BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)	
)	
WATER QUALITY STANDARDS AND)	
EFFLUENT LIMITATIONS FOR THE)	R08-09
CHICAGO AREA WATERWAY SYSTEM)	(Rulemaking – Water)
AND THE LOWER DES PLAINES RIVER:)	_
PROPOSED AMENDMENTS TO 35 III.)	
Adm. Code Parts 301, 302, 303, and 304)	

NOTICE OF FILING

To:

John Therriault, Clerk Illinois Pollution Control Board James R. Thompson Center 100 West Randolph St., Suite 11-500 Chicago, IL 60601

Deborah J. Williams, Assistant Counsel Stefanie N. Diers, Assistant Counsel Illinois Environmental Protection Agency 1021 North Grand Avenue East P.O. Box 19276 Springfield, IL 62794-9276

DATED: October 17th, 2008

Marie Tipsord, Hearing Officer Illinois Pollution Control Board James R. Thompson Center 100 West Randolph St, Suite 11-500 Chicago, Il 60601

Persons included on the attached SERVICE LIST

PLEASE TAKE NOTICE that the Environmental Law and Policy Center of the Midwest ("ELPC") and the Illinois Chapter of the Sierra Club today have electronically filed PREFILED QUESTIONS OF <u>G. ALLEN BURTON</u> AND <u>GREG SEEGERT</u>, copies of which are herewith served upon you.

Respectfully Submitted,

Most There

Albert Ettinger Senior Staff Attorney

Environmental Law & Policy Center

35 E. Wacker Dr. Suite 1300

Chicago, Il 60601 (312) 795-3707

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
)
WATER QUALITY STANDARDS AND)
EFFLUENT LIMITATIONS FOR THE) R08-09
CHICAGO AREA WATERWAYS SYSTEM) (Rulemaking- Water)
AND THE LOWER DES PLAINES RIVER:)
PROPOSED AMENDMENTS TO 35 Ill. Adm.)
Code Parts 301, 302, 303 and 304)
)

PREFILED QUESTIONS OF ENVIRONMENTAL LAW AND POLICY CENTER AND SIERRA CLUB TO G. ALLEN BURTON

The Environmental Law and Policy Center of the Midwest and the Illinois Chapter of the Sierra Club hereby file questions to G. Allen Burton:

- 1. What was the purpose of your sediment study?
- 2. How did you determine sampling locations for the sediment study?
- 3. Did you examine the sediment strata in your samples?
- 4. Did you perform any statistical analysis to compare historic data to this year's samples?
- 5. Do you have any direct evidence that contaminated sediment is limiting the abundance of any fish species in these waterways?
- 6. On page 4 of your prefiled testimony you state that "the removal of one stressor alone will not be sufficient to restore a watershed to beneficial use attainment." To your knowledge, has fish diversity and abundance improved over the past thirty years or so?
- 7. On page 12 of your prefiled testimony, you state, "Toxic sediments abound in most tributary mouth, tailwater, and pool depositional areas, which generally provide better habitats for fish." Are sedimentation rates the same within all types of habitat?
- 8. Are you aware of any waterways that support healthy aquatic life despite the presence of contaminated sediments?
- 9. What is the basis for the statement on page 9 of your prefiled testimony that nutrient enrichment is a significant stressor?
- 10. On pages 14 and 15 of Attachment 1 to your prefiled testimony, you quote a line from a petition asking USEPA to set standards for nitrogen and phosphorus that reads "Toxic algal blooms in Illinois have closed lakes due to swimming and fishing and burdened water suppliers with increased treatment costs. These blooms have killed livestock, pets, and tragically, a teenager in Wisconsin in 2002." Are you suggesting that you expect toxic cyanobacterial blooms to occur on these segments of the Lower Des Plaines River?
- 11. Does nitrogen or phosphorus pollution cause increased algae or nuisance weeds in the Upper Dresden Pool or the CAWS?

- 12. Does nitrogen or phosphorus affect dissolved oxygen levels in the CAWS or the Upper Dresden Pool?
- 13. Do you believe that ammonia levels are still high in the Upper Dresden Pool?
- 14. What field observations support your assertion on page 12 of your prefiled testimony that rapid mortality occurs in shallow-water habitats?
- 15. On page 14 of Attachment 1 to your prefiled testimony, you state that "Prior studies have shown that turbidity has and continues to be a stressor in both the CSSC and the UDP." What are these prior studies?
- 16. Do you have any documentation showing that turbidity is worse in the CSSC and the UDP than in other large Illinois rivers?
- 17. What kinds of effects can temperature have on the toxicity of contaminants in the water column or sediment?
- 18. Besides studying the effect of temperature on the toxicity of chemicals to fish, have you studied any other effects of temperature on fish?
- 19. Do you believe that emerging contaminants are affecting aquatic life in the CAWS or Upper Dresden Pool? If so, how? Which contaminants? Where are they having an effect?
- 20. Are you aware of studies regarding emerging contaminants in the CAWS or Upper Dresden Pool?
- 21. On page 17 of your Attachment 1 to your prefiled testimony, you state that "The most reliable indicator of in situ conditions are the indigenous communities present in the waterway." Did you study any of the indigenous communities in these waterways?
- 22. Have you ever conducted a Use Attainability Analysis before?
- 23. Have you studied the effect of entrainment of aquatic life by Midwest Generation plants on the aquatic life in the Lower Des Plaines or the CAWS?
- 24. Do you know how much of the barge traffic in the Upper Dresden Pool or the CAWS is for supply of Midwest Generation plants?
- 25. Have you studied the relationship between temperature and dissolved oxygen levels in the Upper Dresden Pool?
- 26. How does increased temperature caused by the operation of Midwest Generation plants affect dissolved oxygen levels in the CAWS and the Upper Dresden Pool?

BEFORE THE ILLINOIS POLLUTION CONTROL BOARD

IN THE MATTER OF:)
WATER QUALITY STANDARDS AND EFFLUENT LIMITATIONS FOR THE CHICAGO AREA WATERWAYS SYSTEM AND THE LOWER DES PLAINES RIVER: PROPOSED AMENDMENTS TO 35 III. Adm. Code Parts 301, 302, 303 and 304))) R08-09) (Rulemaking- Water)))
)

PREFILED QUESTIONS OF ENVIRONMENTAL LAW AND POLICY CENTER AND SIERRA CLUB TO GREG SEEGERT

The Environmental Law and Policy Center of the Midwest and the Illinois Chapter of the Sierra Club hereby file questions to Greg Seegert:

- 1. Does your analysis of each UAA factor apply uniformly to the entire CAWS/Lower Des Plaines system?
- 2. Which factors are applicable to which water segments?
- 3. Have you seen effects of nitrogen or phosphorus pollution in any part of the Chicago Area Waterways System ("CAWS") or Lower Des Plaines ("LDP")?
- 4. What water bodies have you studied that are comparable to the various segments of the CAWS and LDP?
- 5. On page 3 of your prefiled testimony, you state that changes in flow can adversely affect nest-building fish. Have nest-building fish been found in EA stream surveys?
- 6. How does aquatic vegetation in the Upper Dresden Pool compare to aquatic vegetation in the Illinois River?
- 7. What are the potential causes of fish abnormalities?
- 8. Have you seen any evidence of fish kills in the CAWS or LDP from barge propeller strikes?
- 9. Do you believe that all impounded waters have poor fisheries?
- 10. If not, what causes an impounded water to have a better fishery than other impounded water bodies?
- 11. Are you aware of any waterways with barge traffic that are able to support a healthy fishery?
- 12. How effective is the EA fish sampling gear at collecting fish (such as walleye) that may be present in deeper water?
- 13. On page 21 of your prefiled testimony, you state that 1.7% of fish collected were intolerant or moderately intolerant, and that this does not reflect a balanced indigenous population. What percentage of intolerant or moderately intolerant fish would you expect to see in a General Use waterway?

- 14. What Illinois water bodies would you suggest that we consider in attempting to determine the fish species that should be present in a general use waterway?
- 15. Have you looked at the fishery in the Des Plaines below the I-55 bridge?
- 16. If you have investigated the fishery below the I-55 bridge, is it better or worse than the fishery above the bridge?
- 17. Is the Fox River similar in depth and flow to the LDP?
- 18. Did you design your stream survey to be able to determine whether or not the system is influenced by thermal inputs from the Midwest Generation plants?
- 19. Did you determine whether the chemical quality of the LDP has improved sine 1994?
- 20. Did you look at how the operation of the Midwest Generation plants changed over time?
- 21. What is the significance of an average of QHEI scores?
- 22. What is the expected margin of error for QHEI scores?
- 23. Have you determined what the MBI QHEI scores would be if the changes you suggest were made?
- 24. Have you calculated QHEI scores from Hickory Creek, Jackson Creek, Prairie Creek or any other tributary to the LDP?
- 25. Have you calculated QHEI scores for the Kankakee River or the Du Page River?
- 26. Why do you believe that the 25 white suckers EA collected in the Brandon Pool in 1993-94 drifted from the Upper Des Plaines River?
- 27. Why is it that darters and redhorse are sometimes found in the Upper Dresden Pool?
- 28. Please describe the fish population in samples taken from areas in the LDP identified as having good habitat.
- 29. Should the Upper Dresden Pool be given a classification equivalent to the Ohio Modified Warmwater Habitat classification?
- 30. How would you classify the Sanitary and Ship Canal using the Ohio system?
- 31. Have you ever seen a water body that was adversely affected by heat discharges?
- 32. Have you considered the effect of entrainment by Midwest Generation plants on the fishery of the CAWS or the LDP?

CERTIFICATE OF SERVICE

I, Albert F. Ettinger, the undersigned, hereby certify that I have served the attached prefiled questions of the Environmental Law and Policy Center and the Illinois Chapter of the Sierra Club to <u>G. ALLEN BURTON</u> AND <u>GREG SEEGERT</u> 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 filing on October 17th, 2008; and upon the attached service list by depositing said documents in the United States Mail, postage prepaid, in Chicago, Illinois on October 17th, 2008.

Respectfully Submitted,

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Albert Ettinger

Senior Staff Attorney

Environmental Law & Policy Center

35 E. Wacker Dr., Suite 1300

Chicago, IL 60601 aettinger@elpc.org

Lyman C. Welch Manager, Water Quality Programs Alliance for the Great Lakes 17 N. State Street Suite 1390 Chicago, IL 60602

Kay Anderson American Bottoms RWTF One American Bottoms Road Sauget, IL 62201

Tracy Elzemeyer, General Counsel American Water Company Central Region 727 Craig Road St. Louis, MO 63141

Kenneth W. Liss Andrews Environmental Engineering 3300 Ginger Creek Drive Springfield, IL 62711

Frederic P. Andes and Erika K. Powers Barnes & Thornburg LLP One North Wacker Drive, Suite 4400 Chicago, IL 60606

Bob Carter
Bloomington Normal Water Reclamation
District
P.O. Box 3307
Bloomington, IL 61702-3307

Beth Steinhorn 2021 Timberbrook Springfield, IL 62702 Claire Manning
Brown, Hay & Stephens LLP
700 First Mercantile Building
205 South Fifth St., P.O. Box 2459
Springfield, IL 62705-2459

Lisa Frede Chemical Industry Council of Illinois 2250 E. Devon Avenue Suite 239 Des Plaines, IL 60018-4509

Keith I. Harley and Elizabeth Schenkier Chicago Legal Clinic, Inc. 205 West Monroe, 4th Floor Chicago, IL 60606

Cathy Hudzik
City of Chicago, Mayor's Office of
Intergovernmental Affairs
121 North LaSalle Street
City Hall – Room 406
Chicago, IL 60602

Robert VanGyseghem City of Geneva 1800 South Street Geneva, IL 60134-2203

Dennis L. Duffield
Director of Public Works & Utilities
City of Joliet, Department of Public Works
& Utilities
921 E. Washington Street
Joliet, IL 60431

Dr. Thomas J. Murphy 2325 N. Clifton Street Chicago, IL 60614

Roy M. Harsch Drinker, Biddle, Gardner, Carton 191 N. Wacker Drive, Suite 3700 Chicago, IL 60606-1698

Irwin Polls
Ecological Monitoring and Assessment
3206 Maple Leaf Drive
Glenview, IL 60025

Tom Muth Fox Metro Water Reclamation District 682 State Route 31 Oswego, IL 60543

Katherine D. Hodge, Monica T. Rios, N. LaDonna Driver, Alec M. Davis and Matthew C. Read Hodge Dwyer Zeman 3150 Roland Avenue P.O. Box 5776 Springfield, IL 62705-5776

> James Huff, Vice-President Huff & Huff, Inc. 915 Harger Road, Suite 330 Oak Brook, IL 60523

Kristy A.N. Bulleit and Brent Fewell Hunton & Williams LLC 1900 K. Street, NW Washington, DC 20006 W.C. Blanton Blackwell Sanders LLP 4801 Main Street Suite 1000 Kansas City, MO 64112

Deborah J. Williams and Stefanie N. Diers
Assistant Counsel, Division of
Legal Counsel
Illinois Environmental Protection Agency
1021 North Grand Avenue East
P.O. Box 19276
Springfield, IL 62794-9276

Marie Tipsord, Hearing Officer John Therriault, Assistant Clerk Illinois Pollution Control Board 100 West Randoph, Suite 11-500 Chicago, IL 60601-7447

Kevin G. Desharnais, Thomas W. Dimond, Jennifer A. Simon and Thomas V. Skinner Mayer, Brown LLP 71 South Wacker Drive Chicago, IL 60606-4637

Jerry Paulsen and Cindy Skrukrud McHenry County Defenders 132 Cass Street Woodstock, IL 60098

Ronald M. Hill, Frederick M. Feldman, Esq., Louis Kollias and Margaret T. Conway Metropolitan Water Reclamation District of Greater Chicago 100 East Erie Street, Room 301 Chicago, IL 60611

Bernard Sawyer and Thomas Granto Metropolitan Water Reclamation District 6001 West Pershing Road Cicero, IL 60650-4112

Ann Alexander, Senior Attorney Natural resources Defense Council 101 North Wacker Drive, Suite 609 Chicago, IL 60606

Mark Schultz
Regional Environmental Coordinator
Navy Facilities and Engineering Command
201 Decatur Avenue
Building 1A
Great Lakes, IL
60088-2801

Marc Miller, Senior Policy Advisor Jamie S. Caston, Policy Advisor Office of Lt. Governor Pat Quinn Room 414 State House Springfield, IL 62706

Matthew J. Dunn, Chief Office of the Attorney General Environmental Bureau North 69 West Washington, Suite 1800 Chicago, IL 60602

Susan Hedman and Andrew Armstrong, Environmental Counsel Environmental Bureau North Office of the Illinois Attorney General 69 West Washington, Suite 1800 Chicago, IL 60602 Stacy Myers-Glen Openlands 25 East Washington, Suite 1650 Chicago, IL 60602

Traci Barkley
Prairie Rivers Networks
1902 Fox Drive
Suite 6
Champaign, IL 61820

Charles W. Wesselhoft and James T. Harrington Ross & Hardies 150 North Michigan Avenue Suite 2500 Chicago, IL 60601-7567

Jack Darin Sierra Club, Illinois Chapter 70 E. Lake Street, Suite 1500 Chicago, IL 60601-7447

James L. Daugherty, District Manager Thorn Creek Basin Sanitary District 700 West End Avenue Chicago Heights, IL 60411

Frederick D. Keady, P.E., President Vermillion Coal Company 1979 Johns Drive Glenview, IL 60025

Vicky McKinley Evanston Environmental Board 223 Grey Avenue Evanston, IL 60202