Central Lake County Joint Action Water Agency



November 3, 2017

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

Re: 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:

As Operations Director of the Central Lake County Joint Action Water Agency, I appreciate the opportunity to provide input on the proposed changes to the regulations documented above.

604.105 a) Satellite communities purchasing water from parent supplies should be exempted from this section.

604.120 b) recommends a color scheme that is different than the ANSI/ASME A13.1 pipe identification standard used in the United States. Suggest adopting the this standard for consistency and to eliminate operator/maintenance mechanic confusion.

604.130 a) 1) C) This section does not clearly state whether the equipment must be on-line. Please clarify. This section also appears to require ammonia monitoring. This is an unnecessary expense for many supplies including those on Lake Michigan. Ammonia is not detectable in Lake Michigan water and requiring equipment for its routine monitoring is an unnecessary expense. At most, suggest moving this requirement to 604.130 a) 2) d)

604.135 b) 3) Filters containing granular activated carbon can not be disinfected with sodium hypochlorite because 1 - carbon removes chlorine and 2 - high levels destroy the chlorine. Suggest exemption for granular activated carbon with appropriate flushing and testing to verify bacteriological acceptability. Note that the inability to disinfect GAC is implicitly acknowledged in 602.310 b) where the filter must be disinfected prior to GAC addition.

604.135 c) 3) "any portion of the distribution system" should be further clarified to exempt pump and delivery station yard piping.

604.135 c) 3) C) This section calls for chlorine and turbidity testing at not more than hourly intervals in the affected area for "several hours".... If "significant" decrease in chlorine residual or turbidity occurs... The terms "several" and "significant" allow for interpretation. Suggest replacing "several" with "four". Suggest changing "significant" with "exceeds the minimum or maximum value in the historic record".

604.135 d) Emergency Operations Plans should be declared confidential and not subject to FOIA as they can reveal system weaknesses and vulnerabilities. IEPA or similar agency should provide an Emergency Operations Plan template and guidance for utilities.

604.160 a) IEPA should provide utilities with a template chemical safety plan, otherwise there is no standard here.

604.160 b) Safety training shall be further defined as "in accordance with applicable IDOL regulation", otherwise there is no standard here.

604.165 d) How long shall records be retained, must provide a standard or state, "in perpetuity".

604.220 calls for "Zebra" Mussel Control. Note that zebra mussels have largely been displaced from Lake Michigan for example, by Quagga Mussels. Suggest changing this section title to "Invasive Mussel Control" See https://rvlakeguardian.wordpress.com/category/lake-michigan for mussel survey results.

604.605 b) Suggest adding the following to the end of the first sentence which provides a filtration rate cap, "unless filter performance in compliance with the appropriate water quality regulations is demonstrated". This regulation, as written, results in the unnecessary and significant expenditure of public funds on additional capital, when it may be clearly documented over a prolonged period, that a higher filtration rate is achievable. Other states recognize higher filtration rates as acceptable without threat to public health or recognize a L/d filtration ratio requirement.

604.605 g) 4) D) iii) Please explain "periodic treatment of filter material for control of bacterial and other growth." This is not a familiar concept.

604.605 j) 6) Replace "Tapid" with "Rapid".

604.720 c) Replace "in activation" with "inactivation"

604.725 a) I very strongly object to the changes proposed in this section. The minimum free chlorine residual should not be changed from 0.2 to 0.5 mg/L and total residuals should not be increased from 0.5 to 1.0 mg/L. This is an arbitrary change and is not supported with new research or established science. It will result in higher chlorine use, higher utility chemical costs, higher regulated disinfection by-products, increased customer taste and odor complaints, and the need by some utilities for larger chemical feed pumps and tankage. It will not improve public health and in fact, may threaten public health through increased DBP production and public confidence through increased chlorinous taste/odor

in tap water. It is out of compliance with federal standards. Concern about the ability to accurately measure 0.2 mg/L chlorine levels may be addressed by restricting the use of color wheels or comparators. Inexpensive monitoring equipment can easily, objectively and accurately measure chlorine residuals at this level.

604.730 The requirement to shut down facilities when chlorine residuals at the entry point are below limits, is dangerous. Power surges/sags can cause process feedback loops to trip, chlorine monitors run out of reagent, probes fail, etc. The result of these relatively benign events suddenly shutting down a treatment process, will result in much larger water quality degradation events including filter turbidity breakthrough which can then cascade into filter-to-waste issues, pressure issues, etc.

604.1145 a) This requirement does not specify the required water temperature and in essence, requires a water heater no matter what the source temperature may be. Suggest changing section to read "Source water temperature shall be sufficient to dissolve potassium permanganate".

604.1150 2) The term "hydrofluosilicic acid" is a term no longer used widely. The CDC (https://www.cdc.gov/niosh/ipcsneng/neng1233.html) and NSF (https://www.nsf.org/newsroom_pdf/NSF_Fact_Sheet_on_Fluoridation.pdf) use the term "Fluorosilicic Acid" as do some suppliers. Note that the NIH (https://pubchem.ncbi.nlm.nih.gov/compound/11137276) uses "Fluosilicic acid". Suggest providing alternative names for clarification.

604.1415 c) Please define a "dead end" in terms of length from flowing main.

604.1425 b) 1) It should be noted that this section can not apply to large transmission mains. This exception may be addressed as it is in the section above, by stating "Unless otherwise approved by the Agency...".

604.1435 a) and b) Especially in Lake County, the requirement to keep all valve containing manholes dry is not possible without sump pumps. With hundreds of valve vaults, this is not feasible. If this is not the intent of this section, please clarify.

601.101 b) 2) The way this paragraph is written is confusing. Chlorine has a deleterious physiological effect. This paragraph states, literally, that it can not be permitted to reach the consumer. Suggest clarification.

601.105 Definition of Satellite Supply does not allow for that supply to feed phosphoric acid or other corrosion inhibitors as defined here. Is this intentional? It may be more cost effective in some situations for a satellite to treat their water, rather than a parent supply, when that parent supply serves many satellites that do not require corrosion inhibitors.

601.115 c) How does a regulation like this stay current when it is corrected or improved? This section should state that the most current edition of the standard is used. If IEPA has a concern that they are then creating a regulation that they do not have control over, suggest language like "...or the most current edition of the standard at the discretion of the Agency."

602.310 c) and 602.310 c) 2) This section references Section 602.315. This section does not appear in the document.

602.310 d) Please confirming that single sample sets will no longer be permitted.

602.325 d) Strike "is" from the phrase "...water supply that it is may not seek...".

Sincerely,

William J. Soucie Operations Director