but for no other chemicals. In crafting the water quality standards necessary to protect for the aquatic life uses designated by the Board, to what extent did the Agency consider other chemical constituents besides dissolved oxygen and temperature?
 - a. The aquatic life use designations proposed by the Board for First-Notice acknowledge that the water bodies so designated are not fully capable of achieving the full aquatic life use goals of the Clean Water Act ("CWA"), however, the water quality

standards proposed by the Agency in some instances (for example, in the cases of dissolved oxygen, temperature, and mercury) are more stringent than the water quality standards for General Use waters. Given that the existing water quality standards for General Use waters are protective of the aquatic life use goals of the CWA, what is the rationale for proposing more stringent standards for the Chicago Area Waterways ("CAWS") and Brandon Pool Aquatic Life Use B waters of the Lower Des Plaines River ("LDPR") given their lesser aquatic life use goal?

- b. Does the Agency ultimately intend to apply the more stringent water quality standards proposed in its revised amendments to Part 302, Subpart D to General Use waters? And if so, has the Agency initiated, or does it plan to initiate, outreach to potentially impacted stakeholders elsewhere in the state who may have an interest in this proceeding?
- 2. Does the Agency acknowledge the potential for periodic exceedences of its proposed water quality standards due to contaminants present in the waterways from such sources as sediment and stormwater runoff?
 - a. Is the Agency aware of mercury levels that may exceed the proposed water quality standard due to re-suspension of sediments containing mercury? Does the Agency believe this is an existing physical condition or part of the nature of the receiving body of water?
 - i. Illinois EPA has listed water bodies as impaired based on Illinois

 Department of Natural Resources ("IDNR") fish tissue concentrations of mercury

 (see 2012 Illinois Integrated Water Quality Report and Section 303(d) List). Is

there a fish-tissue based human health water quality standard for mercury in Illinois?

- ii. How does the IDNR fish-tissue based human health criterion (methyl mercury) compare to U.S. EPA's standard?
- iii. Is the IDNR fish-tissue based human health criterion equivalent to the current General Use and proposed 12 ng/l water column criterion?
- iv. Has IDNR or Illinois EPA collected side-by-side samples of fish tissue and water column data with which to "translate"?
- v. Does IDNR have any site-specific fish-tissue mercury data for the waterways subject to this proceeding?
- b. Given the use of the Metropolitan Water Reclamation District of Greater Chicago (the "District" or "MWRDGC") effluent data as the basis for determining non-summer months' thermal temperatures, did the Agency review the District's effluent data to see whether there are any mercury and chloride detections? And, if so, at what levels? Would the District's mercury and chloride discharges, given the effluent dominated nature of, in particular, the Chicago Sanitary and Ship Canal ("CSSC") and LDPR, be a relevant factor to consider in setting the mercury and chloride water quality standards?
- c. Is the Agency aware of high levels of chlorides in the waterways during winter months due to road de-icing activities? Given the proposed chlorides water quality standard, does the Agency anticipate a non-zero level of noncompliance (i.e., no allowance for taking into consideration background concentrations of chloride in the waterbody from non-point sources such as road de-icing activities)? To what extent has the Agency considered how its proposal will impact discharges of chlorides during winter

months when the waterways exceed the proposed chlorides standard? Is Illinois EPA considering updating the chloride water quality standard? If so, what is the schedule for doing so?

- 3. Does the Agency have data showing whether the ambient waters in CSSC and LDPR currently attain the lower (6.5) end of the range of the pH standard? If so, are mixing zones available for pH if end of pipe pH is between 6.0 and 6.5?
- 4. Illinois EPA's revised proposal changes the methodology used for evaluating the cyanide standard. Has Illinois EPA generated data on the waterways subject to this proceeding using the ligand-exchange method and compared that to the results of the weak acid dissociable method? If so, how different were the results?
- 5. The Agency's proposed amendments for the protection of human health, in addition to the earlier proposed aquatic life and wildlife toxicity provisions (proposed at Section 302.410), and their inclusion in the amendment to Subpart F ("Procedures for Determining Water Quality Criteria") appear to be intended to subject the CAWS and Aquatic Life Use B LDPR waters to the same toxicity-based standards as the General Use waters (compare to Section 302.210, "Other Toxic Substances"). Does the Agency intend for the waters of the CAWS and LDPR, designated as lower uses, to be subject to those General Use standards? If so, to what extent has the Agency analyzed the waterways' capability of meeting those standards, and what impact the proposal may have on sources discharging to the waterways? Has the Agency considered re-titling the Section to reflect the inclusion of a human-health component?
 - a. It is IERG's understanding that the human health-based Subpart F derivation methods and currently published values are based on 20 g/d consumption of trophic level 4 ("TL4") fish and at the bioconcentration rate of a TL4 fish. TL4 fish

include bass, trout, and salmon. However, there are minimal to no TL4 fish that are found or would be found in some of the segments of the waters subject to this rulemaking (such as the Upper Dresden Island Pool ("UDIP")). Trophic level 3 ("TL3") fish are carp, bullhead, catfish, dace, minnow, chub, white sucker, sculpin, bluegill, crappie, perch, and not all of these fish are found in some of the segments of the waters subject to this rulemaking.

Typically the bioconcentration factors ("BCF") are higher for TL4 fish and the 20 g/day fish consumption rate ("FCR") is based on TL4 fish, resulting in a more stringent criteria to protect humans. Given that chemical quality improvement in these waterbodies will not result in habitat quality improvement, and habitat is the limiting factor in having sustainable populations of bass in some of these waters, is Illinois EPA intending to adjust the process for deriving Subpart F standards to reflect the trophic level of the fish consumed and the rate that trophic level of fish is consumed?

- b. Is Illinois EPA intending to adjust the BCF for the trophic level of concern?
- c. In Subpart F, "Resident or Indigenous Species" is defined as "species which currently live a substantial portion of their lifecycle or reproduce in a given body of water, or which are native species whose historical range includes a given body of water." (Emphasis added.) The locks and dams on the LDPR and its heavy navigation are recognized uses. Does Illinois EPA intend to revise the definition of "resident or indigenous species" at 35 IAC 302.501(b) to specify that a "historical range" will consider all limitations on the historical range due to the current designated conditions of the body of water (e.g. flood control and navigation)?

- d. Given that these waters are not a source of drinking water or used for swimming, does Illinois EPA intend to revise and republish the existing table of Subpart F values to reflect the lower adjustment to 0.001 L/day as the exposure to a chemical? Currently, drinking is 2 L/day, and swimming is 0.01 L/day.
- 6. Does the Agency intend to provide any testimony or support for the proposed water quality standards beyond U.S. EPA guidance or criteria documents? Further, does the Agency intend to provide any testimony on technical feasibility or economic reasonableness of its proposed amendments?
 - a. Does the Agency intend to call any other witnesses to support the revised water quality standards it is proposing?
- 7. The Agency's proposed deletion of the reference to Section 303.237 from Section 302.101 (Scope and Applicability) appears to remove the UDIP from Subpart D. Is the Agency's intent to remove the UDIP from all provisions in Subpart D? What provisions does the Agency intend to apply to the Chicago River and UDIP?
 - a. On page 221 of its First-Notice Opinion and Order in Subdocket C, the Board indicates that "the Board will examine water quality standards for UDIP in Subdocket D to ensure that the UDIP can meet the water quality standards applicable under the General Use standard." Does the Agency plan to propose any other different or additional water quality standards for the UDIP that are not in the existing General Use standards?
- 8. Is it Illinois EPA's understanding that the amended proposal addresses all of U.S. EPA's concerns raised in its letter, dated January 29, 2010 (Public Comment No. 286, filed by

Illinois EPA with the Board on March 26, 2010)? If not, which concerns remain to be addressed? What is the Agency's plan for doing so?

- 9. Is Illinois EPA aware of any other concerns raised by U.S. EPA since January 29, 2010, regarding the water quality standards for the CAWS and LDPR? If so, what are those concerns? Are they addressed by the amended proposal, and if so, how? If concerns remain unaddressed, what are they, and what is the Agency's plan for addressing them?
- 10. Is it Illinois EPA's expectation that U.S. EPA will, in conducting its review and approval of the water quality standards for the CAWS and LDPR (as reflected in the amended proposal) in accordance with Section 303(c) of the CWA, grant approval without conditions?
- 11. Illinois EPA, per U.S. EPA's suggestion, is proposing the addition of "cold shock" language. What are the conditions under which cold shock occurs (e.g., what temperature change and over what timeframe)?
 - a. How will this language be implemented in permits?
- 12. Is Illinois EPA envisioning total maximum daily load ("TMDL") development as part of addressing situations where a water is transitioning from having no water quality standard for a particular parameter to, for example, a general use water quality standard for that parameter for which the water is impaired? If so, will existing dischargers retain their historical load limit(s) for the pollutant(s) in the interim while a TMDL is completed? If a discharger has no current load limit(s) for a pollutant (s) that is subject to a TMDL, will the interim limit be based on existing effluent quality?
- 13. Some states have developed and received U.S. EPA approval of "streamlined variance" rules for specific pollutants. For instance, Indiana has a streamlined variance program

for mercury (see 327 Indiana Administrative Code 5-35). What are Illinois EPA's thoughts on this type of approach?

This concludes IERG's questions for the Agency. IERG thanks the Board for the opportunity to pose these questions today. IERG reserves the right to supplement or modify these pre-filed questions.

Respectfully submitted,

ILLINOIS ENVIRONMENTAL REGULATORY GROUP

Dated: June 24, 2013

By: /s/ Alec M. Davis
Alec M. Davis

Alec M. Davis General Counsel Illinois Environmental Regulatory Group 215 East Adams Street Springfield, Illinois 62701 (217) 522-5512

CERTIFICATE OF SERVICE

I, Alec M. Davis, the undersigned, hereby certify that I have served the PRE-FILED QUESTIONS OF THE ILLINOIS ENVIRONMENTAL REGULATORY GROUP FOR THE ILLINOIS ENVIRONMENTAL PROTECTION AGENCY upon:

Mr. John T. Therriault Assistant Clerk of the Board Illinois Pollution Control Board 100 West Randolph Street Suite 11-500 Chicago, Illinois 60601

via electronic mail on June 24, 2013; and upon:

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by depositing said documents in the United States Mail, postage prepaid, in Springfield, Illinois on June 24, 2013.

By: /s/ Alec M. Davis
Alec M. Davis