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BEFORE THE ILLINOIS POLLUTION CONTROL BOARD JUL 01 2005

STATE OF ILLINOIS  
Pollution Control Board

INTERIM PHOSPHORUS EFFLUENT )  
STANDARD, PROPOSED 35 ILL. ADM. ) R2004-026  
CODE 304.123(G-K) ) Rulemaking – Water  
)

NOTICE OF FILING

PLEASE TAKE NOTICE that the Environmental Law & Policy Center, Prairie Rivers Network and Sierra Club have filed the attached RESPONSE OF THE ENVIRONMENTAL LAW & POLICY CENTER, PRAIRIE RIVERS NETWORK AND SIERRA CLUB TO THE FIRST NOTICE COMMENTS OF THE ILLINOIS ASSOCIATION OF WASTEWATER AGENCIES.



Albert F. Ettinger (Reg. No. 3125045)  
Counsel for Environmental Law & Policy Center, Prairie Rivers Network, and Sierra Club

DATED: July 1, 2005

Environmental Law & Policy Center  
35 East Wacker Drive, Suite 1300  
Chicago, IL 60601  
312-795-3707

**BEFORE THE ILLINOIS POLLUTION CONTROL BOARD**

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IN THE MATTER OF: ) STATE OF ILLINOIS  
 ) Pollution Control Board  
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**RESPONSE OF THE ENVIRONMENTAL LAW & POLICY CENTER, PRAIRIE  
RIVERS NETWORK AND SIERRA CLUB TO THE FIRST NOTICE COMMENTS OF  
THE ILLINOIS ASSOCIATION OF WASTEWATER AGENCIES**

ELPC, Prairie Rivers Network and Sierra Club (“ELPC/PRN/Sierra”) did not have any criticisms to make of the Board’s proposed First Notice Rule in this matter and, accordingly, did not file comments. However, the Illinois Association of Wastewater Agencies (“IAWA”) does have criticisms of the proposed First Notice rule and the April 7, 2005 Opinion and Order issued by the Board. These criticisms were stated in comments filed June 20, 2005. Response is made here to those IAWA comments and to questions posed by the Joint Committee on Administrative Rules regarding the economic and budgetary effects of the proposal.

IAWA’s first three criticisms are that there is “insufficient justification” for the rule, that there is no need to “shortcut” what IAWA labels a “science-based approach” and that the proposed reduction in the increases of phosphorus to be allowed is insignificant. These meritless criticisms have all been answered by the Board’s opinion and in prior comments filed by ELPC/PRN/Sierra Club. With regard to IAWA’s true but irrelevant refrain that agriculture is a major source of phosphorus, it may be further mentioned that the Board itself has found that phosphorus from point sources is probably more damaging to the environment because it is more

biologically available to algae. See, In the Matter of: Site-Specific Phosphorus Limitation for the City of Shelbyville, R 1983-12 R 1983-12, 1984 Ill. ENV LEXIS 129, \*9 (December 20, 1984).

IAWA did raise two new matters in its June 20 comments: a concern regarding daily maximum limits that it claims would be created by the rule as drafted and a claim that the costs of the proposal have been seriously underestimated.

**I. ELPC/PRN/Sierra do not object to amending the rules to make more clear that daily maximum limits are not intended.**

ELPC/PRN/Sierra do not object to placing language in the rule that clarifies that no daily maximum limit is intended to be created by the new rule. The language we would propose would state:

- k) The averaging rules under subsections (a)(2) and (a)(3) of Section 304.104 do not apply to permit limits established pursuant to Section 304.123(g) or (h).

As IAWA states, the Wisconsin phosphorus effluent rules, which establish 1 mg/L limits for a broader range of dischargers than the proposed Board rule, do not have a daily maximum. Also, without a daily maximum, it should be possible for most Illinois dischargers to use biological phosphorus removal methods which generate less sludge than chemical phosphorus removal methods.

**II. If the proposal costs dischargers anything, the costs will be very modest.**

IAWA's comments regarding the potential economic costs to Illinois dischargers of the proposed rules basically confirm that costs are modest. At the hearing, Ms. Beth Wentzel presented, among other information, a document prepared by engineers hired by the City of Elgin stating that capital costs of providing phosphorus removal for a 4.3 million gallon per day (MGD) treatment plant would be \$150,000. This information was cited by the Board as one of the facts supporting its decision. (Opinion and Order p. 18). Based on a study of certain

Wisconsin plants and unsubstantiated statements made about costs at a Kentucky plant and several Illinois plants<sup>1</sup>, IAWA claims that this figure seriously underestimates the economic impact of the proposed rule. (Comment of IAWA p. 3). In fact, the economic costs of the proposal were probably overstated and certainly were not significantly understated.

First, as explained in the Pre-filed testimony of Albert Ettinger (pp. 11-12), a limit of 1 mg/L is already required for new or increased discharges by a provision of Illinois' antidegradation regulations, 35 Ill. Adm. Code 302.105(c). Under this provision, new or increased pollution may only be allowed to the extent it is "necessary" and it certainly is not necessary to allow more than 1 mg/L phosphorus to be discharged given that a 1 mg/L phosphorus limit was found economically reasonable by the Board even given the technology in existence two decades ago. See Village of Wauconda v. Illinois EPA, PCB 1981-017, 1981 Ill. ENV LEXIS 266, at \*4 (May 1, 1981); In the Matter of: Amendments to the Water Pollution Regulations, R1976-001, p. 4, 1979 Ill. ENV LEXIS 312 (Feb. 15, 1979); In the Matter of: Site-Specific Phosphorus Limitation for the City of Shelbyville, R 1983-12, 1984 Ill. ENV LEXIS 129, \*13 (December 20, 1984).

Further, it must be kept in mind that the figures given by IAWA are for the present value of the total costs of 20 years of construction and operation of the phosphorus removal equipment. No party to this proceeding has denied that phosphorus removal is likely to be required well within the 20 year period. Thus, even if phosphorus removal was not already required by the antidegradation rules, the effect of the proposal at issue here would be to advance the installation

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<sup>1</sup> While the Board evidentiary rules are flexible, there really does not seem to be much excuse for relying on cost figures stated by counsel without any exhibit to support the estimate or witness willing to explain how these numbers were found.

of phosphorus removal equipment at a few plants by a few years and to encourage some municipalities to explore land treatment or other non-discharge treatment.

Finally, even looking at IAWA's worst case scenario, the cost is modest when viewed properly. IAWA states that "for plants with a capacity of one or two MGD using [chemical phosphorus removal], it appears the 20 year present worth including sludge processing and disposal will be \$600,000 to \$1,000,000" (Comment of IAWA p.4). Ignoring antidegradation, the virtual certainty that phosphorus treatment will be required in much less than 20 years and assuming \$1,000,000 for a 1 MGD, that amounts to \$5.00 per person a year.<sup>2</sup> Moreover, it is clear from the Wisconsin study cited by IAWA that costs per person vary greatly and fall rapidly with increased scale.

The total economic cost to the state of enacting the Board's proposal is actually less than zero because it provides a rule of thumb that will be convenient to the Agency and give notice to planners while not requiring wastewater treatment that is not already required by the antidegradation rules. Even, however, ignoring the antidegradation requirements, total costs would not be large. It is unclear how many new or increased discharges there will be before numeric phosphorus standards are adopted and what, if any, increased costs will be incurred by new or expanding dischargers as a result of having a 1 mg/L phosphorus limit. Further, against any such increased costs must be set savings from not having to retrofit plants after numeric standards are adopted and the savings for drinking water plants and other water users from reduced phosphorus pollution. The evidence provided by Professor Lemke and others regarding

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<sup>2</sup> \$1,000,000/20years = \$50,000/year; 1 MGD = 10,000 persons (see 35 Ill. Adm. Code 301.345); \$50,000/yr/10,000 persons = \$5/yr/person

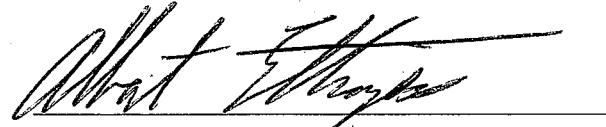
the effects on Illinois' rivers, lakes and streams from phosphorus pollution shows that the net economic effects of reducing phosphorus loadings are strongly positive.

### **III. Adoption of the proposal will save money for the State of Illinois.**

The budget implications of adoption of the proposal are not huge but are clearly positive. The principle effect of the rule will be to establish a bright line rule for new or increased discharges during the period during which phosphorus standards are developed. The net effect of the adoption of the rule then will be to reduce the number of permit disputes and potential hearings and appeals resulting from such disputes.

### **CONCLUSION**

The Board should send to Second Notice an interim phosphorus effluent rule generally requiring a limit of 1 mg/L total phosphorus for all new or increased discharges for dischargers greater than 1 MGD. The proposed First Notice rule may be amended to make more clear that a daily maximum limit is not required to be set under the rule.



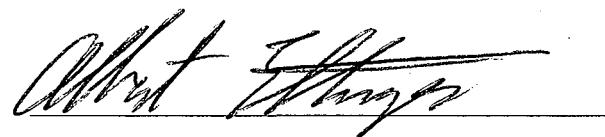
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**CERTIFICATE OF SERVICE**

I, Albert F. Ettinger, certify that on July 1, 2005, I filed the attached RESPONSE OF THE ENVIRONMENTAL LAW & POLICY CENTER, PRAIRIE RIVERS NETWORK AND SIERRA CLUB TO THE FIRST NOTICE COMMENTS OF THE ILLINOIS ASSOCIATION OF WASTEWATER AGENCIES. An original and 9 copies was filed, on recycled paper, with the Illinois Pollution Control Board, James R. Thompson Center, 100 West Randolph, Suite 11-500, Chicago, IL 60601, and copies were served via United States Mail to those individuals on the included service list.



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