

ILLINOIS POLLUTION CONTROL BOARD
September 17, 2015

IN THE MATTER OF:)
)
AMENDMENTS TO PRIMARY DRINKING) R15-23
WATER STANDARDS) (Rulemaking - Water)
35 ILL. ADM. CODE 611)

Proposed Rule. Second Notice.

OPINION AND ORDER OF THE BOARD (by D. Glosser):

On May 20, 2015, the Illinois Environmental Protection Agency (IEPA) filed a new rulemaking to amend the fluoridation requirement in the Board's public water supply regulations. The proposal amends Section 611.125 to change the requirement that all community water supplies maintain a fluoride ion concentration of 0.9 to 1.2 milligrams per liter (mg/L) in the community water supply distribution system to reflect a fluoridation ion concentration of 0.7 mg/L.

The Board held two hearings and heard testimony from IEPA in support of the proposals. The Board also received 7 total public comments. The Board considered the comments and testimony and finds that proceeding to second notice is appropriate. In this opinion, the Board finds the rule as proposed by IEPA is technically feasible and economically reasonable and is protective of human health and the environment. Therefore, the Board adopts the rule for second notice as the rule was proposed for first notice making only nonsubstantive changes. The Board directs the Clerk to file the rule with the Joint Committee on Administrative Rules.

The Board will briefly describe the procedural background and then summarize the rule proposal. The Board will then summarize the relevant portions of the testimony and comments. Finally, the Board will discuss the reasons for proceeding to second notice.

PROCEDURAL BACKGROUND

Along with the rule language, IEPA included a statement of reasons (SR) and a motion for expedited review. IEPA also filed a motion asking the Board to adopt the proposal as an emergency rule while proceeding with expedited review. On June 4, 2015, the Board accepted the proposal without commenting on the merits of the proposal and directed the Clerk to provide first notice of the proposal. Also on June 4, 2015, the Board reserved ruling on the motion to adopt an emergency rule, requested that IEPA provide additional information, and invited public comment on the matter.

The Board received the following five comments regarding the request for the emergency rule. The Board will not summarize those comments in this opinion as those comments were summarized and discussed in the July 9, 2015 order. The Board notes that the comments were from:

Kyla Jacobsen, Utilities Director, City of Elgin Water Department (PC 1)
Molly Nocerino (PC 2)
William J. Soucie, M.S., Operations Director, Central Lake County Joint Action Water Agency (PC 3)
Randolph Pankiewicz, Manager Water Quality and Environmental Compliance, Illinois American Water (PC 4)
IEPA (PC 5).

On July 9, 2015, after considering the comments, the Board found that that an immediate effective date of the amended fluoride requirement is not necessary to address an emergency. Therefore, the Board denied the motion for emergency rulemaking.

Pursuant to Section 27(b) of the Environmental Protection Act (Act) (415 ILCS 5/27(B) (2014)), the Board is required to request the Department of Commerce and Economic Opportunity (DCEO) to conduct an economic impact study on certain proposed rules prior to adoption of those rules. If DCEO chooses to conduct the economic impact study, DCEO has 30 to 45 days after such request to produce a study of the economic impact of the proposed rules. The Board must then make the economic impact study, or DCEO's explanation for not conducting the study, available to the public at least 20 days before a public hearing on the economic impact of the proposed rules. On June 4, 2015, the Board requested that DCEO conduct an economic impact study for the above-referenced rulemakings. Any response from DCEO was due by July 16, 2015. The Board received no response from DCEO.

The Board held a hearing on July 30, 2015, in Springfield and a hearing on August 19, 2015, in Chicago. Mr. David McMillan testified on behalf of IEPA. Also at the August 19, 2015 hearing, the hearing officer asked if anyone wished to comment on DCEO's decision not to perform an economic impact statement. No one commented. 8/19/15 Tr. at 3-5.

The final comment period was closed on September 9, 2015 and the Board received two additional comments, one from the IEPA (PC 7) and one from Molly Nocerino (PC 6).

IEPA'S PROPOSAL

IEPA explains that the Board's rules at Section 611.125 require all community water supplies to maintain a fluoride ion concentration of 0.9 to 1.2 mg/L in the community water supply distribution system. SR. at 1; 35 Ill. Adm. Code 611.125. IEPA continues that the state requirement is based on a statutory fluoridation requirement found in the Public Water Supply Regulation Act, 415 ILCS 40 (2014). SR. at 1. A statutory change in 2011 removed the fluoridation range from the statute and replaced it with a reference to the optimal fluoridation levels recommended by the United States Department of Health and Human Services (HHS). On May 1, 2015, HHS adopted a recommended fluoridation ion concentration of 0.7 mg/L. SR. at 1, 4. IEPA proposes to change the Board's rules to adopt the current HHS recommendation, which will result in a reduction of community water supply's cost of having to meet the existing higher fluoridation levels. IEPA recommends the Board amend the rules to reflect a fluoridation ion concentration of 0.7 mg/L. SR. at 1. In addition, IEPA is proposing that the Board reinstate a

secondary fluoride standard in Section 611.858 that IEPA opines to have been inadvertently repealed in 2001. SR. at 1, citing SDWA Update, USEPA Amendments (January 1, 2000, through June 30, 2000), R01-07 (Jan. 4, 2001).

Fluoridation Requirement

By way of background, IEPA explains that on April 5, 1962, the United States Department of Health, Education, and Welfare, the predecessor of HHS, adopted Drinking Water Standards, which included recommended optimal control limits for fluoride concentrations. SR. at 2, and Exhibit A. Statutorily, beginning on July 17, 1967, public water supplies in Illinois were required to add fluoride to drinking water to maintain a fluoride content between 0.9 and 1.2 mg/L. SR. at 2, citing Laws 1967 p. 1769, S.B. No. 516; Illinois Revised Statutes Ch. 111 ½ ¶ 121g1. IEPA further explains that the 1967 law required the Illinois Department of Public Health (IDPH) to promulgate rules to require the addition of fluoride. *Id.* In August 1967, IDPH promulgated rules and regulations requiring the addition of fluoride to maintain a fluoride ion concentration of 0.9 to 1.2 mg/L. SR. at 2; *see also* Exhibit B.

IEPA notes that IEPA was created in 1970 with the adoption of the Environmental Protection Act (Act). The General Assembly found that “state supervision of public water supplies is necessary in order to protect the public from disease and to assure an adequate supply of pure water for all beneficial uses.” 415 ILCS 5/14 (2014). Under Title IV of the Act, the Board and IEPA began regulating public water supplies. IEPA initially operated the public water supply program under the rules developed by the IDPH. SR. at 3; *see also* Exhibit C. In 1975, the Board adopted rules governing public water supplies. Public Water Supplies, R73-13 (Jan. 3, 1975). This rule added a fluoridation requirement, stating “[t]his rule reinforces the existing law requiring fluoridation of public water supplies. The [Illinois] Environmental Protection Agency will by this rule cooperate with the [Illinois] Public Health Department, and by its field personnel insure proper operation of equipment and enforcement of the rule.” SR. at 3, quoting R73-13, slip op. at 38.

The fluoridation requirement was re-codified at 35 Ill. Adm. Code 604.405 pursuant to the Illinois Administrative Procedure Act (IAPA). In 1990, the fluoridation requirement was moved to Section 611.125 when the Board adopted regulations implementing the Safe Drinking Water Act. In its Proposed Order, the Board stated, “The Board has moved the mandatory fluoridation requirement from 35 Ill. Adm. Code 604.405. This is an additional state requirement. Since mandatory fluoridation is enforced by the Department of Public Health, the Board solicits comment as to whether it should retain this provision in the regulations.” Safe Drinking Water Act Rules, R88-26, slip op. at 20 (Oct. 5, 1989). The Board did not receive any comments, and retained the mandatory fluoridation in Part 611. R88-26, slip op. at 59 (Aug. 9, 1990).

IEPA indicates that the law in Illinois regarding mandatory fluoridation remained unchanged until June 28, 2011, when Public Act 97-43 amended Section 7a of the Public Water Supply Regulation Act by removing the required range of fluoride content. SR. at 4, citing P.A. 97-43; 415 ILCS 40/7a (2014). IEPA offers that the statute now requires IDPH to promulgate rules to require public water supplies to add fluoride to meet the recommendation on optimal

fluoridation for community water levels as proposed and adopted by HHS. *Id.* At the time of the 2011 amendment, the only adopted recommendation from HHS was from 1962. SR. at 4; U.S. Department of Health, Education, and Welfare *Drinking Water Standards* (1962) (SR. Exh A).

IEPA states that on January 13, 2011, HHS proposed a new recommendation for fluoride concentration in drinking water: “HHS proposes that community water systems adjust their fluoride content to 0.7 mg/L.” SR. at 4; *see also* Exhibit D. HHS accepted comments on the proposed fluoride recommendation until April 15, 2011. 76 Fed. Reg. 10899 (Feb. 29, 2011). IEPA indicates that on May 1, 2015, HHS issued its recommendation for fluoride concentration in drinking water:

For community water systems that add fluoride to their water, [HHS] recommends a fluoride concentration of 0.7 mg/L (parts per million [ppm]) to maintain caries prevention benefits and reduce the risk of dental fluorosis. SR. at 4; *see also* Exhibit E, 80 Fed. Reg. 24936-24947 (May 1, 2015).

Fluoride Secondary Standard

IEPA states that in the Board’s final order in R01-7, the Board repealed Section 611.858. SR. at 4, citing R01-07, slip op. at 117. IEPA notes that the Board’s final opinion struck the text of Section 611.858, but did not provide any discussion of its repeal. SR. at 5, citing R01-7. IEPA further notes that the Board stated that it intended to repeal Sections 611.832, 611.851 through 611.856, and existing Appendix A to Part 611, but did not discuss repeal of Section 611.858. *Id.*, citing R01-7, slip op. at 12. IEPA indicates that Sections 611.901, 611.904, and 611.908 were added in the same final order repealing Section 611.858, but each of these sections contained a cross reference to Section 611.858. *Id.* citing R01-07, slip op. at 137, 143. IEPA offers that the Code of Federal Regulations published in July 2001 still contained the secondary standard for fluoride of 2.0 mg/L. SR. at 5; *see also* Exhibit F. IEPA opines that based on the forgoing, the repeal of Section 611.858 appears to be an inadvertent error, and IEPA proposes that the Section be reinstated.

TESTIMONY AND COMMENTS

Below the Board summarizes the testimony and public comments received regarding the proposed rule. As noted above, the Board will not summarize the comments that were filed relating to whether or not the Board should propose an emergency rule (PC 1 through PC 5).

IEPA Testimony and Public Comments

Mr. David McMillan presented testimony on behalf of IEPA. Exh. 1. Mr. McMillan is the Illinois Drinking Water Administrator for IEPA and has held the position since December 2010, and he leads a collaborative program over four sections to ensure the safety of Illinois’ drinking water supplies. Exh. 1 at 1. Mr. McMillan graduated from Bradley University with a Bachelor of Science in Geology in 1985. *Id.*

Mr. McMillan testifies that on May 1, 2015, HHS issued a recommendation that community water supplies add fluoride to their water to maintain the fluoride ion concentration of 0.7 mg/L. Exh. 1 at 2. Mr. McMillan notes that IDPH is required by statute to incorporate HHS standards in IDPH rules. *Id.* IEPA believes that the Board should modify its rules. *Id.*

Mr. McMillan testifies that IEPA projects that water systems that add fluoride could see a reduction of 20% to 30% in the cost of chemical addition for fluoride. Exh. 1 at 2. Mr. McMillan explains that IEPA projects that a total population using water with fluoride addition is 11,825,891 according to information gleaned from the Safe Drinking Water Information System. *Id.* Further based upon information received from the City of Chicago and considering their population served is 5,409,202, Chicago estimates a savings of \$1,000,000 per year. *Id.* Mr. McMillan states that based upon information received from Illinois American Water Company and considering their population served is 932,688, Illinois American Water Company estimate a savings of \$150,000 per year. Using these two estimates, Mr. McMillan extrapolates that the cost savings statewide can be conservatively projected to around \$2,000,000 statewide per year. *Id.* Mr. McMillan opines that during these times of limited resources, the savings could be used to further protect water supplies in Illinois. Exh. 1 at 3.

Mr. McMillan also responded to some questions posed by the Board. The Board asked about IEPA's proposal to reinstate Section 611.858, which IEPA notes is cross-referenced in Section 611.901, 611.904 and 611.908 (35 Ill. Adm. Code 611.901, 611.904 and 611.908). PC 7 at 1. The Board noted in its question that:

Secondary standards relate to aesthetic qualities of water and are not federally enforceable standards. 40 CFR 143.1. Board regulations do not include these secondary standards. However, enforceable primary standards require public notice when there is an exceedance of the secondary standard for fluoride. 40 CFR 141.208. Hearing Officer Order July 16, 2015.

The Board asked Mr. McMillan to comment on whether, instead of reinstating Section 611.858, it be appropriate to delete the cross references either in this rulemaking or in an identical in substance rulemaking. *Id.* Mr. McMillan indicated that deletion of the cross references would be acceptable, either in this rulemaking or in an identical and substance rulemaking. PC 7 at 2; 8/19/15 Tr. at 6.

Mr. McMillan also responded to a question seeking clarification of statements in IEPA's public comment regarding the emergency rule. Hearing Officer Order July 16, 2015. The Board asked IEPA to explain why the fluoride requirement in the Board's rules is not a health-based standard. *Id.* Mr. McMillan explains that because IEPA must permit installation and operation of community water supplies, including plants that add fluoride, the Board should have a fluoride standard in the rules. PC 7 at 2; 7/30/15Tr. at 9. Mr. McMillan states: "[t]he standard is not health based, but rather its basis is in the interest of safety of chemical addition as any consideration of health was already made by the legislature when the statute was created [415 ILCS 40/7a]." *Id.* Mr. McMillan further explains that IEPA has a responsibility to ensure that the chemicals added to public water supplies are added in a "safe, consistent manner" before issuing permits.

Mr. McMillan indicates that the standard in the Board's regulation is not based solely on the statutory requirement for IDPH; but rather "[t]his rule reinforces the existing law requiring fluoridation of public water supplies." *Id.* at 3 quoting R 73-13. 7/30/15Tr. at 11. Mr. McMillan explains that the proposed rule will ensure that IEPA will cooperate with IDPH to ensure the proper operation of equipment at a public water supply facility. 7/30/15Tr. at 9.

Molly Nocerino (PC 6)

Ms. Nocerino shares a summary of a *Newsweek* article on a review of the effectiveness of fluoridation by the Cochrane Collaboration. PC 6 at 1. The article was by Douglas Main and was entitled Fluoridation May Not Prevent Cavities, Scientific Review Shows. *Id.*

DISCUSSION

The Board's discussion begins with a brief analysis of the Board's authority to adopt rules under the Act. The Board then discusses the economic reasonableness and technical feasibility of the rule. The Board concludes this section by discussing the issues raised in comments and questions and explaining the Board's reasons for proceeding to second notice.

Board's Rulemaking Authority

The Board adopts rules under Title VII of the Act (415 ILCS 5/26-29 (2014)). The Board's authority is primarily derived from Section 27 of the Act (415 ILCS 5/27 (2014)), which allows the Board to adopt substantive regulations that can include "different provisions as required by circumstances for different contaminant sources and for different geographical areas." 415 ILCS 5/27(a) (2014).

Section 27(a) of the Act also provides that,

In promulgating regulations under this Act, the Board shall take into account the existing physical conditions, the character of the area involved, including the character of surrounding land uses, zoning classifications, the nature of the existing air quality, or receiving body of water, as the case may be, and the technical feasibility and economic reasonableness of measuring or reducing the particular type of pollution. 415 ILCS 5/27(a) (2014).

Thus, the Board considers whether the rule is economically reasonable and technically feasible in reducing the particular type of pollution. The Board's review in rulemakings is the same whether the rule is specific to one region or discharger or the rule is of generally applicable State wide. Therefore, the Board must determine that the proposed rule is technically feasible and economically reasonable.

Technical Feasibility and Economic Reasonableness of Alternatives

The Board's rules already require a fluoride ion concentration for public water supplies that add fluoride based on the statutory provisions in Section 7a of the Public Water Supply Regulation Act (415 ILCS 40/7a (2014)). Therefore, the proposed rule, lowering that level is technically feasible.

The lowering of the fluoridation requirement will allow public water supplies that add fluoride to reduce costs. Reductions of 20% to 30% in the cost of chemical addition for fluoride can be achieved, and IEPA projects that a total population using water with fluoride addition is 11,825,891 according to information gleaned from the Safe Drinking Water Information System. Based upon information received from the City of Chicago and considering their population served is 5,409,202, Chicago estimates a savings of \$1,000,000 per year. The Board therefore finds that the rule is economically reasonable.

Addition of Fluoride

Ms. Nocerino provided comment on the effectiveness of fluoridation and citations to articles and studies on the benefits of fluoridation. In response to Board questions, IEPA provided additional explanation to the Board regarding the relationship between the fluoridation requirement in the Board's rules and the statutory health based requirement in Section 7a of the Public Water Supply Regulation Act (415 ILCS 40/7a (2014)). IEPA explains that the fluoridation requirement in the Public Water Supply Regulation Act is a health based standard, while the Board's fluoridation requirement is in the interest of safety of chemical additives to water supplies. IEPA indicates that the proposed rule is necessary to ensure that permitted public water supply facilities are operated in a safe, consistent manner.

While the Board appreciates the concerns expressed regarding the addition of fluoride to drinking water, the Board is constrained by the statutory provisions requiring addition of fluoride to drinking water in Section 7a of the Public Water Supply Regulation Act (415 ILCS 40/7a (2014)). The statute sets the standard for fluoridation of public water supplies and the Board's rules set standards for permitting. To ensure that the Board's rules are consistent with Section 7a of the Public Water Supply Regulation Act (415 ILCS 40/7a (2014)), the Board will proceed with the proposed amendment.

Secondary Fluoride Standard (Section 611.858)

At first notice the Board proposed restoring Section 611.858; however, the Board specifically asked the IEPA about an alternative to such restoration. The Board sought comment on whether elimination of the cross-references to Section 611.858 would be acceptable. IEPA indicated that the elimination of the cross reference to Section 611.858 in Sections 611.901, 611.904, and 611.908 was an acceptable change. IEPA also indicated that the change could be made either in this rulemaking or in an identical-in-substance rulemaking. After reviewing the issue the Board made the change in an identical-in-substance rule. The Board noted:

The Board will do so in this IIS update, rather than in docket R15-23, as requested by the Agency. The Board would prefer to correct errors in IIS rules in an IIS proceeding

where doing so does not result in delay of the correction. As is explained below, no such delay will occur in this proceeding. SDWA Update, USEPA Amendments (January 1, 2015 through June 30, 2015), R16-4 slip op. at 5 (Aug. 20, 2015).

Therefore, the Board will not proceed to second notice with the language reinstating Section 611.858.

CONCLUSION

The Board finds that the proposed rule is supported by the record and that the rule is economically reasonable and technically feasible. Therefore, the Board will proceed to second notice with the rule. The Board will not proceed to second notice with language reinstating Section 611.858 as that provision is not supported.

ORDER

The Board directs the Clerk to submit the following rule to the Joint Committee on Administrative Rules for second notice:

TITLE 35: ENVIRONMENTAL PROTECTION
SUBTITLE F: PUBLIC WATER SUPPLIES
CHAPTER I: POLLUTION CONTROL BOARD

PART 611
PRIMARY DRINKING WATER STANDARDS

SUBPART A: GENERAL

Section	
611.100	Purpose, Scope, and Applicability
611.101	Definitions
611.102	Incorporations by Reference
611.103	Severability
611.105	Electronic Reporting
611.107	Agency Inspection of PWS Facilities
611.108	Delegation to Local Government
611.109	Enforcement
611.110	Special Exception Permits
611.111	Relief Equivalent to SDWA Section 1415(a) Variances
611.112	Relief Equivalent to SDWA Section 1416 Exemptions
611.113	Alternative Treatment Techniques
611.114	Siting Requirements
611.115	Source Water Quantity
611.120	Effective Dates
611.121	Maximum Contaminant Levels and Finished Water Quality
611.125	Fluoridation Requirement
611.126	Prohibition on Use of Lead

611.130	Special Requirements for Certain Variances and Adjusted Standards
611.131	Relief Equivalent to SDWA Section 1415(e) Small System Variance
611.160	Composite Correction Program
611.161	Case-by-Case Reduced Subpart Y Monitoring for Wholesale and Consecutive Systems

SUBPART B: FILTRATION AND DISINFECTION

Section	
611.201	Requiring a Demonstration
611.202	Procedures for Agency Determinations
611.211	Filtration Required
611.212	Groundwater under Direct Influence of Surface Water
611.213	No Method of HPC Analysis
611.220	General Requirements
611.230	Filtration Effective Dates
611.231	Source Water Quality Conditions
611.232	Site-Specific Conditions
611.233	Treatment Technique Violations
611.240	Disinfection
611.241	Unfiltered PWSs
611.242	Filtered PWSs
611.250	Filtration
611.261	Unfiltered PWSs: Reporting and Recordkeeping
611.262	Filtered PWSs: Reporting and Recordkeeping
611.271	Protection during Repair Work
611.272	Disinfection Following Repair
611.276	Recycle Provisions

SUBPART C: USE OF NON-CENTRALIZED TREATMENT DEVICES

Section	
611.280	Point-of-Entry Devices
611.290	Use of Point-of-Use Devices or Bottled Water

SUBPART D: TREATMENT TECHNIQUES

Section	
611.295	General Requirements
611.296	Acrylamide and Epichlorohydrin
611.297	Corrosion Control

SUBPART F: MAXIMUM CONTAMINANT LEVELS (MCLs) AND MAXIMUM RESIDUAL DISINFECTANT LEVELS (MRDLs)

Section	
611.300	Old MCLs for Inorganic Chemical Contaminants

611.301	Revised MCLs for Inorganic Chemical Contaminants
611.310	State-Only Maximum Contaminant Levels (MCLs) for Organic Chemical Contaminants
611.311	Revised MCLs for Organic Chemical Contaminants
611.312	Maximum Contaminant Levels (MCLs) for Disinfection Byproducts (DBPs)
611.313	Maximum Residual Disinfectant Levels (MRDLs)
611.320	Turbidity (Repealed)
611.325	Microbiological Contaminants
611.330	Maximum Contaminant Levels for Radionuclides
611.331	Beta Particle and Photon Radioactivity (Repealed)

SUBPART G: LEAD AND COPPER

Section	
611.350	General Requirements
611.351	Applicability of Corrosion Control
611.352	Corrosion Control Treatment
611.353	Source Water Treatment
611.354	Lead Service Line Replacement
611.355	Public Education and Supplemental Monitoring
611.356	Tap Water Monitoring for Lead and Copper
611.357	Monitoring for Water Quality Parameters
611.358	Monitoring for Lead and Copper in Source Water
611.359	Analytical Methods
611.360	Reporting
611.361	Recordkeeping

SUBPART I: DISINFECTANT RESIDUALS, DISINFECTION BYPRODUCTS, AND DISINFECTION BYPRODUCT PRECURSORS

Section	
611.380	General Requirements
611.381	Analytical Requirements
611.382	Monitoring Requirements
611.383	Compliance Requirements
611.384	Reporting and Recordkeeping Requirements
611.385	Treatment Technique for Control of Disinfection Byproduct (DBP) Precursors

SUBPART K: GENERAL MONITORING AND ANALYTICAL REQUIREMENTS

Section	
611.480	Alternative Analytical Techniques
611.490	Certified Laboratories
611.491	Laboratory Testing Equipment
611.500	Consecutive PWSs
611.510	Special Monitoring for Unregulated Contaminants (Repealed)

**SUBPART L: MICROBIOLOGICAL MONITORING
AND ANALYTICAL REQUIREMENTS**

Section	
611.521	Routine Coliform Monitoring
611.522	Repeat Coliform Monitoring
611.523	Invalidation of Total Coliform Samples
611.524	Sanitary Surveys
611.525	Fecal Coliform and E. Coli Testing
611.526	Analytical Methodology
611.527	Response to Violation
611.528	Transition from Subpart L to Subpart AA Requirements
611.531	Analytical Requirements
611.532	Unfiltered PWSs
611.533	Filtered PWSs

SUBPART M: TURBIDITY MONITORING AND ANALYTICAL REQUIREMENTS

Section	
611.560	Turbidity

SUBPART N: INORGANIC MONITORING AND ANALYTICAL REQUIREMENTS

Section	
611.591	Violation of a State MCL
611.592	Frequency of State Monitoring
611.600	Applicability
611.601	Monitoring Frequency
611.602	Asbestos Monitoring Frequency
611.603	Inorganic Monitoring Frequency
611.604	Nitrate Monitoring
611.605	Nitrite Monitoring
611.606	Confirmation Samples
611.607	More Frequent Monitoring and Confirmation Sampling
611.608	Additional Optional Monitoring
611.609	Determining Compliance
611.610	Inorganic Monitoring Times
611.611	Inorganic Analysis
611.612	Monitoring Requirements for Old Inorganic MCLs
611.630	Special Monitoring for Sodium
611.631	Special Monitoring for Inorganic Chemicals (Repealed)

SUBPART O: ORGANIC MONITORING AND ANALYTICAL REQUIREMENTS

Section	
---------	--

611.640	Definitions
611.641	Old MCLs
611.645	Analytical Methods for Organic Chemical Contaminants
611.646	Phase I, Phase II, and Phase V Volatile Organic Contaminants
611.647	Sampling for Phase I Volatile Organic Contaminants (Repealed)
611.648	Phase II, Phase IIB, and Phase V Synthetic Organic Contaminants
611.650	Monitoring for 36 Contaminants (Repealed)
611.657	Analytical Methods for 36 Contaminants (Repealed)
611.658	Special Monitoring for Organic Chemicals (Repealed)

SUBPART P: THM MONITORING AND ANALYTICAL REQUIREMENTS (~~REPEALED~~)

Section

611.680	Sampling, Analytical, and other Requirements (Repealed)
611.683	Reduced Monitoring Frequency (Repealed)
611.684	Averaging (Repealed)
611.685	Analytical Methods (Repealed)
611.686	Modification to System (Repealed)
611.687	Sampling for THM Potential (Repealed)
611.688	Applicability Dates (Repealed)

SUBPART Q: RADIOLOGICAL MONITORING AND ANALYTICAL REQUIREMENTS

Section

611.720	Analytical Methods
611.731	Gross Alpha
611.732	Beta Particle and Photon Radioactivity
611.733	General Monitoring and Compliance Requirements

SUBPART R: ENHANCED FILTRATION AND DISINFECTION: SYSTEMS THAT SERVE 10,000 OR MORE PEOPLE

Section

611.740	General Requirements
611.741	Standards for Avoiding Filtration
611.742	Disinfection Profiling and Benchmarking
611.743	Filtration
611.744	Filtration Sampling Requirements
611.745	Reporting and Recordkeeping Requirements

SUBPART S: GROUNDWATER RULE

Section

611.800	General Requirements and Applicability
611.801	Sanitary Surveys for GWS Suppliers
611.802	Groundwater Source Microbial Monitoring and Analytical Methods

- 611.803 Treatment Technique Requirements for GWS Suppliers
- 611.804 Treatment Technique Violations for GWS Suppliers
- 611.805 Reporting and Recordkeeping for GWS Suppliers

SUBPART T: REPORTING AND RECORDKEEPING

- Section
- 611.830 Applicability
- 611.831 Monthly Operating Report
- 611.832 Notice by Agency (Repealed)
- 611.833 Cross Connection Reporting
- 611.840 Reporting
- 611.851 Reporting MCL, MRDL, and other Violations (Repealed)
- 611.852 Reporting other Violations (Repealed)
- 611.853 Notice to New Billing Units (Repealed)
- 611.854 General Content of Public Notice (Repealed)
- 611.855 Mandatory Health Effects Language (Repealed)
- 611.856 Fluoride Notice (Repealed)
- 611.858 Fluoride Secondary Standard (~~Repealed~~)-(Repealed)
- 611.860 Record Maintenance
- 611.870 List of 36 Contaminants (Repealed)

SUBPART U: CONSUMER CONFIDENCE REPORTS

- Section
- 611.881 Purpose and Applicability
- 611.882 Compliance Dates
- 611.883 Content of the Reports
- 611.884 Required Additional Health Information
- 611.885 Report Delivery and Recordkeeping

SUBPART V: PUBLIC NOTIFICATION OF DRINKING WATER VIOLATIONS

- Section
- 611.901 General Public Notification Requirements
- 611.902 Tier 1 Public Notice: Form, Manner, and Frequency of Notice
- 611.903 Tier 2 Public Notice: Form, Manner, and Frequency of Notice
- 611.904 Tier 3 Public Notice: Form, Manner, and Frequency of Notice
- 611.905 Content of the Public Notice
- 611.906 Notice to New Billing Units or New Customers
- 611.907 Special Notice of the Availability of Unregulated Contaminant Monitoring Results
- 611.908 Special Notice for Exceedence of the Fluoride Secondary Standard
- 611.909 Special Notice for Nitrate Exceedences above the MCL by a Non-Community Water System
- 611.910 Notice by the Agency on Behalf of a PWS

611.911 Special Notice for Cryptosporidium

SUBPART W: INITIAL DISTRIBUTION SYSTEM EVALUATIONS

Section

611.920 General Requirements
 611.921 Standard Monitoring
 611.922 System-Specific Studies
 611.923 40/30 Certification
 611.924 Very Small System Waivers
 611.925 Subpart Y Compliance Monitoring Location Recommendations

**SUBPART X: ENHANCED FILTRATION AND DISINFECTION-SYSTEMS SERVING
 FEWER THAN 10,000 PEOPLE**

Section

611.950 General Requirements
 611.951 Finished Water Reservoirs
 611.952 Additional Watershed Control Requirements for Unfiltered Systems
 611.953 Disinfection Profile
 611.954 Disinfection Benchmark
 611.955 Combined Filter Effluent Turbidity Limits
 611.956 Individual Filter Turbidity Requirements
 611.957 Reporting and Recordkeeping Requirements

SUBPART Y: STAGE 2 DISINFECTION BYPRODUCTS REQUIREMENTS

Section

611.970 General Requirements
 611.971 Routine Monitoring
 611.972 Subpart Y Monitoring Plan
 611.973 Reduced Monitoring
 611.974 Additional Requirements for Consecutive Systems
 611.975 Conditions Requiring Increased Monitoring
 611.976 Operational Evaluation Levels
 611.977 Requirements for Remaining on Reduced TTHM and HAA5 Monitoring Based
 on Subpart I Results
 611.978 Requirements for Remaining on Increased TTHM and HAA5 Monitoring Based
 on Subpart I Results
 611.979 Reporting and Recordkeeping Requirements

SUBPART Z: ENHANCED TREATMENT FOR CRYPTOSPORIDIUM

Section

611.1000 General Requirements
 611.1001 Source Water Monitoring Requirements: Source Water Monitoring
 611.1002 Source Water Monitoring Requirements: Sampling Schedules
 611.1003 Source Water Monitoring Requirements: Sampling Locations

- 611.1004 Source Water Monitoring Requirements: Analytical Methods
- 611.1005 Source Water Monitoring Requirements: Approved Laboratories
- 611.1006 Source Water Monitoring Requirements: Reporting Source Water Monitoring Results
- 611.1007 Source Water Monitoring Requirements: Grandfathering Previously Collected Data
- 611.1008 Disinfection Profiling and Benchmarking Requirements: Requirements When Making a Significant Change in Disinfection Practice
- 611.1009 Disinfection Profiling and Benchmarking Requirements: Developing the Disinfection Profile and Benchmark
- 611.1010 Treatment Technique Requirements: Bin Classification for Filtered Systems
- 611.1011 Treatment Technique Requirements: Filtered System Additional Cryptosporidium Treatment Requirements
- 611.1012 Treatment Technique Requirements: Unfiltered System Cryptosporidium Treatment Requirements
- 611.1013 Treatment Technique Requirements: Schedule for Compliance with Cryptosporidium Treatment Requirements
- 611.1014 Treatment Technique Requirements: Requirements for Uncovered Finished Water Storage Facilities
- 611.1015 Requirements for Microbial Toolbox Components: Microbial Toolbox Options for Meeting Cryptosporidium Treatment Requirements
- 611.1016 Requirements for Microbial Toolbox Components: Source Toolbox Components
- 611.1017 Requirements for Microbial Toolbox Components: Pre-Filtration Treatment Toolbox Components
- 611.1018 Requirements for Microbial Toolbox Components: Treatment Performance Toolbox Components
- 611.1019 Requirements for Microbial Toolbox Components: Additional Filtration Toolbox Components
- 611.1020 Requirements for Microbial Toolbox Components: Inactivation Toolbox Components
- 611.1021 Reporting and Recordkeeping Requirements: Reporting Requirements
- 611.1022 Reporting and Recordkeeping Requirements: Recordkeeping Requirements
- 611.1023 Requirements to Respond to Significant Deficiencies Identified in Sanitary Surveys Performed by USEPA or the Agency

SUBPART AA: REVISED TOTAL COLIFORM RULE

Section

- 611.1051 General
- 611.1052 Analytical Methods and Laboratory Certification
- 611.1053 General Monitoring Requirements for all PWSs
- 611.1054 Routine Monitoring Requirements for Non-CWSs That Serve 1,000 or Fewer People Using Only Groundwater
- 611.1055 Routine Monitoring Requirements for CWSs That Serve 1,000 or Fewer People Using Only Groundwater

611.1056	Routine Monitoring Requirements for Subpart B Systems That Serve 1,000 or Fewer People
611.1057	Routine Monitoring Requirements for PWSs That Serve More Than 1,000 People
611.1058	Repeat Monitoring and E. coli Requirements
611.1059	Coliform Treatment Technique Triggers and Assessment Requirements for Protection Against Potential Fecal Contamination
611.1060	Violations
611.1061	Reporting and Recordkeeping
611.APPENDIX A	Regulated Contaminants
611.APPENDIX B	Percent Inactivation of G. Lamblia Cysts
611.APPENDIX C	Common Names of Organic Chemicals
611.APPENDIX D	Defined Substrate Method for the Simultaneous Detection of Total Coliforms and Eschericia Coli from Drinking Water
611.APPENDIX E	Mandatory Lead Public Education Information for Community Water Systems
611.APPENDIX F	Mandatory Lead Public Education Information for Non-Transient Non-Community Water Systems
611.APPENDIX G	NPDWR Violations and Situations Requiring Public Notice
611.APPENDIX H	Standard Health Effects Language for Public Notification
611.APPENDIX I	Acronyms Used in Public Notification Regulation
611.TABLE A	Total Coliform Monitoring Frequency
611.TABLE B	Fecal or Total Coliform Density Measurements
611.TABLE C	Frequency of RDC Measurement
611.TABLE D	Number of Lead and Copper Monitoring Sites
611.TABLE E	Lead and Copper Monitoring Start Dates
611.TABLE F	Number of Water Quality Parameter Sampling Sites
611.TABLE G	Summary of Section 611.357 Monitoring Requirements for Water Quality Parameters
611.TABLE H	CT Values (mg·min/ℓ) for Cryptosporidium Inactivation by Chlorine Dioxide
611.TABLE I	CT Values (mg·min/ℓ) for Cryptosporidium Inactivation by Ozone
611.TABLE J	UV Dose Table for Cryptosporidium, Giardia lamblia, and Virus Inactivation Credit
611.TABLE Z	Federal Effective Dates

AUTHORITY: Implementing Sections 7.2, 17, and 17.5 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/7.2, 17, 17.5, and 27].

SOURCE: Adopted in R88-26 at 14 Ill. Reg. 16517, effective September 20, 1990; amended in R90-21 at 14 Ill. Reg. 20448, effective December 11, 1990; amended in R90-13 at 15 Ill. Reg. 1562, effective January 22, 1991; amended in R91-3 at 16 Ill. Reg. 19010, effective December 1, 1992; amended in R92-3 at 17 Ill. Reg. 7796, effective May 18, 1993; amended in R93-1 at 17 Ill. Reg. 12650, effective July 23, 1993; amended in R94-4 at 18 Ill. Reg. 12291, effective July 28, 1994; amended in R94-23 at 19 Ill. Reg. 8613, effective June 20, 1995; amended in R95-17 at 20 Ill. Reg. 14493, effective October 22, 1996; amended in R98-2 at 22 Ill. Reg. 5020, effective March 5,

1998; amended in R99-6 at 23 Ill. Reg. 2756, effective February 17, 1999; amended in R99-12 at 23 Ill. Reg. 10348, effective August 11, 1999; amended in R00-8 at 23 Ill. Reg. 14715, effective December 8, 1999; amended in R00-10 at 24 Ill. Reg. 14226, effective September 11, 2000; amended in R01-7 at 25 Ill. Reg. 1329, effective January 11, 2001; amended in R01-20 at 25 Ill. Reg. 13611, effective October 9, 2001; amended in R02-5 at 26 Ill. Reg. 3522, effective February 22, 2002; amended in R03-4 at 27 Ill. Reg. 1183, effective January 10, 2003; amended in R03-15 at 27 Ill. Reg. 16447, effective October 10, 2003; amended in R04-3 at 28 Ill. Reg. 5269, effective March 10, 2004; amended in R04-13 at 28 Ill. Reg. 12666, effective August 26, 2004; amended in R05-6 at 29 Ill. Reg. 2287, effective January 28, 2005; amended in R06-15 at 30 Ill. Reg. 17004, effective October 13, 2006; amended in R07-2/R07-11 at 31 Ill. Reg. 11757, effective July 27, 2007; amended in R08-7/R08-13 at 33 Ill. Reg. 633, effective December 30, 2008; amended in R10-1/R10-17/R11-6 at 34 Ill. Reg. 19848, effective December 7, 2010; amended in R12-4 at 36 Ill. Reg. 36 Ill. Reg. 7110, effective April 25, 2012; amended in R13-2 at 37 Ill. Reg. 1978, effective February 4, 2013; amended in R14-8 at 38 Ill. Reg. 3608, effective January 27, 2014; amended in R14-9 at 38 Ill. Reg. 9792, effective April 21, 2014; amended in R15-23 at 39 Ill. Reg. _____, effective _____).

SUBPART A: GENERAL

Section 611.125 Fluoridation Requirement

All CWSs that are required to add fluoride to the water must maintain a fluoride ion concentration, reported as F, of 0.7 0.9 to 1.2 mg/ℓ in its distribution system, ~~as required by Section 7a of the Public Water Supply Regulation Act [415 ILCS 40/7a].~~

BOARD NOTE: This is an additional State requirement.

(Source: Amended at 39 Ill. Reg. _____, effective _____)

~~SUBPART T: REPORTING AND RECORDKEEPING~~

~~**Section 611.858 Fluoride Secondary Standard**~~

~~The secondary standard for fluoride is 2.0 mg/L.~~

~~BOARD NOTE: Derived from 40 CFR 143.3 (2014).~~

~~(Source: Section repealed at 25 Ill. Reg. 1329, effective January 11, 2001, new section adopted at 39 Ill. Reg. _____, effective _____)~~

IT IS SO ORDERED.

I, John T. Therriault, Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion and order on September 17, 2015, by a vote of 5-0.

A handwritten signature in black ink, reading "John T. Therriault". The signature is written in a cursive style with a long horizontal stroke at the end.

John T. Therriault, Clerk
Illinois Pollution Control Board