

ILLINOIS POLLUTION CONTROL BOARD  
May 20, 2004

IN THE MATTER OF: )  
 ) R04-13  
SDWA UPDATE, USEPA AMENDMENTS ) (Identical-in-Substance  
(July 1, 2003 though December 31, 2003) ) Rulemaking - Public Water Supply)

Proposed Rule. Proposal for Public Comment.

OPINION AND ORDER OF THE BOARD (by T.E. Johnson):

The Board today proposes amendments to the Illinois regulations that are “identical in substance” to drinking water regulations adopted by the United States Environmental Protection Agency (USEPA). The USEPA rules implement Sections 1412(b), 1414(c), 1417(a), and 1445(a) of the federal Safe Drinking Water Act (SDWA) (42 U.S.C. §§ 300g-1(a), 300g-3(c), 300g-6(a), and 300j-4(a) (1994)). This docket includes federal SDWA amendments that USEPA adopted in the period July 1, 2003 though December 31, 2003. The substantive amendments involved in this proceeding relate to a notice of change in a key USEPA policy that determines the applicability of the SDWA regulations under certain circumstances. Another amendment in this proceeding updates the name of the entity from which material incorporated by reference is available.

Sections 7.2 and 17.5 of the Environmental Protection Act (Act) (415 ILCS 5/7.2 and 17.5 (2002)) provide for quick adoption by the Board of regulations that are identical in substance to federal regulations that USEPA adopts to implement Sections 1412(b), 1414(c), 1417(a), and 1445(a) of the federal SDWA. Section 17.5 also provides that Title VII of the Act and Section 5 of the Administrative Procedure Act (APA) (5 ILCS 100/5-35 and 5-40 (2002)) do not apply to the Board’s adoption of identical-in-substance regulations. The federal SDWA regulations are found at 40 C.F.R. 141 through 143.

This opinion supports an order that the Board also adopts today. That order includes the text of the proposed amendments. The Board will cause the proposed amendments to be published in the *Illinois Register* and will hold the docket open to receive public comments for 45 days after the date of publication. The Board will then adopt and file the final rules, taking into account the public comments received. The rules will be adopted and filed no later than December 23, 2004.

**FEDERAL ACTIONS CONSIDERED IN THIS RULEMAKING**

The following briefly summarizes the federal actions considered in this rulemaking.

**Docket R03-13: July 1, 2003 though December 31, 2003 SDWA Amendments**

USEPA did not amend the federal SDWA regulations during the period July 1, 2003 though December 31, 2003. Rather, USEPA published a notice of its policy interpreting a key

provision of the SDWA itself that determines the applicability of the SDWA regulations. This policy revision is summarized below:

**68 Fed. Reg. 74233 (December 23, 2003)**

USEPA changed its policy and determined that a property owner that “submeters” water, *i.e.*, that distributes water to a limited number of tenants on its own property, does not “sell” water within the meaning of Section 1411(3) of SDWA (42 U.S.C. 300g(3) 2000). Thus, such a property owner is not a public water supply to which the SDWA requirements apply.

**No Later SDWA (Drinking Water) Amendments of Interest**

The Board engages in ongoing monitoring of federal actions. As of the date of this opinion and accompanying order, the Board has not identified any USEPA actions since December 31, 2003, that further amend the SDWA rules. When the Board observes an action outside the nominal timeframe of a docket that would require expedited consideration in the pending docket, the Board will expedite consideration of those amendments. Federal actions that could warrant expedited consideration include those that directly affect the amendments involved in this docket, those for which compelling reasons would warrant consideration as soon as possible and those for which the Board has received a request for expedited consideration. If the Board identifies any federal actions that fulfill these criteria prior to final action on the present amendments, it may include those amendments in the present update docket R04-13.

**No Other Federal Actions Having a Direct Impact on the Illinois SDWA (Drinking Water) Regulations**

In addition to the amendments to the federal SDWA regulations, amendments to certain other federal regulations occasionally have an effect on the Illinois drinking water rules. Most notably, 35 Ill. Adm. Code 611.102 includes the incorporation of Appendices B and C of 40 C.F.R. 136 by reference. These are federal Clean Water Act methods for analysis of contaminants in water.

As of the date of this proposal for public comment, the Board has found one set of amendments to the analytical methods for analysis of contaminants in water in 40 C.F.R. 136 and a set of corrections to those amendments.

**68 Fed. Reg. 43272 (July 21, 2003)**

USEPA approved new methods for microbiological analysis of water and wastewater.

**68 Fed. Reg. 54934 (September 19, 2003)**

USEPA corrected its July 21, 2003 approval of new methods for microbiological analysis of water and wastewater

Examination of the July 21, 2003 amendments and September 19, 2003 corrections reveals that none of the amendments require Board action. The segments of 40 CFR 136 amended by USEPA are different from those incorporated by reference in Section 611.102. No

Board action will be required at this time to update the version of 40 C.F.R. 136 incorporated by reference in to include the amendments.

**Summary Tabulation of the Federal Actions Included in This Docket**

December 23, 2003 (68 Fed. Reg. 74233)	Revised USEPA policy relative to the applicability of the SDWA requirements to a property owner that “submeters,” rather than “sells,” water to a limited number of tenants on its own property.
---	--

**PUBLIC COMMENTS**

The Board will receive public comments on this proposal for 45 days following its publication in the *Illinois Register*. After that time, the Board will immediately consider adoption of the amendments, making any necessary changes made evident through the public comments. The Board will file any adopted rules with the Secretary of State immediately after adoption, but no later than December 23, 2004.

At the time of adoption of the proposal for public comment, the Board had received two public comments relating to this proceeding.

- PC 1 Letter dated March 22, 2004 from Teresa Smith, Ph. D., Central Region Microbiology Field Specialist, EMD Chemicals Inc.
- PC 2 E-mail to M. McCambridge (Board hearing officer in this matter) dated January 28, 2004 from Lou Allyn Byus, Assistant Manager, Field Operations, Division of Public Water Supplies, Illinois Environmental Protection Agency (Agency).

In PC 1, EMD Chemicals Inc. requests that the Board update their company name in the incorporations by reference section of the regulations. Discussion of this comment and the amendments that the Board has undertaken in response to it appears in the segment of the discussion that begins on page 6 of this opinion.

In PC 2, the Agency suggested language for a Board note to append to the regulations. The Agency suggested language to describe how it intends to implement the USEPA policy revision of December 23, 2004. This comment and the Board’s response are considered in the segment of the discussion relating to the federal action of December 23, 2003.

**DISCUSSION**

The following discussion begins with a description of the types of deviations the Board makes from the literal text of federal regulations in adopting identical-in-substance rules. It is followed by a discussion of the amendments and actions undertaken in direct response to the federal actions involved in this proceeding. This first series of discussions is organized by federal subject matter, generally appearing in chronological order of the relevant *Federal Register* notices involved. Finally, this discussion closes with a description of the amendments and actions that are not directly derived from the federal actions.

## **Discussion of the Federal Action**

### **Applicability of the SDWA Requirements to Submetered Properties—Section 611.100**

On December 23, 2003 (68 Fed. Reg. 74233), USEPA announced that it had revised its policy relative to the applicability of the SDWA requirements under certain limited circumstances. USEPA recently determined that the national primary drinking water standards (NPDWRs) do not apply to a landlord that submeters the water consumed by its tenants and bills them for the water consumed with some limitations. USEPA believes that apartment buildings and other property types that share characteristics of an apartment building should be subject to the revised policy.

The NPDWRs apply to a “public water system” (PWS), which is a system for provision of water for human consumption through pipes or constructed conveyances to fifteen or more service connections or to 25 or more persons. Section 1401(1) and (4) of SDWA (42 U.S.C. 300f(1) and (4) (2000)). They do not apply, however, to a PWS that (1) consists only of distribution and storage facilities, (2) obtains all of its water from a regulated PWS, (3) does not sell water to any person, and (4) is not a carrier that conveys passengers in interstate commerce. Section 1411 of SDWA (42 U.S.C. 300g (2000)). The revised policy relates to the third limitation of this exemption: the system may not “sell” the water. The revised policy distinguishes “submetering” water from “selling” it.

USEPA stated that the State should make any applicability determination based on the characteristics of the system. USEPA stated that the person that submeters the water must receive all its water from a single regulated PWS to qualify for exemption. Factors listed by USEPA included the existence of a limited distribution system with no known backflow or cross connection issues; the presence of most of the plumbing in buildings, rather than in the ground; and single ownership (or association ownership) of the property. USEPA cited apartment buildings, co-ops, and condominiums as examples of eligible properties. Persons interested in the details of the federal amendments should consult the *Federal Register* notice of December 23, 2003.

USEPA did not amend its regulations when it published this revised policy relating to the “sale” of water under Section 1311 of SDWA. The Board notes that 40 C.F.R. 141.3 is nearly identical to Section 1311 of SDWA. USEPA did not mention section 141.3 of the SDWA regulations in announcing its revised policy, but the near identity of language would indicate that USEPA has revised its interpretation of section 141.3.

Section 611.100(d) of the Illinois rules is derived from 40 C.F.R. 141.3. The federal policy revision relating to submetered properties alters the scope and meaning of 40 C.F.R. 141.3 and Illinois Section 611.100(d). In the past, when USEPA has undertaken extra-regulatory actions that affect the meaning and implementation of its regulations, the Board has responded by adding a Board note to the affected segment of the rules. Examples in the SDWA regulations include the following Board notes:

Section 611.126 (noting a USEPA interpretation that a certain industry standard was “established in accordance with 42 USC 300g-6(e),” as required by 40 C.F.R. 141.43(d)(3));

Section 611.311 (noting an indefinite USEPA stay of the maximum contaminant levels (MCLs) for three contaminants, even though the MCLs remain in the regulations);

Section 611.330(h), footnote 2 (noting that USEPA refers to an extrinsic document to add meaning to its regulations);

Section 611.330(h), limitation note (c) (noting a USEPA reference to a table to limit the meaning of its regulations and citing the extrinsic source that sets forth the table); and

Section 611.356(g)(1)(A)(ii) (noting a USEPA interpretation that a certain industry standard was “established in accordance with 42 USC 300g-6(e),” as required by 40 CFR 141.86(g)(1)(i)(B)).

Section 17.5 of the Act (415 ILCS 5/17.5 (2002)) requires the Board to adopt regulations that are “identical in substance” to the federal NPDWRs and to amendments to the federal NPDWRs. The December 23, 2003 policy revision that distinguishes a person who “submeters” water from one who “sells” it does not involve a regulatory amendment. Nevertheless, it embodies a change in federal policy and alters the meaning and implementation of the federal rules. As the Board has done in the past, the Board now interprets the December 23, 2003 policy revision as an amendment to the federal regulations that is within the scope of our mandate under Section 17.5 of the Act. *See, e.g., SDWA Update, USEPA Regulations (July 1, 2002 through December 31, 2002)*, R03-15 (Oct. 2, 2003) at pp. 9-11 (amending a Board note to Section 611.311 about the indefinite federal stay of the regulations); *SDWA Update, USEPA Regulations (July 1, 2000 through December 31, 2000)*, R01-20 (Oct. 4, 2001) at p. 6 (adding language to footnote 2 and limitation note (c) in Section 611.330(h)); *SDWA Update, USEPA Regulations (January 1, 2000 through June 30, 2000)*, R01-7 (Jan. 1, 2001) at p. 8 (adding the name of a national standard to the text of Sections 611.126 and 611.356(g) based on a *Federal Register* notice); *SDWA Update, USEPA Regulations (June 1, 1991 through December 31, 1991)*, R92-3 (May 5, 1993) (adding a Board note to Section 611.311 about the indefinite federal stay of the regulations).

Although USEPA did not formally amend the text of the rules, its policy is an “agency statement of general applicability that implements, applies, interprets, or prescribes law or policy,” as stated in the definition of “rule” at Section 1-70 the Administrative Procedure Act (5 ILCS 100/1-70 (2002)). The Board will continue the past practice of adding a Board note to the affected segment of the regulations to indicate the federal action. The Board has added that note to the affected segment of the text, which is Section 611.100(d).

The Agency, in PC 1, has suggested that the Board include an explanation of how the Agency intends to implement the revised federal policy relative to submetered properties. The Agency drew most of its explanation directly from the December 23, 2003 *Federal Register*

notice. The Agency has suggested the following language in the Board note appended to Section 611.100:

BOARD NOTE: On December 23, 2003, USEPA published a re-interpretation of submetering of a water system for the purposes of tracking water use and consumption. A submetered public water system is not considered to “sell” water under the criteria for exemption. The Agency will determine whether or not a public water system meets the criteria for submetering based upon the following: A submetered public water system must purchase all water from a public water system subject to Section 611 regulations. A submetered public water system must have a limited distribution system, with the no history or presence of unprotected cross-connections and a majority of its plumbing within a structure rather than underground. A submetered public water system must be owned by a single/individual or an association of property owners, as in the case of a condominium or co-op. A public water system that serves a large distribution system, a large consumer population, or a mixed commercial/industrial population does not qualify as a submetered public water system. Examples of public water systems that do not qualify as submetered public water systems are military installations or facilities and large mobile home parks

The Board is proposing an alternative that more closely tracks the federal language. The revised policy states that USEPA will rely on the State to make the determination whether a property owner “submeters” or “sells” water. USEPA then recites examples when water is “submetered” and when it is “sold.” The Board would prefer to allow the federal policy to speak for itself as to how it limits the State’s discretion in making the determination. The Board’s intent is to avoid imposing limits on Agency discretion where USEPA intended only to provide examples to guide State determinations. The Board-proposed note would read as follows (with underlining and overstrike indicating the revisions to the existing Board note):

BOARD NOTE: Derived from 40 CFR 141.3-~~(2002)~~ (2003). The text of 40 CFR 141.3 is nearly identical to Section 1411 of the federal SDWA (42 USC 300g). On December 23, 2003 (at 68 Fed. Reg. 74233), USEPA announced a change in its policy relating to Section 1411. USEPA determined that a property owner that is not otherwise subject to the SDWA national primary drinking water standards “submeters” water, and does not “sell” water within the meaning of Section 1411(3) if the property owner meters water water to tenants on its property and bills the tenants for the water. USEPA charged the State with determining whether water is “submetered” or “sold” in a particular situation. USEPA stated that eligibility for exclusion requires that the owner obtain water from a regulated water system. USEPA set forth factors for consideration to aid the State in making such a determination: the property has a limited distribution system with no known backflow or cross-connection issues; the majority of the plumbing is within a structure, rather than in the ground; and property ownership is single or within an association of owners. USEPA cited apartment buildings, co-ops, and condominiums as examples of eligible properties. USEPA further stated that it does not intend the policy to apply to a large distribution system, to one that serves a large population, or one that serves a mixed commercial and residential population. USEPA cited “many military

installations/facilities” and large mobile home parks as examples of systems to which the policy would not apply.

In summary, the Board incorporated the December 23, 2003 federal policy revision relating to “submetered” water into the Illinois SDWA regulations by adding a Board note reference to the USEPA policy revision at Section 611.100(d), which corresponds with the language of Section 1411 of SDWA. The Board requests comment on the addition of the Board note. Specifically, the Board requests comment on the language chosen to indicate the federal policy revision.

### **Updating the Name of EMD Chemicals--Section 611.102**

In PC 1, EMD Chemicals Inc. requests that the Board update its company name in the incorporations by reference section of the regulations. EMD Chemicals, formerly named EM Science, produces two methods for microbiological analysis of water that are approved by USEPA. The methods are incorporated by reference in Section 611.102.

The Board uses this opportunity to update the three appearances of “EM Science” to “EMD Chemicals” in that Section. The Board invites comment on this proposed name change.

### **Discussion of Miscellaneous Housekeeping Amendments**

The tables below list numerous corrections and amendments that are not based on current federal amendments. The first table (beginning immediately below) includes deviations made in this Proposal for Public Comment from the verbatim text of the federal amendments. The second table (beginning immediately after Table 1 below) contains corrections and clarifications that the Board made in the base text involved in this proposal. The amendments listed in this second table are not directly derived from the current federal amendments. Some of the entries in these tables are discussed further in appropriate segments of the general discussion beginning at page 4 of this opinion.

**Table 1:  
Deviations from the Text of the Federal Amendments**

Illinois Section	40 C.F.R. Section	Revision(s)
611.100(d) Board note	40 C.F.R. 141.3, 42 U.S.C. 300g, and December 23, 2003 <i>Federal Register</i> notice of revised policy	Explained the relationship among Section 1411 of SDWA (42 U.S.C. 300g), 40 C.F.R. 141.3, and 35 Ill. Adm. Code 611.100(d); added a reference to and an explanation of the federal policy change relating to “submetered” water

**Table2 :  
Board Housekeeping Amendments**

Section	Source	Revision(s)
611.100(b)	Board	Moved the period after “requirements” inside the closing quotation mark
611.100(c)	Board	Moved the comma after “suppliers” inside the closing quotation mark
611.100(c) Board note	Board	Updated the citation to the <i>Code of Federal Regulations</i> to the most recent edition
611.100(d)(1)	Board	Added “the PWS” to form an complete sentence
611.100(d)(2)	Board	Added “the PWS” to form an complete sentence
611.100(d)(3)	Board	Added “the PWS” to form an complete sentence
611.100(d)(4)	Board	Added “the PWS” to form an complete sentence
611.100(d) Board note	Board	Updated the citation to the <i>Code of Federal Regulations</i> to the most recent edition
611.102(a) “Membrane Filter . . .”	EMD Chemicals	Changed “EM Science” to “EMD Chemicals Inc.”
611.102(a) “Readycult Coliforms . . .”	EMD Chemicals	Changed “EM Science” to “EMD Chemicals Inc.”
611.102(b) “EMD Chemicals Inc.”	EMD Chemicals	Changed “EM Science” to “EMD Chemicals Inc.”

**ORDER**

The Board proposes the following amendments for public comment:

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
611.107	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

#### 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	Old 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  
 611.531 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

Section	
611.680	Sampling, Analytical, and other Requirements
611.683	Reduced Monitoring Frequency (Repealed)
611.684	Averaging (Repealed)
611.685	Analytical Methods
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 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)
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

#### 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
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 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. \_\_\_\_\_, effective \_\_\_\_\_.

## SUBPART A: GENERAL

### Section 611.100 Purpose, Scope, and Applicability

- a) This Part satisfies the requirement of Section 17.5 of the Environmental Protection Act (Act) [415 ILCS 5/17.5] that the Board adopt regulations that are identical in substance with federal regulations promulgated by the United States

Environmental Protection Agency (USEPA) pursuant to Sections 1412(b), 1414(c), 1417(a), and 1445(a) of the Safe Drinking Water Act (SDWA) (42 USC 300g-1(b), 300g-3(c), 300g-6(a), and 300j-4(a)).

- b) This Part establishes primary drinking water regulations (NPDWRs) pursuant to the SDWA, and also includes additional, related State requirements that are consistent with and more stringent than the USEPA regulations (Section 7.2(a)(6) of the Act [415 ILCS 5/7.2(a)(6)]). The latter provisions are specifically marked as “additional State requirements.” They apply only to community water systems (CWSs).
- c) This Part applies to “suppliers,” owners and operators of “public water systems” (“PWSs”). PWSs include CWSs, “non-community water systems (“non-CWSs”), and “non-transient non-community water systems (“NTNCWSs”), as these terms are defined in Section 611.101.
- 1) CWS suppliers are required to obtain permits from the Illinois Environmental Protection Agency (Agency) pursuant to 35 Ill. Adm. Code 602.
  - 2) Non-CWS suppliers are subject to additional regulations promulgated by the Illinois Department of Public Health (Public Health or DPH) pursuant to Section 9 of the Illinois Groundwater Protection Act [415 ILCS 55/9], including 77 Ill. Adm. Code 900.
  - 3) Non-CWS suppliers are not required to obtain permits or other approvals from the Agency, or to file reports or other documents with the Agency. Any provision in this Part so providing is to be understood as requiring the non-CWS supplier to obtain the comparable form of approval from, or to file the comparable report or other document with Public Health.

BOARD NOTE: Derived from 40 CFR 141.1-(2002) (2003).

- d) This Part applies to each PWS, unless the PWS meets all of the following conditions:
- 1) ~~Consists~~ The PWS consists only of distribution and storage facilities (and does not have any collection and treatment facilities);
  - 2) ~~Obtains~~ The PWS obtains all of its water from, but is not owned or operated by, a supplier to which such regulations apply;
  - 3) ~~Does~~ The PWS does not sell water to any person; and
  - 4) ~~Is~~ The PWS is not a carrier that conveys passengers in interstate commerce.

BOARD NOTE: Derived from 40 CFR 141.3-(2002) (2003). The text of 40 CFR 141.3 is nearly identical to Section 1411 of the federal SDWA (42 USC 300g). On December 23, 2003 (at 68 Fed. Reg. 74233), USEPA announced a change in its policy relating to Section 1411. USEPA determined that a property owner that is not otherwise subject to the SDWA national primary drinking water standards “submeters” water, and does not “sell” water within the meaning of Section 1411(3) if the property owner meters water water to tenants on its property and bills the tenants for the water. USEPA charged the State with determining whether water is “submetered” or “sold” in a particular situation. USEPA stated that eligibility for exclusion requires that the owner obtain water from a regulated water system. USEPA set forth factors for consideration to aid the State in making such a determination: the property has a limited distribution system with no known backflow or cross-connection issues; the majority of the plumbing is within a structure, rather than in the ground; and property ownership is single or within an association of owners. USEPA cited apartment buildings, co-ops, and condominiums as examples of eligible properties. USEPA further stated that it does not intend the policy to apply to a large distribution system, to one that serves a large population, or one that serves a mixed commercial and residential population. USEPA cited “many military installations/facilities” and large mobile home parks as examples of systems to which the policy would not apply.

- e) Some subsection labels have been omitted in order to maintain local consistency between USEPA subsection labels and the subsection labels in this Part.

(Source: Amended at 28 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### Section 611.102 Incorporations by Reference

- a) Abbreviations and short-name listing of references. The following names and abbreviated names, presented in alphabetical order, are used in this Part to refer to materials incorporated by reference:

“Amco-AEPA-1 Polymer” is available from Advanced Polymer Systems.

“ASTM Method” means a method published by and available from the American Society for Testing and Materials (ASTM).

“Colisure Test” means “Colisure Presence/Absence Test for Detection and Identification of Coliform Bacteria and Escherichia Coli in Drinking Water,” available from Millipore Corporation, Technical Services Department.

“Dioxin and Furan Method 1613” means “Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope-Dilution HRGC/HRMS,” available from NTIS.



“GLI Method 2” means GLI Method 2, “Turbidity,” Nov. 2, 1992, available from Great Lakes Instruments, Inc.

“Hach FilterTrak Method 10133” means “Determination of Turbidity by Laser Nephelometry,” available from Hach Co.

“HASL Procedure Manual” means HASL Procedure Manual, HASL 300, available from ERDA Health and Safety Laboratory.

“Kelada 01” means “Kelada Automated Test Methods for Total Cyanide, Acid Dissociable Cyanide, And Thiocyanate,” Revision 1.2, August 2001, EPA # 821-B-01-009, available from the National Technical Information Service (NTIS).

“Membrane Filter Technique using Chromocult Doliform Agar” means “Chromocult Coliform Agar Presence/Absence Membrane Filter Test Method for Detection and Identification of Coliform Bacteria and Escherichia coli in Finished Waters,” available from ~~EM Science~~ EMD Chemicals Inc.

“NCRP” means “National Council on Radiation Protection.”

“NTIS” means “National Technical Information Service.”

“New Jersey Radium Method” means “Determination of Radium 228 in Drinking Water,” available from the New Jersey Department of Environmental Protection.

“New York Radium Method” means “Determination of Ra-226 and Ra-228 (Ra-02),” available from the New York Department of Public Health.

“ONGP-MUG Test” (meaning “minimal medium ortho-nitrophenyl-beta-d-galactopyranoside-4-methyl-umbelliferyl-beta-d-glucuronide test”), also called the “Autoanalysis Colilert System,” is Method 9223, available in “Standard Methods for the Examination of Water and Wastewater,” 18th ed., from American Public Health Association.

“Palintest Method 1001” means “Method Number 1001,” available from Palintest, Ltd. or the Hach Company.

“QuikChem Method 10-204-00-1-X” means “Digestion and distillation of total cyanide in drinking and wastewaters using MICRO DIST and determination of cyanide by flow injection analysis,” available from Lachat Instruments.

“Readycult Coliforms 100 Presence/Absence Test” means “Readycult Coliforms 100 Presence/Absence Test for Detection and Identification of Coliform Bacteria and Escherichia coli in Finished Waters,” available from ~~EM Science~~ EMD Chemicals Inc.

“SimPlate Method” means “IDEXX SimPlate TM HPC Test Method for Heterotrophs in Water,” available from IDEXX Laboratories, Inc.

“Radiochemical Methods” means “Interim Radiochemical Methodology for Drinking Water,” available from NTIS.

“Standard Methods” means “Standard Methods for the Examination of Water and Wastewater,” available from the American Public Health Association or the American Waterworks Association.

“Syngenta AG-625” means “Atrazine in Drinking Water by Immunoassay,” February 2001 is available from Syngenta Crop Protection, Inc.

“Technical Bulletin 601” means “Technical Bulletin 601, Standard Method of Testing for Nitrate in Drinking Water,” July 1994, available from Analytical Technology, Inc.

“Technicon Methods” means “Fluoride in Water and Wastewater,” available from Bran & Luebbe.

“USDOE Manual” means “EML Procedures Manual,” available from the United State Department of Energy.

“USEPA Asbestos Methods-100.1” means Method 100.1, “Analytical Method for Determination of Asbestos Fibers in Water,” September 1983, available from NTIS.

“USEPA Asbestos Methods-100.2” means Method 100.2, “Determination of Asbestos Structures over 10-mm in Length in Drinking Water,” June 1994, available from NTIS.

“USEPA Environmental Inorganics Methods” means “Methods for the Determination of Inorganic Substances in Environmental Samples,” August 1993, available from NTIS.

“USEPA Environmental Metals Methods” means “Methods for the Determination of Metals in Environmental Samples,” available from NTIS.

“USEPA Inorganic Methods” means “Methods for Chemical Analysis of

Water and Wastes,” March 1983, available from NTIS.

“USEPA Interim Radiochemical Methods” means “Interim Radiochemical Methodology for Drinking Water,” EPA 600/4-75-008 (revised), March 1976. Available from NTIS.

“USEPA Organic Methods” means “Methods for the Determination of Organic Compounds in Drinking Water,” July 1991, for Methods 502.2, 505, 507, 508, 508A, 515.1, and 531.1; “Methods for the Determination of Organic Compounds in Drinking Water--Supplement I,” July 1990, for Methods 506, 547, 550, 550.1, and 551; and “Methods for the Determination of Organic Compounds in Drinking Water--Supplement II,” August 1992, for Methods 515.2, 524.2, 548.1, 549.1, 552.1, and 555, available from NTIS. Methods 504.1, 508.1, and 525.2 are available from EPA EMSL; “Methods for the Determination of Organic Compounds” in Drinking Water--Supplement II, August 1992, for Method 552.1; “Methods for the Determination of Organic Compounds in Drinking Water--Supplement III,” August 1995, for Methods 502.2, 524.2, 551.1, and 552.2. Method 515.4, “Determination of Chlorinated Acids in Drinking Water by Liquid-Liquid Microextraction, Derivatization and Fast Gas Chromatography with Electron Capture Detection,” Revision 1.0, April 2000, EPA 815/B-00/001, and Method 531.2, “Measurement of N-methylcarbamoyloximes and N-methylcarbamates in Water by Direct Aqueous Injection HPLC with Postcolumn Derivatization,” Revision 1.0, September 2001, EPA 815/B/01/002, are both available on-line from USEPA, Office of Ground Water and Drinking Water.

“USEPA Radioactivity Methods” means “Prescribed Procedures for Measurement of Radioactivity in Drinking Water,” EPA 600/4-80-032, August 1980. Available from NTIS.

“USEPA Radiochemical Analyses” means “Radiochemical Analytical Procedures for Analysis of Environmental Samples,” March 1979. Available from NTIS.

“USEPA Radiochemistry Methods” means “Radiochemistry Procedures Manual,” EPA 520/5-84-006, December 1987. Available from NTIS.

“USEPA Technical Notes” means “Technical Notes on Drinking Water Methods,” available from NTIS.

“USGS Methods” means “Methods of Analysis by the U.S. Geological Survey National Water Quality Laboratory--Determination of Inorganic and Organic Constituents in Water and Fluvial Sediments,” available from NTIS and USGS.

“Waters Method B-1011” means “Waters Test Method for the Determination of Nitrite/Nitrate in Water Using Single Column Ion Chromatography,” available from Waters Corporation, Technical Services Division.

- b) The Board incorporates the following publications by reference:

Advanced Polymer Systems, 3696 Haven Avenue, Redwood City, CA 94063 415-366-2626.

Amco-AEPA-1 Polymer. See 40 CFR 141.22(a) (2003). Also, as referenced in ASTM D1889.

American Public Health Association, 1015 Fifteenth Street NW, Washington, DC 20005 800-645-5476.

“Standard Methods for the Examination of Water and Wastewater,” 17th Edition, 1989 (referred to as “Standard Methods, 17th ed.”).

“Standard Methods for the Examination of Water and Wastewater,” 18th Edition, 1992, including “Supplement to the 18th Edition of Standard Methods for the Examination of Water and Wastewater,” 1994 (collectively referred to as “Standard Methods, 18th ed.”). See the methods listed separately for the same references under American Waterworks Association.

“Standard Methods for the Examination of Water and Wastewater,” 19th Edition, 1995 (referred to as “Standard Methods, 19th ed.”).

“Standard Methods for the Examination of Water and Wastewater,” 20th Edition, 1998 (referred to as “Standard Methods, 20th ed.”).

American Waterworks Association et al., 6666 West Quincy Ave., Denver, CO 80235 303-794-7711.

“National Field Evaluation of a Defined Substrate Method for the Simultaneous Enumeration of Total Coliforms and Escherichia coli for Drinking Water: Comparison with the Standard Multiple Tube Fermentation Method,” S.C. Edberg, M.J. Allen & D.B. Smith, Applied Environmental Microbiology, vol. 54, iss. 6, pp 1595-1601 (1988).

“Standard Methods for the Examination of Water and

Wastewater,” 13th Edition, 1971 (referred to as “Standard Methods, 13th ed.”).

Method 302, Gross Alpha and Gross Beta Radioactivity in Water (Total, Suspended, and Dissolved).

Method 303, Total Radioactive Strontium and Strontium 90 in Water.

Method 304, Radium in Water by Precipitation.

Method 305, Radium 226 by Radon in Water (Soluble, Suspended, and Total).

Method 306, Tritium in Water.

“Standard Methods for the Examination of Water and Wastewater,” 17th Edition, 1989 (referred to as “Standard Methods, 17th ed.”).

Method 7110 B, Gross Alpha and Gross Beta Radioactivity in Water (Total, Suspended, and Dissolved).

Method 7500-Cs B, Radioactive Cesium, Precipitation Method.

Method 7500-<sup>3</sup>H B, Tritium in Water.

Method 7500-I B, Radioactive Iodine, Precipitation Method.

Method 7500-I C, Radioactive Iodine, Ion-Exchange Method.

Method 7500-I D, Radioactive Iodine, Distillation Method.

Method 7500-Ra B, Radium in Water by Precipitation.

Method 7500-Ra C, Radium 226 by Radon in Water (Soluble, Suspended, and Total).

Method 7500-Ra D, Radium, Sequential Precipitation Method (Proposed).

Method 7500-Sr B, Total Radioactive Strontium and Strontium 90 in Water.

Method 7500-U B, Uranium, Radiochemical Method (Proposed).

Method 7500-U C, Uranium, Isotopic Method (Proposed).

“Standard Methods for the Examination of Water and Wastewater,” 18th Edition, 1992 (referred to as “Standard Methods, 18th ed.”).

Method 2130 B, Turbidity, Nephelometric Method.

Method 2320 B, Alkalinity, Titration Method.

Method 2510 B, Conductivity, Laboratory Method.

Method 2550, Temperature, Laboratory and Field Methods.

Method 3111 B, Metals by Flame Atomic Absorption Spectrometry, Direct Air-Acetylene Flame Method.

Method 3111 D, Metals by Flame Atomic Absorption Spectrometry, Direct Nitrous Oxide-Acetylene Flame Method.

Method 3112 B, Metals by Cold-Vapor Atomic Absorption Spectrometry, Cold-Vapor Atomic Absorption Spectrometric Method.

Method 3113 B, Metals by Electrothermal Atomic Absorption Spectrometry, Electrothermal Atomic Absorption Spectrometric Method.

Method 3114 B, Metals by Hydride Generation/Atomic Absorption Spectrometry, Manual Hydride Generation/Atomic Absorption Spectrometric Method.

Method 3120 B, Metals by Plasma Emission Spectroscopy, Inductively Coupled Plasma (ICP) Method.

Method 3500-Ca D, Calcium, EDTA Titrimetric Method.

Method 3500-Mg E, Magnesium, Calculation Method.

Method 4110 B, Determination of Anions by Ion Chromatography, Ion Chromatography with Chemical

Suppression of Eluent Conductivity.

Method 4500-CN<sup>-</sup> C, Cyanide, Total Cyanide after Distillation.

Method 4500-CN<sup>-</sup> E, Cyanide, Colorimetric Method.

Method 4500-CN<sup>-</sup> F, Cyanide, Cyanide-Selective Electrode Method.

Method 4500-CN<sup>-</sup> G, Cyanide, Cyanides Amenable to Chlorination after Distillation.

Method 4500-Cl D, Chlorine, Amperometric Titration Method.

Method 4500-Cl E, Chlorine, Low-Level Amperometric Titration Method.

Method 4500-Cl F, Chlorine, DPD Ferrous Titrimetric Method.

Method 4500-Cl G, Chlorine, DPD Colorimetric Method.

Method 4500-Cl H, Chlorine, Syringaldazine (FACTS) Method.

Method 4500-Cl I, Chlorine, Iodometric Electrode Method.

Method 4500-ClO<sub>2</sub> C, Chlorine Dioxide, Amperometric Method I.

Method 4500-ClO<sub>2</sub> D, Chlorine Dioxide, DPD Method.

Method 4500-ClO<sub>2</sub> E, Chlorine Dioxide, Amperometric Method II (Proposed).

Method 4500-F<sup>-</sup> B, Fluoride, Preliminary Distillation Step.

Method 4500-F<sup>-</sup> C, Fluoride, Ion-Selective Electrode Method.

Method 4500-F<sup>-</sup> D, Fluoride, SPADNS Method.

Method 4500-F<sup>-</sup> E, Fluoride, Complexone Method.

Method 4500-H<sup>+</sup> B, pH Value, Electrometric Method.

Method 4500-NO<sub>2</sub><sup>-</sup> B, Nitrogen (Nitrite), Colorimetric Method.

Method 4500-NO<sub>3</sub><sup>-</sup> D, Nitrogen (Nitrate), Nitrate Electrode Method.

Method 4500-NO<sub>3</sub><sup>-</sup> E, Nitrogen (Nitrate), Cadmium Reduction Method.

Method 4500-NO<sub>3</sub><sup>-</sup> F, Nitrogen (Nitrate), Automated Cadmium Reduction Method.

Method 4500-O<sub>3</sub> B, Ozone (Residual) (Proposed), Indigo Colorimetric Method.

Method 4500-P E, Phosphorus, Ascorbic Acid Method.

Method 4500-P F, Phosphorus, Automated Ascorbic Acid Reduction Method.

Method 4500-Si D, Silica, Molybdosilicate Method.

Method 4500-Si E, Silica, Heteropoly Blue Method.

Method 4500-Si F, Silica, Automated Method for Molybdate-Reactive Silica.

Method 6651, Glyphosate Herbicide (Proposed).

Method 7110 B, Gross Alpha and Beta Radioactivity (Total, Suspended, and Dissolved), Evaporation Method for Gross Alpha-Beta.

Method 7110 C, Gross Alpha and Beta Radioactivity (Total, Suspended, and Dissolved), Coprecipitation Method for Gross Alpha Radioactivity in Drinking Water (Proposed).

Method 7500-Cs B, Radioactive Cesium, Precipitation Method.

Method 7500-<sup>3</sup>H B, Tritium, Liquid Scintillation Spectrometric Method.



Method 7500-I B, Radioactive Iodine, Precipitation Method.

Method 7500-I C, Radioactive Iodine, Ion-Exchange Method.

Method 7500-I D, Radioactive Iodine, Distillation Method.

Method 7500-Ra B, Radium, Precipitation Method.

Method 7500-Ra C, Radium, Emanation Method.

Method 7500-Ra D, Radium, Sequential Precipitation Method (Proposed).

Method 7500-Sr B, Total Radioactive Strontium and Strontium 90, Precipitation Method.

Method 7500-U B, Uranium, Radiochemical Method (Proposed).

Method 7500-U C, Uranium, Isotopic Method (Proposed).

Method 9215 B, Heterotrophic Plate Count, Pour Plate Method.

Method 9221 A, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Introduction.

Method 9221 B, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Standard Total Coliform Fermentation Technique.

Method 9221 C, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Estimation of Bacterial Density.

Method 9221 D, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Presence-Absence (P-A) Coliform Test.

Method 9221 E, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Fecal Coliform Procedure.

Method 9222 A, Membrane Filter Technique for Members

of the Coliform Group, Introduction.

Method 9222 B, Membrane Filter Technique for Members of the Coliform Group, Standard Total Coliform Membrane Filter Procedure.

Method 9222 C, Membrane Filter Technique for Members of the Coliform Group, Delayed-Incubation Total Coliform Procedure.

Method 9222 D, Membrane Filter Technique for Members of the Coliform Group, Fecal Coliform Membrane Filter Procedure.

Method 9223, Chromogenic Substrate Coliform Test (Proposed).

“Supplement to the 18th Edition of Standard Methods for the Examination of Water and Wastewater,” American Public Health Association, 1994.

Method 6610, Carbamate Pesticide Method.

“Standard Methods for the Examination of Water and Wastewater,” 19th Edition, 1995 (referred to as “Standard Methods, 19th ed.”).

Method 2130 B, Turbidity, Nephelometric Method.

Method 2320 B, Alkalinity, Titration Method.

Method 2510 B, Conductivity, Laboratory Method.

Method 2550, Temperature, Laboratory, and Field Methods.

Method 3111 B, Metals by Flame Atomic Absorption Spectrometry, Direct Air-Acetylene Flame Method.

Method 3111 D, Metals by Flame Atomic Absorption Spectrometry, Direct Nitrous Oxide-Acetylene Flame Method.

Method 3112 B, Metals by Cold-Vapor Atomic Absorption Spectrometry, Cold-Vapor Atomic Absorption Spectrometric Method.

Method 3113 B, Metals by Electrothermal Atomic Absorption Spectrometry, Electrothermal Atomic Absorption Spectrometric Method.

Method 3114 B, Metals by Hydride Generation/Atomic Absorption Spectrometry, Manual Hydride Generation/Atomic Absorption Spectrometric Method.

Method 3120 B, Metals by Plasma Emission Spectroscopy, Inductively Coupled Plasma (ICP) Method.

Method 3500-Ca D, Calcium, EDTA Titrimetric Method.

Method 3500-Mg E, Magnesium, Calculation Method.

Method 4110 B, Determination of Anions by Ion Chromatography, Ion Chromatography with Chemical Suppression of Eluent Conductivity.

Method 4500-Cl D, Chlorine, Amperometric Titration Method.

Method 4500-Cl E, Chlorine, Low-Level Amperometric Titration Method.

Method 4500-Cl F, Chlorine, DPD Ferrous Titrimetric Method.

Method 4500-Cl G, Chlorine, DPD Colorimetric Method.

Method 4500-Cl H, Chlorine, Syringaldazine (FACTS) Method.

Method 4500-Cl I, Chlorine, Iodometric Electrode Method.

Method 4500-ClO<sub>2</sub> C, Chlorine Dioxide, Amperometric Method I.

Method 4500-ClO<sub>2</sub> D, Chlorine Dioxide, DPD Method.

Method 4500-ClO<sub>2</sub> E, Chlorine Dioxide, Amperometric Method II (Proposed).

Method 4500-CN<sup>-</sup> C, Cyanide, Total Cyanide after Distillation.

Method 4500-CN<sup>-</sup> E, Cyanide, Colorimetric Method.

Method 4500-CN<sup>-</sup> F, Cyanide, Cyanide-Selective Electrode Method.

Method 4500-CN<sup>-</sup> G, Cyanide, Cyanides Amenable to Chlorination after Distillation.

Method 4500-F<sup>-</sup> B, Fluoride, Preliminary Distillation Step.

Method 4500-F<sup>-</sup> C, Fluoride, Ion-Selective Electrode Method.

Method 4500-F<sup>-</sup> D, Fluoride, SPADNS Method.

Method 4500-F<sup>-</sup> E, Fluoride, Complexone Method.

Method 4500-H<sup>+</sup> B, pH Value, Electrometric Method.

Method 4500-NO<sub>2</sub><sup>-</sup> B, Nitrogen (Nitrite), Colorimetric Method.

Method 4500-NO<sub>3</sub><sup>-</sup> D, Nitrogen (Nitrate), Nitrate Electrode Method.

Method 4500-NO<sub>3</sub><sup>-</sup> E, Nitrogen (Nitrate), Cadmium Reduction Method.

Method 4500-NO<sub>3</sub><sup>-</sup> F, Nitrogen (Nitrate), Automated Cadmium Reduction Method.

Method 4500-O<sub>3</sub> B, Ozone (Residual) (Proposed), Indigo Colorimetric Method.

Method 4500-P E, Phosphorus, Ascorbic Acid Method.

Method 4500-P F, Phosphorus, Automated Ascorbic Acid Reduction Method.

Method 4500-Si D, Silica, Molybdosilicate Method.

Method 4500-Si E, Silica, Heteropoly Blue Method.

Method 4500-Si F, Silica, Automated Method for Molybdate-Reactive Silica.

Method 5910 B, UV Absorbing Organic Constituents, Ultraviolet Absorption Method.

Method 6251 B, Disinfection Byproducts: Haloacetic Acids and Trichlorophenol, Micro Liquid-Liquid Extraction Gas Chromatographic Method.

Method 6651, Glyphosate Herbicide (Proposed).

Method 7110 B, Gross Alpha and Gross Beta Radioactivity, Evaporation Method for Gross Alpha-Beta.

Method 7110 C, Gross Alpha and Beta Radioactivity (Total, Suspended, and Dissolved), Coprecipitation Method for Gross Alpha Radioactivity in Drinking Water (Proposed).

Method 7120 B, Gamma-Emitting Radionuclides, Gamma Spectrometric Method.

Method 7500-Cs B, Radioactive Cesium, Precipitation Method.

Method 7500-3H B, Tritium, Liquid Scintillation Spectrometric Method.

Method 7500-I B, Radioactive Iodine, Precipitation Method.

Method 7500-I C, Radioactive Iodine, Ion-Exchange Method.

Method 7500-I D, Radioactive Iodine, Distillation Method.

Method 7500-Ra B, Radium, Precipitation Method.

Method 7500-Ra C, Radium, Emanation Method.

Method 7500-Ra D, Radium, Sequential Precipitation Method.

Method 7500-Sr B, Total Radioactive Strontium and Strontium 90, Precipitation Method.

Method 7500-U B, Uranium, Radiochemical Method.

Method 7500-U C, Uranium, Isotopic Method.

Method 9215 B, Heterotrophic Plate Count, Pour Plate Method.

Method 9221 A, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Introduction.

Method 9221 B, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Standard Total Coliform Fermentation Technique.

Method 9221 C, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Estimation of Bacterial Density.

Method 9221 D, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Presence-Absence (P-A) Coliform Test.

Method 9221 E, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Fecal Coliform Procedure.

Method 9222 A, Membrane Filter Technique for Members of the Coliform Group, Introduction.

Method 9222 B, Membrane Filter Technique for Members of the Coliform Group, Standard Total Coliform Membrane Filter Procedure.

Method 9222 C, Membrane Filter Technique for Members of the Coliform Group, Delayed-Incubation Total Coliform Procedure.

Method 9222 D, Membrane Filter Technique for Members of the Coliform Group, Fecal Coliform Membrane Filter Procedure.

Method 9223, Chromogenic Substrate Coliform Test (Proposed).

“Supplement to the 19th Edition of Standard Methods for the Examination of Water and Wastewater,” American Public Health Association, 1996.

Method 5310 B, TOC, Combustion-Infrared Method.

Method 5310 C, TOC, Persulfate-Ultraviolet Oxidation Method.

Method 5310 D, TOC, Wet-Oxidation Method.

“Standard Methods for the Examination of Water and Wastewater,” 20th Edition, 1998 (referred to as “Standard Methods, 20th ed.”).

Method 2130 B, Turbidity, Nephelometric Method.

Method 2320 B, Alkalinity, Titration Method.

Method 2510 B, Conductivity, Laboratory Method.

Method 2550, Temperature, Laboratory, and Field Methods.

Method 3120 B, Metals by Plasma Emission Spectroscopy, Inductively Coupled Plasma (ICP) Method.

Method 3500-Ca B, Calcium, EDTA Titrimetric Method.

Method 3500-Mg B, Magnesium, EDTA Titrimetric Method.

Method 4110 B, Determination of Anions by Ion Chromatography, Ion Chromatography with Chemical Suppression of Eluent Conductivity.

Method 4500-CN<sup>-</sup> C, Cyanide, Total Cyanide after Distillation.

Method 4500-CN<sup>-</sup> E, Cyanide, Colorimetric Method.

Method 4500-CN<sup>-</sup> F, Cyanide, Cyanide-Selective Electrode Method.

Method 4500-CN<sup>-</sup> G, Cyanide, Cyanides Amenable to Chlorination after Distillation.

Method 4500-Cl D, Chlorine, Amperometric Titration Method.

Method 4500-Cl E, Chlorine, Low-Level Amperometric Titration Method.

Method 4500-Cl F, Chlorine, DPD Ferrous Titrimetric Method.

Method 4500-Cl G, Chlorine, DPD Colorimetric Method.

Method 4500-Cl H, Chlorine, Syringaldazine (FACTS) Method.

Method 4500-Cl I, Chlorine, Iodometric Electrode Method.

Method 4500-ClO<sub>2</sub> C, Chlorine Dioxide, Amperometric Method I.

Method 4500-ClO<sub>2</sub> D, Chlorine Dioxide, DPD Method.

Method 4500-ClO<sub>2</sub> E, Chlorine Dioxide, Amperometric Method II (Proposed).

Method 4500-F<sup>-</sup> B, Fluoride, Preliminary Distillation Step.

Method 4500-F<sup>-</sup> C, Fluoride, Ion-Selective Electrode Method.

Method 4500-F<sup>-</sup> D, Fluoride, SPADNS Method.

Method 4500-F<sup>-</sup> E, Fluoride, Complexone Method.

Method 4500-H<sup>+</sup> B, pH Value, Electrometric Method.

Method 4500-NO<sub>2</sub><sup>-</sup> B, Nitrogen (Nitrite), Colorimetric Method.

Method 4500-NO<sub>3</sub><sup>-</sup> D, Nitrogen (Nitrate), Nitrate Electrode Method.

Method 4500-NO<sub>3</sub><sup>-</sup> E, Nitrogen (Nitrate), Cadmium Reduction Method.

Method 4500-NO<sub>3</sub><sup>-</sup> F, Nitrogen (Nitrate), Automated Cadmium Reduction Method.

Method 4500-O<sub>3</sub> B, Ozone (Residual) (Proposed), Indigo



Colorimetric Method.

Method 4500-P E, Phosphorus, Ascorbic Acid Method.

Method 4500-P F, Phosphorus, Automated Ascorbic Acid Reduction Method.

Method 4500-Si C, Silica, Molybdosilicate Method.

Method 4500-Si D, Silica, Heteropoly Blue Method.

Method 4500-Si E, Silica, Automated Method for Molybdate-Reactive Silica.

Method 4500-Cl E, Chlorine (Residual), Low-Level Amperometric Titration Method.

Method 4500-Cl F, Chlorine (Residual), DPD Ferrous Titrimetric Method.

Method 4500-Cl G, Chlorine (Residual), DPD Colorimetric Method.

Method 4500-Cl H, Chlorine (Residual), Syringaldazine (FACTS) Method.

Method 4500-Cl I, Chlorine (Residual), Iodometric Electrode Technique.

Method 4500-ClO<sub>2</sub> D, Chlorine Dioxide, DPD Method.

Method 4500-ClO<sub>2</sub> E, Chlorine Dioxide, Amperometric Method II.

Method 6651, Glyphosate Herbicide (Proposed).

Method 7110-B, Gross Alpha and Gross Beta Radioactivity, Evaporation Method for Gross Alpha-Beta.

Method 7110 C, Gross Alpha and Beta Radioactivity (Total, Suspended, and Dissolved), Coprecipitation Method for Gross Alpha Radioactivity in Drinking Water (Proposed).

Method 7120-B, Gamma-Emitting Radionuclides, Gamma Spectrometric Method.

Method 7500-Cs B, Radioactive Cesium, Precipitation Method.

Method 7500-3H B, Tritium, Liquid Scintillation Spectrometric Method.

Method 7500-I B, Radioactive Iodine, Precipitation Method.

Method 7500-I C, Radioactive Iodine, Ion-Exchange Method.

Method 7500-I D, Radioactive Iodine, Distillation Method.

Method 7500-Ra B, Radium, Precipitation Method.

Method 7500-Ra C, Radium, Emanation Method.

Method 7500-Sr B, Total Radiactive Strontium and Strontium 90, Precipitation Method.

Method 7500-U B, Uranium, Radiochemical Method.

Method 7500-U C, Uranium, Isotopic Method.

Method 9215 B, Heterotrophic Plate Count, Pour Plate Method.

Method 9221 A, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Introduction.

Method 9221 B, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Standard Total Coliform Fermentation Technique.

Method 9221 C, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Estimation of Bacterial Density.

Method 9221 D, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Presence-Absence (P-A) Coliform Test.

Method 9221 E, Multiple-Tube Fermentation Technique for Members of the Coliform Group, Fecal Coliform

Procedure.

Method 9222 A, Membrane Filter Technique for Members of the Coliform Group, Introduction.

Method 9222 B, Membrane Filter Technique for Members of the Coliform Group, Standard Total Coliform Membrane Filter Procedure.

Method 9222 C, Membrane Filter Technique for Members of the Coliform Group, Delayed-Incubation Total Coliform Procedure.

Method 9222 D, Membrane Filter Technique for Members of the Coliform Group, Fecal Coliform Membrane Filter Procedure.

Method 9223, Chromogenic Substrate Coliform Test (Proposed).

Analytical Technology, Inc. ATI Orion, 529 Main Street, Boston, MA 02129.

Technical Bulletin 601, "Standard Method of Testing for Nitrate in Drinking Water," July, 1994, PN 221890-001 (referred to as "Technical Bulletin 601").

ASTM. American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959 610-832-9585.

ASTM Method D511-93 A and B, "Standard Test Methods for Calcium and Magnesium in Water," "Test Method A--Complexometric Titration" & "Test Method B--Atomic Absorption Spectrophotometric," approved 1993.

ASTM Method D515-88 A, "Standard Test Methods for Phosphorus in Water," "Test Method A--Colorimetric Ascorbic Acid Reduction," approved August 19, 1988.

ASTM Method D859-88, "Standard Test Method for Silica in Water," approved August 19, 1988.

ASTM Method D1067-92 B, "Standard Test Methods for Acidity or Alkalinity in Water," "Test Method B--Electrometric or Color-Change Titration," approved May 15, 1992.

ASTM Method D1125-91 A, "Standard Test Methods for Electrical Conductivity and Resistivity of Water," "Test Method A--Field and Routine Laboratory Measurement of Static (Non-Flowing) Samples," approved June 15, 1991.

ASTM Method D1179-93 B, "Standard Test Methods for Fluoride in Water," "Test Method B--Ion Selective Electrode," approved 1993.

ASTM Method D1293-84, "Standard Test Methods for pH of Water," "Test Method A--Precise Laboratory Measurement" & "Test Method B--Routine or Continuous Measurement," approved October 26, 1984.

ASTM Method D1688-90 A or C, "Standard Test Methods for Copper in Water," "Test Method A--Atomic Absorption, Direct" & "Test Method C--Atomic Absorption, Graphite Furnace," approved March 15, 1990.

ASTM Method D2036-91 A or B, "Standard Test Methods for Cyanide in Water," "Test Method A--Total Cyanides after Distillation" & "Test Method B--Cyanides Amenable to Chlorination by Difference," approved September 15, 1991.

ASTM Method D2459-72, "Standard Test Method for Gamma Spectrometry in Water," approved July 28, 1972, discontinued 1988.

ASTM Method D2460-90, "Standard Test Method for Radionuclides of Radium in Water," approved 1990.

ASTM Method D2907-91, "Standard Test Methods for Microquantities of Uranium in Water by Fluorometry," "Test Method A--Direct Fluorometric" & "Test Method B--Extraction," approved June 15, 1991.

ASTM Method D2972-93 B or C, "Standard Test Methods for Arsenic in Water," "Test Method B--Atomic Absorption, Hydride Generation" & "Test Method C--Atomic Absorption, Graphite Furnace," approved 1993.

ASTM Method D3223-91, "Standard Test Method for Total Mercury in Water," approved September 23, 1991.

ASTM Method D3454-91, "Standard Test Method for Radium-226 in Water," approved 1991.

ASTM Method D3559-90 D, "Standard Test Methods for Lead in Water," "Test Method D--Atomic Absorption, Graphite Furnace," approved August 6, 1990.

ASTM Method D3645-93 B, "Standard Test Methods for Beryllium in Water," "Method B--Atomic Absorption, Graphite Furnace," approved 1993.

ASTM Method D3649-91, "Standard Test Method for High-Resolution Gamma-Ray Spectrometry of Water," approved 1991.

ASTM Method D3697-92, "Standard Test Method for Antimony in Water," approved June 15, 1992.

ASTM Method D3859-93 A, "Standard Test Methods for Selenium in Water," "Method A--Atomic Absorption, Hydride Method," approved 1993.

ASTM Method D3867-90 A and B, "Standard Test Methods for Nitrite-Nitrate in Water," "Test Method A--Automated Cadmium Reduction" & "Test Method B--Manual Cadmium Reduction," approved January 10, 1990.

ASTM Method D3972-90, "Standard Test Method for Isotopic Uranium in Water by Radiochemistry," approved 1990.

ASTM Method D4107-91, "Standard Test Method for Tritium in Drinking Water," approved 1991.

ASTM Method D4327-91, "Standard Test Method for Anions in Water by Ion Chromatography," approved October 15, 1991.

ASTM Method D4785-88, "Standard Test Method for Low-Level Iodine-131 in Water," approved 1988.

ASTM Method D5174-91, "Standard Test Method for Trace Uranium in Water by Pulsed-Laser Phosphorimetry," approved 1991.

ASTM Method D 1253-86, "Standard Test Method for Residual Chlorine in Water," reapproved 1992.

Bran & Luebbe, 1025 Busch Parkway, Buffalo Grove, IL 60089.

"Fluoride in Water and Wastewater," Industrial Method #129-

71W, December 1972 (referred to as “Technicon Methods: Method #129-71W”). See 40 CFR 141.23(k)(1), footnote 11 (2003).

“Fluoride in Water and Wastewater,” #380-75WE, February 1976 (referred to as “Technicon Methods: Method #380-75WE”). See 40 CFR 141.23(k)(1), footnote 11 (2003).

~~EM Science~~ EMD Chemicals Inc. (an affiliate of Merck KGgA, Darmstadt, Germany), 480 S. Democrat Road, Gibbstown, NJ 08027–1297. Telephone: 800-222–0342. E-mail: adellenbusch@emscience.com.

“Chromocult Coliform Agar Presence/Absence Membrane Filter Test Method for Detection and Identification of Coliform Bacteria and Escherichia coli in Finished Waters,” November 2000, Version 1.0.

“Readycult Coliforms 100 Presence/Absence Test for Detection and Identification of Coliform Bacteria and Escherichia coli in Finished Waters,” November 2000, Version 1.0.

ERDA Health and Safety Laboratory, New York, NY.

HASL Procedure Manual, HASL 300, 1973. See 40 CFR 141.25(b)(2) (2003).

Great Lakes Instruments, Inc., 8855 North 55th Street, Milwaukee, WI 53223.

GLI Method 2, “Turbidity,” Nov. 2, 1992.

The Hach Company, P.O. Box 389, Loveland, CO 80539-0389. Phone: 800-227-4224.

“Lead in Drinking Water by Differential Pulse Anodic Stripping Voltammetry,” Method 1001, August 1999.

“Determination of Turbidity by Laser Nephelometry,” January 2000, Revision 2.0 (referred to as “Hach FilterTrak Method 10133”).

IDEXX Laboratories, Inc., One IDEXX Drive, Westbrook, Maine 04092. Telephone: 800-321–0207.

“IDEXX SimPlate™ HPC Test Method for Heterotrophs in

Water,” November 2000.

Lachat Instruments, 6645 W. Mill Rd., Milwaukee, WI 53218. Phone: 414-358-4200.

“Digestion and distillation of total cyanide in drinking and wastewaters using MICRO DIST and determination of cyanide by flow injection analysis,” Revision 2.1, November 30, 2000 (referred to as “QuikChem Method 10-204-00-1-X”).

Millipore Corporation, Technical Services Department, 80 Ashby Road, Milford, MA 01730 800-654-5476.

Colisure Presence/Absence Test for Detection and Identification of Coliform Bacteria and Escherichia Coli in Drinking Water, February 28, 1994 (referred to as “Colisure Test”).

NCRP. National Council on Radiation Protection, 7910 Woodmont Ave., Bethesda, MD 301-657-2652.

“Maximum Permissible Body Burdens and Maximum Permissible Concentrations of Radionuclides in Air and in Water for Occupational Exposure,” NCRP Report Number 22, June 5, 1959.

NSF. National Sanitation Foundation International, 3475 Plymouth Road, PO Box 130140, Ann Arbor, Michigan 48113-0140, 734-769-8010.

NSF Standard 61, section 9, November 1998.

NTIS. National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161, 703-487-4600 or 800-553-6847.

“Interim Radiochemical Methodology for Drinking Water,” EPA 600/4-75-008 (revised), March 1976 (referred to as “USEPA Interim Radiochemical Methods”). (Pages 1, 4, 6, 9, 13, 16, 24, 29, 34)

“Kelada Automated Test Methods for Total Cyanide, Acid Dissociable Cyanide, And Thiocyanate,” Revision 1.2, August 2001, EPA # 821-B-01-009 (referred to as “Kelada 01”).

“Maximum Permissible Body Burdens and Maximum Permissible Concentrations of Radionuclides in Air and in Water for Occupational Exposure,” NBS (National Bureau of Standards) Handbook 69, as amended August 1963, U.S. Department of

Commerce.

Method 100.1, "Analytical Method for Determination of Asbestos Fibers in Water," EPA-600/4-83-043, September 1983, Doc. No. PB83-260471 (referred to as "USEPA Asbestos Methods-100.1").

Method 100.2, "Determination of Asbestos Structures over 10-mm in Length in Drinking Water," EPA-600/4-83-043, June 1994, Doc. No. PB94-201902 (referred to as "USEPA Asbestos Methods-100.2").

"Methods for Chemical Analysis of Water and Wastes," March 1983, Doc. No. PB84-128677 (referred to as "USEPA Inorganic Methods"). (Methods 150.1, 150.2, and 245.2, which formerly appeared in this reference, are available from USEPA EMSL.)

"Methods for the Determination of Inorganic Substances in Environmental Samples," August 1993, PB94-120821 (referred to as "USEPA Environmental Inorganic Methods").

"Methods for the Determination of Metals in Environmental Samples," June 1991, Doc. No. PB91-231498 and "Methods for the Determination of Metals in Environmental Samples--Supplement I," May 1994, PB95-125472 (referred to as "USEPA Environmental Metals Methods").

"Methods for the Determination of Organic Compounds in Drinking Water," December 1988, revised July 1991, EPA-600/4-88/039 (referred to as "USEPA Organic Methods"). (For methods 502.2, 505, 507, 508, 508A, 515.1, and 531.1.)

"Methods for the Determination of Organic Compounds in Drinking Water--Supplement I," July 1990, EPA/600-4-90-020 (referred to as "USEPA Organic Methods"). (For methods 506, 547, 550, 550.1, and 551.)

"Methods for the Determination of Organic Compounds in Drinking Water--Supplement II," August 1992, EPA-600/R-92-129 (referred to as "USEPA Organic Methods"). (For methods 515.2, 524.2, 548.1, 549.1, 552.1, and 555.)

"Prescribed Procedures for Measurement of Radioactivity in Drinking Water," EPA 600/4-80-032, August 1980 (referred to as "USEPA Radioactivity Methods"). (Methods 900, 901, 901.1, 902, 903, 903.1, 904, 905, 906, 908, 908.1)



“Procedures for Radiochemical Analysis of Nuclear Reactor Aqueous Solutions,” H.L. Krieger and S. Gold, EPA-R4-73-014, May 1973, Doc. No. PB222-154/7BA.

“Radiochemical Analytical Procedures for Analysis of Environmental Samples,” March 1979, Doc. No. EMSL LV 053917 (referred to as “USEPA Radiochemical Analyses”). (Pages 1, 19, 33, 65, 87, 92)

“Radiochemistry Procedures Manual,” EPA-520/5-84-006, December 1987, Doc. No. PB-84-215581 (referred to as “USEPA Radiochemistry Methods”). (Methods 00-01, 00-02, 00-07, H-02, Ra-03, Ra-04, Ra-05, Sr-04)

“Technical Notes on Drinking Water Methods,” EPA-600/R-94-173, October 1994, Doc. No. PB-104766 (referred to as “USEPA Technical Notes”).

BOARD NOTE: USEPA made the following assertion with regard to this reference at 40 CFR 141.23(k)(1) and 141.24(e) and (n)(11) (2003): “This document contains other analytical test procedures and approved analytical methods that remain available for compliance monitoring until July 1, 1996.”

“Tetra- through Octa-Chlorinated Dioxins and Furans by Isotope Dilution HRGC/HRMS,” October 1994, EPA-821-B-94-005 (referred to as “Dioxin and Furan Method 1613”).

New Jersey Department of Environment, Division of Environmental Quality, Bureau of Radiation and Inorganic Analytical Services, 9 Ewing Street, Trenton, NJ 08625.

“Determination of Radium 228 in Drinking Water,” August 1990.

New York Department of Health, Radiological Sciences Institute, Center for Laboratories and Research, Empire State Plaza, Albany, NY 12201.

“Determination of Ra-226 and Ra-228 (Ra-02),” January 1980, Revised June 1982.

Palintest, Ltd., 21 Kenton Lands Road, P.O. Box 18395, Erlanger, KY 800-835-9629.

“Lead in Drinking Water by Differential Pulse Anodic Stripping Voltammetry,” Method 1001, August 1999.

Syngenta Crop Protection, Inc., 410 Swing Road, Post Office Box 18300, Greensboro, NC 27419. Telephone: 336-632-6000.

“Atrazine in Drinking Water by Immunoassay,” February 2001 (referred to as “Syngenta AG-625”).

United States Department of Energy, available at the Environmental Measurements Laboratory, U.S. Department of Energy, 376 Hudson Street, New York, NY 10014-3621.

“EML Procedures Manual,” 27th Edition, Volume 1, 1990.

United States Environmental Protection Agency, Office of Ground Water and Drinking Water, accessible on-line and available by download from <http://www.epa.gov/safewater/methods/>.

Method 515.4, “Determination of Chlorinated Acids in Drinking Water by Liquid-Liquid Microextraction, Derivatization and Fast Gas Chromatography with Electron Capture Detection,” Revision 1.0, April 2000, EPA 815/B-00/001 (document file name “met515\_4.pdf”).

Method 531.2, “Measurement of N-methylcarbamoyloximes and N-methylcarbamates in Water by Direct Aqueous Injection HPLC with Postcolumn Derivatization,” Revision 1.0, September 2001, EPA 815/B/01/002 (document file name “met531\_2.pdf”).

United States Environmental Protection Agency, EMSL, Cincinnati, OH 45268 513-569-7586.

“Interim Radiochemical Methodology for Drinking Water,” EPA-600/4-75-008 (referred to as “Radiochemical Methods”). (Revised) March 1976.

“Methods for the Determination of Organic Compounds in Finished Drinking Water and Raw Source Water” (referred to as “USEPA Organic Methods”). (For methods 504.1, 508.1, and 525.2 only.) See NTIS.

“Procedures for Radiochemical Analysis of Nuclear Reactor Aqueous Solutions.” See NTIS.

USEPA, Science and Technology Branch, Criteria and Standards Division, Office of Drinking Water, Washington, D.C. 20460.

“Guidance Manual for Compliance with the Filtration and

Disinfection Requirements for Public Water Systems using Surface Water Sources,” October 1989.

USGS. Books and Open-File Reports Section, United States Geological Survey, Federal Center, Box 25286, Denver, CO 80225-0425.

Methods available upon request by method number from “Methods for Analysis by the U.S. Geological Survey National Water Quality Laboratory--Determination of Inorganic and Organic Constituents in Water and Fluvial Sediments,” Open File Report 93-125, 1993, or Book 5, Chapter A-1, “Methods for Determination of Inorganic Substances in Water and Fluvial Sediments,” 3rd ed., Open-File Report 85-495, 1989, as appropriate (referred to as “USGS Methods”).

I-1030-85

I-1062-85

I-1601-85

I-1700-85

I-2598-85

I-2601-90

I-2700-85

I-3300-85

Methods available upon request by method number from “Methods for Determination of Radioactive Substances in Water and Fluvial Sediments,” Chapter A5 in Book 5 of “Techniques of Water-Resources Investigations of the United States Geological Survey,” 1997.

R-1110-76

R-1111-76

R-1120-76

R-1140-76

R-1141-76

R-1142-76

R-1160-76

R-1171-76

R-1180-76

R-1181-76

R-1182-76

Waters Corporation, Technical Services Division, 34 Maple St., Milford,  
MA 01757 800-252-4752.

“Waters Test Method for Determination of Nitrite/Nitrate in Water  
Using Single Column Ion Chromatography,” Method B-1011,  
August 1987 (referred to as “Waters Method B-1011”).

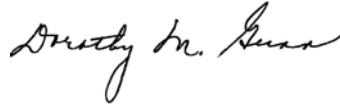
c) The Board incorporates the following federal regulations by reference:

40 CFR 136, Appendices B and C (2003).

d) This Part incorporates no later amendments or editions.

(Source: Amended at 28 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

I, Dorothy M. Gunn, Clerk of the Illinois Pollution Control Board, certify that the Board adopted the above opinion and order on May 20, 2004, by a vote of 5-0.



Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board