ILLINOIS ASSOCIATION OF WASTEWATER AGENCIES' (IAWA) POSITION STATEMENT ON THE DEVELOPMENT OF NUTRIENT STANDARDS IN ILLINOIS

Date: August 31, 2010

- 1. Nutrient standards are appropriate where cause and effect relationships can be clearly identified as necessary to protect the stream use but are not appropriate on a blanket basis statewide as demonstrated by the results from the CFAR research projects.
- 2. A blanket water quality standard for phosphorus (and nitrogen) creating effluent standards for POTWs may result in unwarranted environmental damage to the atmosphere. IAWA conducted a study to document direct and indirect (energy-related) emissions associated with phosphorous and nitrogen removal treatment technologies to meet such standards and the resulting carbon footprint. The results of that study found that for a treatment plant with a flow of 10 MGD, the annual greenhouse gas emissions increase is equal to the annual emissions from 300 automobiles. If all municipal wastewater flows in the state were considered, the increase in greenhouse gas emissions would be more than 470,000 tons of CO₂ equivalent per year which equals 12% to 15% of the annual emissions of a 600 MV electrical power plant operating with an average capacity factor of 75% in the State of Illinois.
- 3. In addition to Item No. 2, such a blanket standard creates a massive expenditure of resources such as TMDLs for nutrients that are not fixable because the problem is something other than nutrients (e.g., habitat); UAA studies to supplement the extensive CFAR effort; construction and operation of nutrient removal technologies at POTWs; etc. For such massive expenditures, tangible benefits must exist. This is at the foundation of sound public policy.
- 4. When a nutrient standard is deemed appropriate for a particular stream segment, IAWA supports a holistic approach to achieving that standard. A stream not meeting its nutrient standard should be placed on the Agency's 303(d) list and have a TMDL performed on it to establish waste load allocations and needed reductions. Such concepts as wetland nutrient sequestering (in lieu of treatment technologies), effluent trading and biological removal technologies could be incorporated into the implementation plan reducing the financial impacts and the carbon footprint of the nutrient standards.
- 5. Implementation policies for any nutrient standards that are developed must be developed concurrently with the standard. A period of compliance must be allowed to achieve nutrient standards once they are triggered for a given waterway segment. This needs to be explicitly stated in the rulemaking to allow

- for development of compliance schedules and protect dischargers from unwarranted legal action.
- 6. Long term averaging is important for technical feasibility and appropriate where nutrient limits are needed. Short term (daily) values are not necessary since the potential impact is related to the longer term overall loading, not a single daily value.
- 7. The interim phosphorus standard should be deleted upon adoption of any new standard; and, if necessary, clarify that anti-degradation and anti-backsliding does not apply to dischargers caught under the interim standard.
- 8. IAWA has carefully reviewed both scenarios that IEPA presented in 2008 for a phosphorus standard, and while it has serious reservations concerning the technical evidence to support the adoption of either one, IAWA believes that if IEPA is going to proceed with a proposal it should carefully consider a combination of both into one approach. An attempt to combine them into one proposal along with the reasoning behind the combination was submitted to IEPA with a transmittal letter dated June 17, 2008. A copy of that submittal is attached to this position statement. The Combined Scenario A&B essentially combines IEPA's Scenarios A and B by requiring both the reactive, dissolved oxygen (DO) trigger of Scenario A and the proactive, habitat trigger of Scenario B. Both the habitat conditions for excessive primary production and the DO consequences of excessive primary production are needed to trigger the applicability of the phosphorus water quality standard in this combined scenario.

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