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December 13, 2017

John T. Therriault, Clerk
Tim Fox, Hearing Officer
Illinois Pollution Control Board
100 West Randolph, Suite 11-500
Chicago, IL 60601

RE: In the Matter of Public Water Supplies: Proposed New 35 ILL. ADM. Code 604
Amendments to 35 ILL. ADM. Code Parts 601, 602, 607, and 611 R18-17 (Rulemaking –
Water)

Dear Mr. Therriault and Fox:

Illinois American Water (ILAW) respectfully would submit the following comments related to the above cited rulemaking, in particular to Section 604.725, a) which states:

A minimum free chlorine residual of 0.5 mg/l or a minimum combined residual of 1.0 mg/l shall be maintained in all active parts of the distribution system at all times.

It is ILAW's position is that the current regulatory requirement for chlorine disinfection maintains a distribution system, which is protective of public health. Under the RTCR (Revised Total Coliform Rule), public water supplies are required to monitor for coliform bacterial in the distribution system. If detected this alerts the utility that there may be a potential problem and the appropriate actions are taken by the utility to check and if needed, make corrections to mitigate the concern.

The concern that the current residual requirements may contribute to disease outbreaks has not been evident. In particular, *Legionella* has been brought up as a concern for the water supply systems in Illinois. *Legionella* outbreaks occur primarily in premise plumbing, where growth proliferates in the building water systems, outside the control of the water utility. Requiring additional treatment by the water utility is unlikely to prevent these opportunistic infections. Proper design, operation and maintenance of premise plumbing systems is a more important consideration for public health than the level of disinfectant in distribution systems.

The proposed increase in residual levels would result in increased capital costs from system infrastructure projects that would be difficult to engineer, design and complete in a short time frame. Meeting the requirements would involve revision of capital planning and budgets to comply with the rule and diverting funds from other projects underway to improve public health protection and to comply with other regulations.

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As an example, addition of booster chlorine stations in the distribution system may require

- Land purchase or invoking eminent domain to facilitate construction
- Additional staffing to maintain station
- Hydraulic modeling to understand the effects of such change during different times of the year
- Other infrastructure such as tanks
- SCADA and Automation equipment
- System operation changes

Increasing the residual at entry points to meet distribution system requirements may not be effective in managing chlorine residuals in the distribution system, but will still have associated costs and impacts, including

- Capital costs if disinfectant feed locations are changed or disinfectant feed systems must be modified,
- Higher operating costs,
- Increased taste and odor complaints
- Additional challenges with disinfection byproduct regulations.

At this time, utilities have not had sufficient time to accurately estimate costs associated with meeting the proposed minimum residual requirements. It is likely that those costs will be significant for some utilities

More information may be needed to clarify what residual concentration is protective of public health. The current requirements for chlorine residual and the required monitoring under the RTCR appear to provide that protection. It is ILAW's feeling that this regulation requires further investigation and informational data review before it should be implemented. The requirement would surely result in increased costs to utilities, potentially create more disinfection by-products, and without sufficient evidence to support that cost is not acceptable.

Respectfully submitted,

Randolph Pankiewicz

Director of Water Quality
and Environmental Compliance