

POLLUTION CONTROL BOARD  
NOTICE OF PROPOSED AMENDMENTS

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AUG 01 2006  
STATE OF ILLINOIS  
Pollution Control Board

- 1) Heading of the Part: Primary Drinking Water Standards
- 2) Code citation: 35 Ill. Adm. Code 611
- 3) Section numbers:

611.102	<u>Proposed action:</u> Amend
611.105	New Section
611.111	Amend
611.212	Amend
611.359	Amend
611.380	Amend
611.609	Amend
611.646	Amend
611.APPENDIX D	Amend
- 4) Statutory authority: 415 ILCS 5/7.2, 17, 17.5, and 27.
- 5) A Complete description of the subjects and issues involved: The following briefly describes the subjects and issues involved in the docket R06-15 rulemaking. A comprehensive description is contained in the Board's opinion and order of July 20, 2006, proposing amendments in docket R06-15, which opinion and order is available from the address below.

This proceeding updates the Illinois Safe Drinking Water Act (SDWA) rules to correspond with amendments adopted by the United States Environmental Protection Agency (USEPA) that appeared in the Federal Register during a single update period. The docket and time period that is involved in this proceeding is the following:

R06-15	Federal SDWA amendments that occurred during the period July 1, 2005 through December 31, 2005.
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The R06-15 docket only amends rules in Part 611. The following table briefly summarizes the sole federal action in the update period:

October 13, 2005 (70 Fed. Reg. 59848)	USEPA adopted new requirements for the filing and receipt of required documents as electronic documents. The filings included are all documents whose filing is provided by the primary drinking water regulations.
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The USEPA action of October 13, 2005 (70 Fed. Reg. 59848) established the Cross-Media Electronic Reporting Rule (CROMERR). The CROMERR sets standards for the filing of documents in various federal program areas in an electronic format. While the CROMERR does not require the filing of documents in an electronic format, it does impose minimum requirements on documents that are filed in such a format and on the electronic document receiving systems used to receive them. The CROMERR imposes requirements on electronic filings submitted to USEPA and on USEPA's Central Data Exchange (CDX) that receives them, as well as on any electronic document filings submitted to the states and any systems used by the states to receive those filings.

Tables appear in the Board's opinion and order of July 20, 2006 in docket R06-15 that list numerous corrections and amendments that are not based on current federal amendments. The tables contain deviations from the literal text of the federal amendments underlying these amendments, as well as corrections and clarifications that the Board made in the base text involved. Persons interested in the details of those corrections and amendments should refer to the July 20, 2006 opinion and order in docket R06-15.

Section 17.5 of the Environmental Protection Act [415 ILCS 5/17.5] provides that Section 5-35 of the Administrative Procedure Act [5 ILCS 100/5-35] does not apply to this rulemaking. Because this rulemaking is not subject to Section 5-35 of the APA, it is not subject to First Notice or to Second Notice review by the Joint Committee on Administrative Rules (JCAR).

- 6) Published studies or reports, and sources of underlying data, used to compose this rulemaking: None
- 7) Will this rulemaking replace any emergency amendments currently in effect? No
- 8) Does this rulemaking contain an automatic repeal date? No
- 9) Does this rulemaking contain incorporations by reference? Yes. Section 611.102 is the centralized location of all incorporations of documents used for the purposes of compliance with all of Part 611. The amendments update all citations to the *Code of Federal Regulations* to the latest edition available, although those updates do not necessarily incorporate the cited federal regulations. Second, the amendments add incorporations of segments of the *Code of Federal Regulations* that embody key elements of the federal CROMERR requirements. Third, the amendments remove the incorporation by reference of appendix C to 40 CFR 136, since this document is not referenced in any substantive segment of the rules. The amendments also update the

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version of appendix B to 40 CFR 136 incorporated by reference to the latest edition available. Finally, the amendments add to each incorporation by reference of a segment of the *Code of Federal Regulations* a citation to the segments of the Illinois regulations for which the incorporation is made.

- 10) Are there any other proposed rulemakings pending on this Part? No
- 11) Statement of statewide policy objectives: These proposed amendments do not create or enlarge a state mandate, as defined in Section 3(b) of the State Mandates Act [30 ILCS 805/3(b) (2002)].
- 12) Time, Place and manner in which interested persons may comment on this proposed rulemaking: The Board will accept written public comment on this proposal for a period of 45 days after the date of this publication. Comments should reference docket R06-15 and be addressed to:

Ms. Dorothy M. Gunn, Clerk  
Illinois Pollution Control Board  
State of Illinois Center, Suite 11-500  
100 W. Randolph St.  
Chicago, IL 60601

Please direct inquiries to the following person and reference docket R06-15:

Michael J. McCambridge  
Staff Attorney  
Illinois Pollution Control Board  
100 W. Randolph 11-500  
Chicago, IL 60601

312-814-6924  
E-mail: [mccambm@ipcb.state.il.us](mailto:mccambm@ipcb.state.il.us)

Request copies of the Board's opinion and order at 312-814-3620, or download a copy from the Board's Website at <http://www.ipcb.state.il.us>.

- 13) Initial regulatory flexibility analysis:
  - A) Types of small businesses, small municipalities, and not-for-profit corporations

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affected: This rulemaking may affect those small businesses, small municipalities, and not-for-profit corporations that own or operate a public water supply.

- B) Reporting, bookkeeping or other procedures required for compliance: The existing rules and proposed amendments require extensive reporting, bookkeeping and other procedures, including the preparation of reports, water analyses, and maintenance of operating records.
- C) Types of professional skills necessary for compliance: Compliance with the existing rules and proposed amendments may require the services of an attorney, certified public accountant, chemist, and registered professional engineer.

- 14) Regulatory agenda on which this rulemaking was summarized: December 2005

The full text of the Proposed Amendments begins on the next page:

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

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STATE OF ILLINOIS  
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

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  
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SUBPART C: USE OF NON-CENTRALIZED TREATMENT DEVICES

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611.290 Use of Point-of-Use Devices or Bottled Water

SUBPART D: TREATMENT TECHNIQUES

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611.295 General Requirements  
611.296 Acrylamide and Epichlorohydrin  
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SUBPART F: MAXIMUM CONTAMINANT LEVELS (MCLs) AND  
MAXIMUM RESIDUAL DISINFECTANT LEVELS (MRDLs)

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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

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

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611.382 Monitoring Requirements  
611.383 Compliance Requirements  
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611.385 Treatment Technique for Control of Disinfection Byproduct (DBP)  
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SUBPART K: GENERAL MONITORING AND ANALYTICAL REQUIREMENTS

Section

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

SUBPART L: MICROBIOLOGICAL MONITORING  
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611.521 Routine Coliform Monitoring  
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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  
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SUBPART M: TURBIDITY MONITORING AND ANALYTICAL REQUIREMENTS

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611.560 Turbidity

SUBPART N: INORGANIC MONITORING AND ANALYTICAL REQUIREMENTS

Section

611.591 Violation of a State MCL  
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611.600 Applicability  
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611.604 Nitrate Monitoring  
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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  
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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

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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  
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- 611.901 General Public Notification Requirements
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- 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

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- 611.950 General Requirements
- 611.951 Finished Water Reservoirs
- 611.952 Additional Watershed Control Requirements for Unfiltered Systems
- 611.953 Disinfection Profile
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- 611.955 Combined Filter Effluent Turbidity Limits
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- 611. ~~Appendix~~ APPENDIX A Regulated Contaminants
- 611. ~~Appendix~~ APPENDIX B Percent Inactivation of G. Lamblia Cysts
- 611. ~~Appendix~~ APPENDIX C Common Names of Organic Chemicals
- 611. ~~Appendix~~ APPENDIX D Defined Substrate Method for the Simultaneous Detection of Total Coliforms and Eschericia Coli from Drinking Water
- 611. ~~Appendix~~ APPENDIX E Mandatory Lead Public Education Information for Community Water Systems
- 611. ~~Appendix~~ APPENDIX F Mandatory Lead Public Education Information for Non-Transient Non-Community Water Systems
- 611. ~~Appendix~~ APPENDIX G NPDWR Violations and Situations Requiring Public Notice
- 611. ~~Appendix~~ APPENDIX H Standard Health Effects Language for Public Notification
- 611. ~~Appendix~~ APPENDIX I Acronyms Used in Public Notification Regulation
- 611. ~~Table~~ TABLE A Total Coliform Monitoring Frequency
- 611. ~~Table~~ TABLE B Fecal or Total Coliform Density Measurements
- 611. ~~Table~~ TABLE C Frequency of RDC Measurement
- 611. ~~Table~~ TABLE D Number of Lead and Copper Monitoring Sites
- 611. ~~Table~~ TABLE E Lead and Copper Monitoring Start Dates
- 611. ~~Table~~ TABLE F Number of Water Quality Parameter Sampling Sites
- 611. ~~Table~~ TABLE G Summary of Section 611.357 Monitoring Requirements for Water Quality Parameters
- 611. ~~Table~~ 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. \_\_\_\_\_, effective \_\_\_\_\_.

SUBPART A: GENERAL

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.

"Colitagâ Test" means "Colitagâ Product as a Test for Detection and Identification of Coliforms and E. coli Bacteria in Drinking Water and Source Water as Required in National Primary Drinking Water Regulations," available from CPI International.

"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 Coliform 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 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 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~~)-(2005). 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 7500-3H 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- C, Cyanide, Total Cyanide after Distillation.

Method 4500-CN- E, Cyanide, Colorimetric Method.

Method 4500-CN- F, Cyanide, Cyanide-Selective Electrode Method.

Method 4500-CN- 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- B, Fluoride, Preliminary Distillation Step.

Method 4500-F- C, Fluoride, Ion-Selective Electrode Method.

Method 4500-F- D, Fluoride, SPADNS Method.

Method 4500-F- E, Fluoride, Complexone Method.

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

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

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

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

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

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

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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.

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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 7500-3 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.

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Method 2130 B, Turbidity, Nephelometric Method.

Method 2320 B, Alkalinity, Titration Method.

Method 2510 B, Conductivity, Laboratory Method.

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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- C, Cyanide, Total Cyanide after Distillation.

Method 4500-CN- E, Cyanide, Colorimetric Method.

Method 4500-CN- F, Cyanide, Cyanide-Selective Electrode Method.

Method 4500-CN- G, Cyanide, Cyanides Amenable to Chlorination after Distillation.

Method 4500-F- B, Fluoride, Preliminary Distillation Step.

Method 4500-F- C, Fluoride, Ion-Selective Electrode Method.

Method 4500-F- D, Fluoride, SPADNS Method.

Method 4500-F- E, Fluoride, Complexone Method.

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

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

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

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

Method 4500-NO<sub>3</sub>- 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.

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Method 6651, Glyphosate Herbicide (Proposed).

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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 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.

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

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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- C, Cyanide, Total Cyanide after Distillation.

Method 4500-CN- E, Cyanide, Colorimetric Method.

Method 4500-CN- F, Cyanide, Cyanide-Selective Electrode Method.

Method 4500-CN- 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- B, Fluoride, Preliminary Distillation Step.

Method 4500-F- C, Fluoride, Ion-Selective Electrode Method.

Method 4500-F- D, Fluoride, SPADNS Method.

Method 4500-F- E, Fluoride, Complexone Method.

Method 4500-H+ B, pH Value, Electrometric Method.

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

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

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

Method 4500-NO<sub>3</sub>- 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.

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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.

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

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

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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~~-(2005): "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").

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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 3.2, as added at 70 Fed. Reg. 59848 (Oct. 13, 2005) (How Does This Part Provide for Electronic Reporting?), referenced in Section 611.105.

40 CFR 3.3, as added at 70 Fed. Reg. 59848 (Oct. 13, 2005) (What Definitions Are Applicable to This Part?), referenced in Section 611.105.

40 CFR 3.10, as added at 70 Fed. Reg. 59848 (Oct. 13, 2005) (What Are the Requirements for Electronic Reporting to EPA?), referenced in Section 611.105.

40 CFR 3.2000, as added at 70 Fed. Reg. 59848 (Oct. 13, 2005) (What Are the Requirements Authorized State, Tribe, and Local Programs' Reporting Systems Must Meet?), referenced in Section 611.105.

Appendix B to 40 CFR ~~136~~, ~~Appendices B and C (2003)~~ 136 (2005),  
~~referenced~~ referenced in Sections 611.359, ~~611.609~~ 611.609, and 611.646.

d) This Part incorporates no later amendments or editions.

(Source: Amended at 30 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### Section 611.105 Electronic Reporting

The filing of any document pursuant to any provision of this Part as an electronic document is subject to this Section.

a) Scope and Applicability.

1) The USEPA, the Board, or the Agency may allow for the filing of electronic documents. This Section does not require submission of electronic documents in lieu of paper documents. This Section sets forth the requirements for the optional electronic filing of any report or document that must be submitted to the appropriate of the following:

A) To USEPA directly under Title 40 of the Code of Federal Regulations; or

B) To the Board or the Agency pursuant to any provision of 35 Ill. Adm. Code 702 through 705, 720 through 728, 730, 733, 738, or 739.

2) Electronic document filing under this Section can begin only after USEPA has first done as follows:

A) As to filing with USEPA, USEPA has published a notice in the Federal Register announcing that USEPA is prepared to receive documents required or permitted by the identified part or subpart of Title 40 of the Code of Federal Regulations in an electronic format; or

B) As to filing with the State, USEPA has granted approval of any electronic document receiving system established by the Board or the Agency that meets the requirements of 40 CFR 3.2000, incorporated by reference in Section 611.102(c).

3) This Section does not apply to any of the following documents, whether or not the document is a document submitted to satisfy the requirements cited in subsection (a)(1) of this Section:

A) Any document submitted via facsimile;

B) Any document submitted via magnetic or optical media, such as diskette, compact disc, digital video disc, or tape; or

C) Any data transfer between USEPA, any state, or any local government and either the Board or the Agency as part of administrative arrangements between the parties to the transfer to share data.

4) Upon USEPA conferring approval for the filing of any types of documents as electronic documents, as described in subsection (a)(2)(B) of this Section, the Agency or the Board, as appropriate, must publish a Notice of Public Information in the Illinois Register that describes the documents approved for submission as electronic documents, the electronic document receiving system approved to receive them, the acceptable formats and procedures for their submission, and the date on which the Board or the Agency will begin to receive those submissions. In the event of cessation of USEPA approval or receiving any type of document as an electronic document, the Board or the Agency must similarly cause publication of a Notice of Public Information in the Illinois Register.

BOARD NOTE: Subsection (a) of this Section is derived from 40 CFR 3.1, as added at 70 Fed. Reg. 59848 (Oct. 13, 2005).

b) Definitions. For the purposes of this Section, terms will have the meaning attributed them in 40 CFR 3.3, incorporated by reference in 35 Ill. Adm. Code 611.102(c).

c) Procedures for submission of electronic documents to USEPA. Except as provided in subsection (a)(3) of this Section, any person who is required under Title 40 of the Code of Federal Regulations to create and submit or otherwise provide a document to USEPA may satisfy this requirement with an electronic document, in lieu of a paper document, provided the following conditions are met:

1) The person satisfies the requirements of 40 CFR 3.10, incorporated by reference in Section 611.102(c); and

2) USEPA has first published a notice in the Federal Register as described in subsection (a)(2) of this Section.

BOARD NOTE: Subsection (c) of this Section is derived from 40 CFR 3.2(a) and subpart B of 40 CFR 3, as added at 70 Fed. Reg. 59848 (Oct. 13, 2005).

d) Procedures for submission of electronic documents to the Board or the Agency.

1) The Board or the Agency may, but is not required to, establish procedures for the electronic submission of documents that meet the requirements of 40 CFR 3.2 and 3.2000, incorporated by reference in Section 611.102(c). The Board or the Agency must establish any such procedures under the Administrative Procedure Act [5 ILCS 100/Art. 5].

2) The Board or the Agency may not accept electronic documents under this Section until after USEPA has approved the procedures in writing, and the Board or the Agency has published a notice of ~~such that~~ approval in the Illinois Register. Nothing in this subsection (d) limits the authority of the Board or the Agency under the Illinois Environmental Protection Act [415 ILCS 5] to accept documents filed electronically.

BOARD NOTE: Subsection (d) of this Section is derived from 40 CFR 3.2(b) and subpart D of 40 CFR 3, as added at 70 Fed. Reg. 59848 (Oct. 13, 2005).

e) Effects of submission of an electronic document.

1) If a person who submits a document as an electronic document fails to comply with the requirements of this Section, that person is subject to the penalties prescribed for failure to comply with the requirement that the electronic document was intended to satisfy.

2) Where a document submitted as an electronic document to satisfy a reporting requirement bears an electronic signature, the electronic signature legally binds, obligates, and makes the signer responsible to the same extent as the signer's handwritten signature would on a paper document submitted to satisfy the same reporting requirement.

3) Proof that a particular signature device was used to create an electronic signature will suffice to establish that the individual uniquely entitled to use the device did so with the intent to sign the electronic document and give it effect.

4) Nothing in this Section limits the use of electronic documents or information derived from electronic documents as evidence in enforcement or other proceedings.

BOARD NOTE: Subsection (e) of this Section is derived from 40 CFR 3.4 and 3.2000(c), as added at 70 Fed. Reg. 59848 (Oct. 13, 2005).

f) Public document subject to State laws. Any electronic document filed with the Board is a public document. The document, its filing, its retention by the Board, and its availability for public inspection and copying are subject to various State laws, including, but not limited to, the following:

1) The Administrative Procedure Act [5 ILCS 100];

2) The Freedom of Information Act [5 ILCS 140];

3) The State Records Act [5 ILCS 160];

4) The Electronic Commerce Security Act [5 ILCS 175];

5) The Environmental Protection Act [415 ILCS 5];

6) Regulations relating to public access to Board records (2 Ill. Adm. Code 2175); and

7) Board procedural rules relating to protection of trade secrets and confidential information (35 Ill. Adm. Code 130).

g) Nothing in this Section or in any provisions adopted pursuant to subsection (c)(1) of this Section will create any right or privilege to submit any document as an electronic document.

BOARD NOTE: Subsection (g) of this Section is derived from 40 CFR 3.2(c), as added at 70 Fed. Reg. 59848 (Oct. 13, 2005).

BOARD NOTE: Derived from 40 CFR 3, as added, and 40 CFR 142.10(g) (2005), as amended at 70 Fed. Reg. 59848 (Oct. 13, 2005).

(Source: Added at 30 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 611.111 Relief Equivalent to SDWA Section 1415(a) Variances

This Section is intended to describe how the Board grants State relief equivalent to that available from USEPA under section 1415(a)(1)(A) and (a)(1)(B) of the SDWA (42 USC 300g-4(a)(1)(A) and (a)(1)(B)). SDWA section 1415 variances do not require ultimate compliance within five years in every situation. Variances under Sections 35-37 of the Act [415 ILCS 5/35-37] do require compliance within five years in every case. Consequently, a PWS may have the option of seeking State regulatory relief equivalent to a SDWA section 1415 variance through one of three procedural mechanisms: a variance under Sections 35-37 of the Act [415 ILCS 5/35-37] and Subpart B of 35 Ill. Adm. Code 104; a site-specific rule under Sections 27-28 of the Act [415 ILCS 5/27-28] and 35 Ill. Adm. Code 102; or an adjusted standard under Section 28.1 of the Act [415 ILCS 5/28.1] and Subpart D of 35 Ill. Adm. Code 104.

a) The Board will grant a PWS a variance, a site-specific rule, or an adjusted standard from an MCL or a treatment technique pursuant to this Section.

1) The PWS must file a petition pursuant to 35 Ill. Adm. Code 102 or 104, as applicable.

2) If a State requirement does not have a federal counterpart, the Board may grant relief from the State requirements without following this Section.

b) Relief from an MCL.

1) As part of the justification for relief from an MCL under this Section, the PWS must demonstrate the following:

A) Because of characteristics of the raw water sources and alternative sources that are reasonably available to the system, the PWS cannot meet the MCL; and

B) The PWS will install or has installed the best available technology (BAT) (as identified in Subpart F of this Part), treatment technique, or other means that the Agency finds available. BAT may vary depending on the following:

i) The number of persons served by the system;

ii) Physical conditions related to engineering feasibility; and

iii) Costs of compliance; and

C) The variance will not result in an unreasonable risk to health.

2) In any order granting relief under this subsection, the Board will prescribe a schedule for the following:

A) Compliance, including increments of progress, by the PWS, with each MCL with respect to which the relief was granted; and

B) Implementation by the PWS of each additional control measure for each MCL with respect to which the relief is granted, during the period ending on the date compliance with such requirement is required.

3) Schedule of compliance for relief from an MCL.

- A) A schedule of compliance will require compliance with each MCL with respect to which the relief was granted as expeditiously as practicable.
- B) If the Board prescribes a schedule requiring compliance with an MCL for which the relief is granted later than five years from the date of issuance of the relief, the Board will do the following:
- i) Document its rationale for the extended compliance schedule;
  - ii) Discuss the rationale for the extended compliance schedule in the required public notice and opportunity for public hearing; and
  - iii) Provide the shortest practicable time schedule feasible under the circumstances.
- c) Relief from a treatment technique requirement.
- 1) As part of the justification for relief from a treatment technique requirement under this Section, the PWS must demonstrate that the treatment technique is not necessary to protect the health of persons served because of the nature of the raw water source.
  - 2) The Board may prescribe monitoring and other requirements as a condition for relief from a treatment technique requirement.
- d) The Board will hold at least one public hearing. In addition the Board will accept comments as appropriate pursuant to 35 Ill. Adm. Code 102 or 104.
- e) The Board will not grant relief from any of the following:
- 1) From the MCL for total coliforms. However, the Board may grant a variance from the total coliform MCL of Section 611.325 for PWSs that prove that the violation of the total coliform MCL is due to persistent growth of total coliform in the distribution system, rather than from fecal or pathogenic contamination, from a treatment lapse or deficiency, or from a problem in the operation or maintenance of the distribution system.
  - 2) From any of the treatment technique requirements of Subpart B of this Part.
  - 3) From the residual disinfectant concentration (RDC) requirements of Sections 611.241(c) and 611.242(b).
- f) The Agency must promptly send USEPA the opinion and order of the Board granting relief pursuant to this Section. The Board may reconsider and modify a grant of relief, or relief conditions, if USEPA notifies the Board of a finding pursuant to section 1415 of the SDWA (42 USC 300g-4).
- g) In addition to the requirements of this Section, the provisions of Section 611.130 or 611.131 may apply to relief granted pursuant to this Section.

BOARD NOTE: Derived from 40 CFR 141.4 (2002)-(2005), from section 1415(a)(1)(A) and (a)(1)(B) of the SDWA and from the "Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems using Surface Water Sources", incorporated by reference in Section 611.102. USEPA has reserved the discretion to review and modify or nullify

Board determinations made pursuant to this Section at 40 CFR 142.23 (2002)---  
(2005).

(Source: Amended at 30 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### SUBPART B: FILTRATION AND DISINFECTION

##### Section 611.212 Groundwater under Direct Influence of Surface Water

The Agency shall, pursuant to Section 611.201, require all CWSs to demonstrate whether they are using "groundwater under the direct influence of surface water." The Agency must determine with information provided by the supplier whether a PWS uses "groundwater under the direct influence of surface water" on an individual basis. The Agency must determine that a groundwater source is under the direct influence of surface water based upon the following:

- a) Physical characteristics of the source: whether the source is obviously a surface water source, such as a lake or stream. Other sources that may be subject to influence from surface waters include: springs, infiltration galleries, wells, or other collectors in subsurface aquifers.
- b) Well construction characteristics and geology with field evaluation.
  - 1) The Agency may use the wellhead protection program's requirements, which include delineation of wellhead protection areas, assessment of sources of contamination and implementation of management control systems, to determine if the wellhead is under the influence of surface water.
  - 2) Wells less than or equal to 50 feet in depth are likely to be under the influence of surface water.
  - 3) Wells greater than 50 feet in depth are likely to be under the influence of surface water, unless they include the following:
    - A) A surface sanitary seal using bentonite clay, concrete, or similar material.
    - B) A well casing that penetrates consolidated (slowly permeable) material; and
    - C) A well casing that is only perforated or screened below consolidated (slowly permeable) material.
  - 4) A source that is less than 200 feet from any surface water is likely to be under the influence of surface water.
- c) Any structural modifications to prevent the direct influence of surface water and eliminate the potential for *Giardia lamblia* cyst contamination.
- d) Source water quality records. The following are indicative that a source is under the influence of surface water:
  - 1) A record of total coliform or fecal coliform contamination in untreated samples collected over the past three years;
  - 2) A history of turbidity problems associated with the source; or

3) A history of known or suspected outbreaks of Giardia lamblia, Cryptosporidium or other pathogenic organisms associated with surface water that has been attributed to that source.

e) Significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH.

1) A variation in turbidity of 0.5 NTU or more over one year is indicative of surface influence.

2) A variation in temperature of ~~9~~-nine Fahrenheit degrees or more over one year is indicative of surface influence.

f) Significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH that closely correlate to climatological or surface water conditions are indicative of surface water influence.

1) Evidence of particulate matter associated with the surface water; or,

2) Turbidity or temperature data that correlates to that of a nearby surface water source.

g) Particulate analysis: Significant occurrence of insects or other macroorganisms, algae, or large diameter pathogens such as Giardia lamblia is indicative of surface influence.

1) "Large diameter" particulates are those over ~~7~~-seven micrometers.

2) Particulates must be measured as specified in the "Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems using Surface Water Sources," incorporated by reference in Section 611.102.

h) The potential for contamination by small-diameter pathogens, such as bacteria or viruses, does not alone render the source "under the direct influence of surface water."

BOARD NOTE: Derived from the definition of "groundwater under the direct influence of surface water" in 40 CFR 141.2-~~(2002)~~ (2005); from the Preamble at 54 Fed. Reg. 27489 (June 29, 1989); and from the USEPA "Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems using Surface Water Sources," incorporated by reference in Section 611.102.

(Source: Amended at 30 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### SUBPART G: LEAD AND COPPER

##### Section 611.359 Analytical Methods

Analyses for lead, copper, pH, conductivity, calcium, alkalinity, orthophosphate, silica, and temperature must be conducted using the methods set forth in Section 611.611(a).

a) Analyses for lead and copper performed for the purposes of compliance with this Subpart G must only be conducted by laboratories that have been certified

by USEPA or the Agency. To obtain certification to conduct analyses for lead and copper, laboratories must do the following:

1) Analyze performance evaluation samples that include lead and copper provided by USEPA Environmental Monitoring and Support Laboratory or equivalent samples provided by the Agency; and

2) Achieve quantitative acceptance limits as follows:

A) For lead:  $\pm 30$  percent of the actual amount in the performance evaluation sample when the actual amount is greater than or equal to 0.005 mg/l (the PQL for lead is 0.005 mg/l);

B) For copper:  $\pm 10$  percent of the actual amount in the performance evaluation sample when the actual amount is greater than or equal to 0.050 mg/l (the PQL for copper is 0.050 mg/l);

C) Achieve the method detection limit (MDL) for lead (0.001 mg/l, as defined in Section 611.350(a)) according to the procedures in 35 Ill. Adm. Code 186 and appendix B to 40 CFR ~~136~~, Appendix B136: "Definition and Procedure for the Determination of the Method Detection Limit -- Revision 1.11" ~~(2002)~~ (2005), incorporated by reference in Section 611.102(c). This need only be accomplished if the laboratory will be processing source water composite samples under Section 611.358(a)(1)(C); and

D) Be currently certified by USEPA or the Agency to perform analyses to the specifications described in subsection (a)(2) of this Section.

BOARD NOTE: Subsection (a) is derived from 40 CFR 141.89(a) and (a)(1) ~~(2002)~~ (2005).

b) The Agency must, by a SEP issued pursuant to Section 611.110, allow a supplier to use previously collected monitoring data for the purposes of monitoring under this Subpart G if the data were collected and analyzed in accordance with the requirements of this Subpart G.

BOARD NOTE: Subsection (b) is derived from 40 CFR 141.89(a)(2) ~~(2002)~~ (2005).

c) Reporting lead and copper levels.

1) All lead and copper levels greater than or equal to the lead and copper PQL ( $Pb \geq 0.005$  mg/l and  $Cu \geq 0.050$  mg/l) must be reported as measured.

2) All lead and copper levels measured less than the PQL and greater than the MDL ( $0.005$  mg/l  $> Pb > MDL$  and  $0.050$  mg/l  $> Cu > MDL$ ) must be either reported as measured or as one-half the PQL set forth in subsection (a) of this Section (i.e., reported as 0.0025 mg/l for lead or 0.025 mg/l for copper).

3) All lead and copper levels below the lead and copper MDL ( $MDL > Pb$ ) must be reported as zero.

BOARD NOTE: Subsection (c) is derived from 40 CFR 141.89(a)(3) and (a)(4) ~~(2002)~~ (2005).

(Source: Amended at 30 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

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

Section 611.380 General Requirements

- a) The requirements of this Subpart I constitute NPDWRs.
- 1) The regulations in this Subpart I establish standards under which a CWS supplier or an NTNCWS supplier that adds a chemical disinfectant to the water in any part of the drinking water treatment process ~~or which provides water that contains a chemical disinfectant~~ must modify its practices to meet MCLs and MRDLs in Sections 611.312 and 611.313, respectively, and must meet the treatment technique requirements for DBP precursors in Section 611.385.
- 2) The regulations in this Subpart I establish standards under which a transient non-CWS supplier that uses chlorine dioxide as a disinfectant or oxidant must modify its practices to meet the MRDL for chlorine dioxide in Section 611.313.
- 3) The Board has established MCLs for TTHM and HAA5 and treatment technique requirements for DBP precursors to limit the levels of known and unknown DBPs that may have adverse health effects. These DBPs may include chloroform, bromodichloromethane, dibromochloromethane, bromoform, dichloroacetic acid, and trichloroacetic acid.
- b) Compliance dates.
- 1) CWSs and NTNCWSs. Unless otherwise noted, a supplier must comply with the requirements of this Subpart I as follows: A Subpart B system supplier serving 10,000 or more persons must comply with this Subpart I beginning January 1, 2002. A Subpart B system supplier serving fewer than 10,000 persons or a supplier using only groundwater not under the direct influence of surface water must comply with this Subpart I beginning January 1, 2004.
- 2) Transient non-CWSs. A Subpart B system supplier serving 10,000 or more persons and using chlorine dioxide as a disinfectant or oxidant must comply with any requirements for chlorine dioxide in this Subpart I beginning January 1, 2002. A Subpart B system supplier serving fewer than 10,000 persons and using chlorine dioxide as a disinfectant or oxidant or a supplier using only groundwater not under the direct influence of surface water and using ~~that uses~~ chlorine dioxide as a disinfectant or oxidant must comply with any requirements for chlorine dioxide in this Subpart I beginning January 1, 2004.
- c) Each CWS or NTNCWS supplier regulated under subsection (a) of this Section must be operated by qualified personnel who meet the requirements specified in 35 Ill. Adm. Code 680.
- d) Control of disinfectant residuals. Notwithstanding the MRDLs in Section 611.313, a supplier may increase residual disinfectant levels in the distribution system of chlorine or chloramines (but not chlorine dioxide) to a level and for a time necessary to protect public health, to address specific microbiological contamination problems caused by circumstances such as, but not limited to, distribution line breaks, storm run-off events, source water contamination events, or cross-connection events.

BOARD NOTE: Derived from 40 CFR 141.130 (2002)-(2005).

(Source: Amended at 30 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

SUBPART N: INORGANIC MONITORING AND ANALYTICAL REQUIREMENTS

Section 611.609 Determining Compliance

Compliance with the MCLs of Section 611.300 or 611.301 (as appropriate) must be determined based on the analytical results obtained at each sampling point.

a) For suppliers that monitor at a frequency greater than annual, compliance with the MCLs for antimony, arsenic (effective January 22, 2004), asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, or thallium is determined by a running annual average at each sampling point. Effective January 22, 2004, if a system fails to collect the required number of samples, compliance (average concentration) will be based on the total number of samples collected.

- 1) If the average at any sampling point is greater than the MCL, then the supplier is out of compliance.
- 2) If any one sample would cause the annual average to be exceeded, then the supplier is out of compliance immediately.
- 3) Any sample below the method detection limit must be calculated at zero for the purpose of determining the annual average.

BOARD NOTE: The "method detection limit" is different from the "detection limit," as set forth in Section 611.600. The "method detection limit" is the level of contaminant that can be determined by a particular method with a 95 percent degree of confidence, as determined by the method outlined in appendix B to 40 CFR 136, ~~Appendix B~~, incorporated by reference at Section 611.102.

b) For suppliers that monitor annually or less frequently, compliance with the MCLs for antimony, arsenic (effective January 22, 2004), asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, or thallium is determined by the level of the contaminant at any sampling point. If confirmation samples are required by the Agency, the determination of compliance will be based on the average of the annual average of the initial MCL exceedence and any Agency-required confirmation samples. Effective January 22, 2004, if a supplier fails to collect the required number of samples, compliance (average concentration) will be based on the total number of samples collected.

c) Compliance with the MCLs for nitrate and nitrite is determined based on one sample if the levels of these contaminants are below the MCLs. If the levels of nitrate or nitrite in the initial sample exceed the MCLs, Section 611.606 requires confirmation sampling, and compliance is determined based on the average of the initial and confirmation samples.

d) Arsenic sampling results must be reported to the nearest 0.001 mg/l.

BOARD NOTE: Derived from 40 CFR 141.23(i) (2002)-(2005).

(Source: Amended at 30 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

SUBPART O: ORGANIC MONITORING AND ANALYTICAL REQUIREMENTS

Section 611.646 Phase I, Phase II, and Phase V Volatile Organic Contaminants

Monitoring of the Phase I, Phase II, and Phase V VOCs for the purpose of determining compliance with the MCL must be conducted as follows:

a) Definitions. As used in this Section the following have the given meanings:

"Detect" and "detection" mean that the contaminant of interest is present at a level greater than or equal to the "detection limit."

"Detection limit" means 0.0005 mg/l.

BOARD NOTE: Derived from 40 CFR 141.24(f)(7), (f)(11), (f)(14)(i), and (f)(20) ~~(2003)~~ (2005). This is a "trigger level" for Phase I, Phase II, and Phase V VOCs inasmuch as it prompts further action. The use of the term "detect" in this Section is not intended to include any analytical capability of quantifying lower levels of any contaminant, or the "method detection limit." Note, however, that certain language at the end of federal paragraph (f)(20) is capable of meaning that the "method detection limit" is used to derive the "detection limit." The Board has chosen to disregard that language at the end of paragraph (f)(20) in favor of the more direct language of paragraphs (f)(7) and (f)(11).

"Method detection limit," as used in subsections (q) and (t) of this Section means the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte.

BOARD NOTE: Derived from appendix B to 40 CFR ~~136, Appendix B (2003)~~ ~~136~~ (2005). The method detection limit is determined by the procedure set forth in appendix B to 40 CFR 136, ~~Appendix B~~ incorporated by reference in Section 611.102(c). See subsection (t) of this Section.

b) Required sampling. Each supplier must take a minimum of one sample at each sampling point at the times required in subsection (u) of this Section.

c) Sampling points.

1) Sampling points for a GWS. Unless otherwise provided by a SEP granted by the Agency pursuant to Section 611.110, a GWS supplier must take at least one sample from each of the following points: each entry point that is representative of each well after treatment.

2) Sampling points for an SWS or mixed system supplier. Unless otherwise provided by a SEP granted by the Agency pursuant to Section 611.110, an SWS or mixed system supplier must sample from each of the following points:

A) Each entry point after treatment; or

B) Points in the distribution system that are representative of each source.

3) The supplier must take each sample at the same sampling point unless the Agency has granted a SEP pursuant to Section 611.110 that designates another location as more representative of each source, treatment plant, or within the distribution system.

4) If a system draws water from more than one source, and the sources are combined before distribution, the supplier must sample at an entry point during periods of normal operating conditions when water is representative of all sources being used.

BOARD NOTE: Subsections (b) and (c) of this Section derived from 40 CFR 141.24(f)(1) through (f)(3) (~~2003~~)(2005).

d) Each CWS and NTNCWS supplier must take four consecutive quarterly samples for each of the Phase I VOCs, excluding vinyl chloride, and Phase II VOCs during each compliance period, beginning in the compliance period starting in the initial compliance period.

e) Reduction to annual monitoring frequency. If the initial monitoring for the Phase I, Phase II, and Phase V VOCs, as allowed in subsection (r)(1) of this Section, was completed by December 31, 1992, and the supplier did not detect any of the Phase I VOCs, including vinyl chloride; Phase II VOCs; or Phase V VOCs, then the supplier must take one sample annually beginning in the initial compliance period.

f) GWS reduction to triennial monitoring frequency. After a minimum of three years of annual sampling, GWS suppliers that have not previously detected any of the Phase I VOCs, including vinyl chloride; Phase II VOCs; or Phase V VOCs must take one sample during each three-year compliance period.

g) A CWS or NTNCWS supplier that has completed the initial round of monitoring required by subsection (d) of this Section and which did not detect any of the Phase I VOCs, including vinyl chloride; Phase II VOCs; and Phase V VOCs may apply to the Agency for a SEP pursuant to Section 611.110 that releases it from the requirements of subsection (e) or (f) of this Section. A supplier that serves fewer than 3300 service connections may apply to the Agency for a SEP that releases it from the requirements of subsection (d) of this Section as to 1,2,4-trichlorobenzene.

BOARD NOTE: Derived from 40 CFR 141.24(f)(7) and (f)(10) (~~2003~~)(2005), and the discussion at 57 Fed. Reg. 31825 (July 17, 1992). Provisions concerning the term of the waiver appear in subsections (i) and (j) of this Section. The definition of "detect," parenthetically added to the federal counterpart paragraph, is in subsection (a) of this Section.

h) Vulnerability assessment. The Agency must consider the factors of Section 611.110(e) in granting a SEP from the requirements of subsection (d), (e), or (f) of this Section sought pursuant to subsection (g) of this Section.

i) A SEP issued to a GWS pursuant to subsection (g) of this Section is for a maximum of six years, except that a SEP as to the subsection (d) of this Section monitoring for 1,2,4-trichlorobenzene must apply only to the initial round of monitoring. As a condition of a SEP, except as to a SEP from the initial round of subsection (d) of this Section monitoring for 1,2,4-trichlorobenzene, the supplier shall, within 30 months after the beginning of the period for which the waiver was issued, reconfirm its vulnerability assessment required by subsection (h) of this Section and submitted pursuant to subsection (g) of this Section, by taking one sample at each sampling point and reapplying for a SEP pursuant to subsection (g) of this Section. Based on this application, the Agency must do either of the following:

1) If it determines that the PWS meets the standard of Section 611.610(e), issue a SEP that reconfirms the prior SEP for the remaining three-year compliance period of the six-year maximum term; or

2) Issue a new SEP requiring the supplier to sample annually.

BOARD NOTE: Subsection (i) of this Section does not apply to an SWS or mixed system supplier.

j) Special considerations for a SEP for an SWS or mixed-system supplier.

1) The Agency must determine that an SWS is not vulnerable before issuing a SEP pursuant to Section 611.110 to an SWS supplier. A SEP issued to an SWS or mixed system supplier pursuant to subsection (g) of this Section is for a maximum of one compliance period; and

2) The Agency may require, as a condition to a SEP issued to an SWS or mixed supplier, that the supplier take such samples for Phase I, Phase II, and Phase V VOCs at such a frequency as the Agency determines are necessary, based on the vulnerability assessment.

BOARD NOTE: There is a great degree of similarity between 40 CFR 141.24(f)(7) (~~2003~~—(2005), the provision applicable to GWSs, and 40 CFR 141.24(f)(10) (~~2003~~) (2005), the provision for SWSs. The Board has consolidated the common requirements of both paragraphs into subsection (g) of this Section. Subsection (j) of this Section represents the elements unique to an SWSs or mixed system, and subsection (i) of this Section relates to a GWS supplier. Although 40 CFR 141.24(f)(7) and (f)(10) are silent as to a mixed system supplier, the Board has included a mixed system supplier with an SWS supplier because this best follows the federal scheme for all other contaminants.

k) If one of the Phase I VOCs, excluding vinyl chloride; a Phase II VOC; or a Phase V VOC is detected in any sample, then the following must occur:

1) The supplier must monitor quarterly for that contaminant at each sampling point that resulted in a detection.

2) Annual monitoring.

A) The Agency must grant a SEP pursuant to Section 611.110 that allows a supplier to reduce the monitoring frequency to annual at a sampling point if it determines that the sampling point is reliably and consistently below the MCL.

B) A request for a SEP must include the following minimal information:

i) For a GWS, two quarterly samples.

ii) For an SWS or mixed system supplier, four quarterly samples.

C) In issuing a SEP, the Agency must specify the level of the contaminant upon which the "reliably and consistently" determination was based. Any SEP that allows less frequent monitoring based on an Agency "reliably and consistently" determination must include a condition requiring the supplier to resume quarterly monitoring pursuant to subsection (k)(1) of this Section if it violates the MCL specified by Section 611.311.

3) Suppliers that monitor annually must monitor during the quarters that previously yielded the highest analytical result.

4) Suppliers that do not detect a contaminant at a sampling point in three consecutive annual samples may apply to the Agency for a SEP pursuant to Section 611.110 that allows it to discontinue monitoring for that contaminant at that point, as specified in subsection (g) of this Section.

5) A GWS supplier that has detected one or more of the two-carbon contaminants listed in subsection (k) (5) (A) of this Section must monitor quarterly for vinyl chloride as described in subsection (k) (5) (B) of this Section, subject to the limitation of subsection (k) (5) (C) of this Section.

A) "Two-carbon contaminants" (Phase I or II VOC) are the following:

1,2-Dichloroethane (Phase I)

1,1-Dichloroethylene (Phase I)

cis-1,2-Dichloroethylene (Phase II)

trans-1,2-Dichloroethylene (Phase II)

Tetrachloroethylene (Phase II)

1,1,1-Trichloroethylene (Phase I)

Trichloroethylene (Phase I)

B) The supplier must sample quarterly for vinyl chloride at each sampling point at which it detected one or more of the two-carbon contaminants listed in subsection (k) (5) (A) of this Section.

C) The Agency must grant a SEP pursuant to Section 611.110 that allows the supplier to reduce the monitoring frequency for vinyl chloride at any sampling point to once in each three-year compliance period if it determines that the supplier has not detected vinyl chloride in the first sample required by subsection (k) (5) (B) of this Section.

1) Quarterly monitoring following MCL violations.

1) Suppliers that violate an MCL for one of the Phase I VOCs, including vinyl chloride; Phase II VOCs; or Phase V VOCs, as determined by subsection (o) of this Section, must monitor quarterly for that contaminant, at the sampling point where the violation occurred, beginning the next quarter after the violation.

2) Annual monitoring.

A) The Agency must grant a SEP pursuant to Section 611.110 that allows a supplier to reduce the monitoring frequency to annually if it determines that the sampling point is reliably and consistently below the MCL.

B) A request for a SEP must include the following minimal information: four quarterly samples.

C) In issuing a SEP, the Agency must specify the level of the contaminant upon which the "reliably and consistently" determination was based. Any SEP

that allows less frequent monitoring based on an Agency "reliably and consistently" determination must include a condition requiring the supplier to resume quarterly monitoring pursuant to subsection (l)(1) of this Section if it violates the MCL specified by Section 611.311.

D) The supplier must monitor during the quarters that previously yielded the highest analytical result.

m) Confirmation samples. The Agency may issue a SEP pursuant to Section 610.110 to require a supplier to use a confirmation sample for results that it finds dubious for whatever reason. The Agency must state its reasons for issuing the SEP if the SEP is Agency-initiated.

1) If a supplier detects any of the Phase I, Phase II, or Phase V VOCs in a sample, the supplier must take a confirmation sample as soon as possible, but no later than 14 days after the supplier receives notice of the detection.

2) Averaging is as specified in subsection (o) of this Section.

3) The Agency must delete the original or confirmation sample if it determines that a sampling error occurred, in which case the confirmation sample will replace the original or confirmation sample.

n) This subsection (n) corresponds with 40 CFR 141.24(f)(14), an optional USEPA provision relating to compositing of samples that USEPA does not require for state programs. This statement maintains structural consistency with USEPA rules.

o) Compliance with the MCLs for the Phase I, Phase II, and Phase V VOCs must be determined based on the analytical results obtained at each sampling point. Effective January 22, 2004, if one sampling point is in violation of an MCL, the system is in violation of the MCL.

1) Effective January 22, 2004, for a supplier that monitors more than once per year, compliance with the MCL is determined by a running annual average at each sampling point.

2) Effective January 22, 2004, a supplier that monitors annually or less frequently whose sample result exceeds the MCL must begin quarterly sampling. The system will not be considered in violation of the MCL until it has completed one year of quarterly sampling.

3) Effective January 22, 2004, if any sample result will cause the running annual average to exceed the MCL at any sampling point, the supplier is out of compliance with the MCL immediately.

4) Effective January 22, 2004, if a supplier fails to collect the required number of samples, compliance will be based on the total number of samples collected.

5) Effective January 22, 2004, if a sample result is less than the detection limit, zero will be used to calculate the annual average.

6) Until January 22, 2004, for a supplier that conducts monitoring at a frequency greater than annual, compliance is determined by a running annual average of all samples taken at each sampling point.

A) If the annual average of any sampling point is greater than the MCL, then the supplier is out of compliance.

B) If the initial sample or a subsequent sample would cause the annual average to exceed the MCL, then the supplier is out of compliance immediately.

C) Any samples below the detection limit must be deemed as zero for purposes of determining the annual average.

7) Until January 22, 2004, if monitoring is conducted annually, or less frequently, the supplier is out of compliance if the level of a contaminant at any sampling point is greater than the MCL. Until January 22, 2004, if a confirmation sample is taken, the determination of compliance is based on the average of two samples.

p) This subsection (p) corresponds with 40 CFR 141.24(f)(16), which USEPA removed and reserved. This statement maintains structural consistency with the federal regulations.

q) Analysis under this Section must only be conducted by laboratories that have received certification by USEPA or the Agency according to the following conditions:

1) To receive certification to conduct analyses for the Phase I VOCs, excluding vinyl chloride; Phase II VOCs; and Phase V VOCs, the laboratory must do the following:

A) It must analyze performance evaluation (PE) samples that include these substances provided by the Agency pursuant to 35 Ill. Adm. Code 186.170;

B) It must achieve the quantitative acceptance limits under subsections (q)(1)(C) and (q)(1)(D) of this Section for at least 80 percent of the regulated organic contaminants in the PE sample;

C) It must achieve quantitative results on the analyses performed under subsection (q)(1)(A) of this Section that are within  $\pm 20$  percent of the actual amount of the substances in the PE sample when the actual amount is greater than or equal to 0.010 mg/l;

D) It must achieve quantitative results on the analyses performed under subsection (q)(1)(A) of this Section that are within  $\pm 40$  percent of the actual amount of the substances in the PE sample when the actual amount is less than 0.010 mg/l; and

E) It must achieve a method detection limit of 0.0005 mg/l, according to the procedures in appendix B to 40 CFR 136, ~~Appendix B~~, incorporated by reference in Section 611.102.

2) To receive certification to conduct analyses for vinyl chloride the laboratory must do the following:

A) It must analyze PE samples provided by the Agency pursuant to 35 Ill. Adm. Code 186.170;

B) It must achieve quantitative results on the analyses performed under subsection (q)(2)(A) of this Section that are within  $\pm 40$  percent of the actual amount of vinyl chloride in the PE sample;

C) It must achieve a method detection limit of 0.0005 mg/l, according to the procedures in appendix B to 40 CFR 136, ~~Appendix B~~, incorporated by reference in Section 611.102; and

D) It must obtain certification pursuant to subsection (q) (1) of this Section for Phase I VOCs, excluding vinyl chloride; Phase II VOCs; and Phase V VOCs.

r) This subsection (r) corresponds with 40 CFR 141.24(f) (18), an obsolete provision that relates to the initial compliance period from 1993 through 1995. This statement maintains consistency with the federal regulations.

s) The Agency shall, by a SEP issued pursuant to Section 611.110, increase the number of sampling points or the frequency of monitoring if it determines that it is necessary to detect variations within the PWS.

t) Each laboratory certified for the analysis of Phase I, Phase II, or Phase V VOCs pursuant to subsection (q) (1) or (q) (2) of this Section shall do the following:

1) Determine the method detection limit (MDL), as defined in appendix B to 40 CFR 136, ~~Appendix B~~, incorporated by reference in Section 611.102, at which it is capable of detecting the Phase I, Phase II, and Phase V VOCs; and,

2) Achieve an MDL for each Phase I, Phase II, and Phase V VOC that is less than or equal to 0.0005 mg/l.

u) Each supplier must monitor, within each compliance period, at the time designated by the Agency by SEP pursuant to Section 611.110.

v) A new system supplier or a supplier that uses a new source of water that begins operation after January 22, 2004 must demonstrate compliance with the MCL within a period of time specified by a permit issued by the Agency. The supplier must also comply with the initial sampling frequencies specified by the Agency to ensure the supplier can demonstrate compliance with the MCL. Routine and increased monitoring frequencies must be conducted in accordance with the requirements in this Section.

BOARD NOTE: Derived from 40 CFR 141.24(f) (~~2003~~)-(2005).

(Source: Amended at 30 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

Section 611. ~~Appendix~~ APPENDIX D Defined Substrate Method for the Simultaneous Detection of Total Coliforms and Escherichia Coli from Drinking Water

Autoanalysis Colilert Presence-Absence (AC P-A) Method.

The AC P-A test format must be either a 100 ml 10-tube most probable number test (one tube positive denoting the presence of total coliforms in that sample) or a single vessel containing sufficient reagent to receive 100 ml of sample. The reagent is available from Access Medical Systems, Branford Connecticut.

The AC P-A method must be performed as follows:

1. For the 10-tube method, add 10 ml of water sample to each test tube. For the single-vessel method, add 100 ml of water sample to the vessel.
2. Dissolve the reagent powder by agitation. (This should produce a colorless solution.)
3. Incubate the test tubes or vessel at 35<sup>±</sup>°C for 24 hours.
4. Development of yellow during incubation denotes the presence of total coliforms in either the test tube or the vessel.
5. Expose each positive (yellow) test tube or vessel to a fluorescent (366 nm) light source. Fluorescence specifically demonstrates the presence of Escherichia coli.

BOARD NOTE: Derived from S. Edberg, M. Allen & D. Smith, "National Field Evaluation of a Defined Substrate Method for the Simultaneous Detection of Total Coliforms and Escherichia coli from Drinking Water: Comparison with Presence-Absence Techniques," Applied and Environmental Microbiology, vol. 55, pp. 1003-1008, as incorporated by reference at 40 CFR 141.21(f)(6)(iii) (2002)-(2005). This method is for use in conjunction with the requirements of Section 611.526.

(Source: Amended at 30 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)  
~~ILLINOIS REGISTER~~

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~~POLLUTION CONTROL BOARD~~

~~NOTICE OF PROPOSED AMENDMENTS~~

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

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PART 611  
PRIMARY DRINKING WATER STANDARDS

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 281 AUTHORITY: Implementing Sections 7.2, 17, and 17.5 and authorized by Section 27 of the  
 282 Environmental Protection Act [415 ILCS 5/7.2, 17, 17.5, and 27].  
 283

284 SOURCE: Adopted in R88-26 at 14 Ill. Reg. 16517, effective September 20, 1990; amended in  
 285 R90-21 at 14 Ill. Reg. 20448, effective December 11, 1990; amended in R90-13 at 15 Ill. Reg.  
 286 1562, effective January 22, 1991; amended in R91-3 at 16 Ill. Reg. 19010, effective December 1,  
 287 1992; amended in R92-3 at 17 Ill. Reg. 7796, effective May 18, 1993; amended in R93-1 at 17  
 288 Ill. Reg. 12650, effective July 23, 1993; amended in R94-4 at 18 Ill. Reg. 12291, effective July  
 289 28, 1994; amended in R94-23 at 19 Ill. Reg. 8613, effective June 20, 1995; amended in R95-17  
 290 at 20 Ill. Reg. 14493, effective October 22, 1996; amended in R98-2 at 22 Ill. Reg. 5020,  
 291 effective March 5, 1998; amended in R99-6 at 23 Ill. Reg. 2756, effective February 17, 1999;  
 292 amended in R99-12 at 23 Ill. Reg. 10348, effective August 11, 1999; amended in R00-8 at 23 Ill.  
 293 Reg. 14715, effective December 8, 1999; amended in R00-10 at 24 Ill. Reg. 14226, effective  
 294 September 11, 2000; amended in R01-7 at 25 Ill. Reg. 1329, effective January 11, 2001;  
 295 amended in R01-20 at 25 Ill. Reg. 13611, effective October 9, 2001; amended in R02-5 at 26 Ill.  
 296 Reg. 3522, effective February 22, 2002; amended in R03-4 at 27 Ill. Reg. 1183, effective January  
 297 10, 2003; amended in R03-15 at 27 Ill. Reg. 16447, effective October 10, 2003; amended in  
 298 R04-3 at 28 Ill. Reg. 5269, effective March 10, 2004; amended in R04-13 at 28 Ill. Reg. 12666,  
 299 effective August 26, 2004; amended in R05-6 at 29 Ill. Reg. 2287, effective January 28, 2005;  
 300 amended in R06-15 at 30 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.  
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SUBPART A: GENERAL

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**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.

"Colitag® Test" means "Colitag® Product as a Test for Detection and Identification of Coliforms and E. coli Bacteria in Drinking Water and Source Water as Required in National Primary Drinking Water Regulations," available from CPI International.

"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

345 Method for Detection and Identification of Coliform Bacteria and  
346 Escherichia coli in Finished Waters," available from EMD Chemicals Inc.  
347  
348 "NCRP" means "National Council on Radiation Protection."  
349  
350 "NTIS" means "National Technical Information Service."  
351  
352 "New Jersey Radium Method" means "Determination of Radium 228 in  
353 Drinking Water," available from the New Jersey Department of  
354 Environmental Protection.  
355  
356 "New York Radium Method" means "Determination of Ra-226 and Ra-  
357 228 (Ra-02)," available from the New York Department of Public Health.  
358  
359 "ONGP-MUG Test" (meaning "minimal medium ortho-nitrophenyl-beta-  
360 d-galactopyranoside-4-methyl-umbelliferyl -beta-d-glucuronide test"),  
361 also called the "Autoanalysis Colilert System," is Method 9223, available  
362 in "Standard Methods for the Examination of Water and Wastewater," 18<sup>th</sup>  
363 ed., from American Public Health Association.  
364  
365 "Palintest Method 1001" means "Method Number 1001," available from  
366 Palintest, Ltd. or the Hach Company.  
367  
368 "QuikChem Method 10-204-00-1-X" means "Digestion and distillation of  
369 total cyanide in drinking and wastewaters using MICRO DIST and  
370 determination of cyanide by flow injection analysis," available from  
371 Lachat Instruments.  
372  
373 "Readycult Coliforms 100 Presence/Absence Test" means "Readycult  
374 Coliforms 100 Presence/Absence Test for Detection and Identification of  
375 Coliform Bacteria and Escherichia coli in Finished Waters," available  
376 from EMD Chemicals Inc.  
377  
378 "SimPlate Method" means "IDEXX SimPlate TM HPC Test Method for  
379 Heterotrophs in Water," available from IDEXX Laboratories, Inc.  
380  
381 "Radiochemical Methods" means "Interim Radiochemical Methodology  
382 for Drinking Water," available from NTIS.  
383  
384 "Standard Methods" means "Standard Methods for the Examination of  
385 Water and Wastewater," available from the American Public Health  
386 Association or the American Waterworks Association.  
387

388 "Syngenta AG-625" means "Atrazine in Drinking Water by  
 389 Immunoassay," February 2001 is available from Syngenta Crop  
 390 Protection, Inc.  
 391

392 "Technical Bulletin 601" means "Technical Bulletin 601, Standard  
 393 Method of Testing for Nitrate in Drinking Water," July 1994, available  
 394 from Analytical Technology, Inc.  
 395

396 "Technicon Methods" means "Fluoride in Water and Wastewater,"  
 397 available from Bran & Luebbe.  
 398

399 "USDOE Manual" means "EML Procedures Manual," available from the  
 400 United State Department of Energy.  
 401

402 "USEPA Asbestos Methods-100.1" means Method 100.1, "Analytical  
 403 Method for Determination of Asbestos Fibers in Water," September 1983,  
 404 available from NTIS.  
 405

406 "USEPA Asbestos Methods-100.2" means Method 100.2, "Determination  
 407 of Asbestos Structures over 10-mm in Length in Drinking Water," June  
 408 1994, available from NTIS.  
 409

410 "USEPA Environmental Inorganics Methods" means "Methods for the  
 411 Determination of Inorganic Substances in Environmental Samples,"  
 412 August 1993, available from NTIS.  
 413

414 "USEPA Environmental Metals Methods" means "Methods for the  
 415 Determination of Metals in Environmental Samples," available from  
 416 NTIS.  
 417

418 "USEPA Inorganic Methods" means "Methods for Chemical Analysis of  
 419 Water and Wastes," March 1983, available from NTIS.  
 420

421 "USEPA Interim Radiochemical Methods" means "Interim Radiochemical  
 422 Methodology for Drinking Water," EPA 600/4-75-008 (revised), March  
 423 1976. Available from NTIS.  
 424

425 "USEPA Organic Methods" means "Methods for the Determination of  
 426 Organic Compounds in Drinking Water," July 1991, for Methods 502.2,  
 427 505, 507, 508, 508A, 515.1, and 531.1; "Methods for the Determination of  
 428 Organic Compounds in Drinking Water – Supplement I," July 1990, for  
 429 Methods 506, 547, 550, 550.1, and 551; and "Methods for the  
 430 Determination of Organic Compounds in Drinking Water – Supplement

431 II," August 1992, for Methods 515.2, 524.2, 548.1, 549.1, 552.1, and 555,  
 432 available from NTIS. Methods 504.1, 508.1, and 525.2 are available from  
 433 EPA EMSL; "Methods for the Determination of Organic Compounds" in  
 434 Drinking Water – Supplement II, August 1992, for Method 552.1;  
 435 "Methods for the Determination of Organic Compounds in Drinking  
 436 Water – Supplement III," August 1995, for Methods 502.2, 524.2, 551.1,  
 437 and 552.2. Method 515.4, "Determination of Chlorinated Acids in  
 438 Drinking Water by Liquid-Liquid Microextraction, Derivatization and Fast  
 439 Gas Chromatography with Electron Capture Detection," Revision 1.0,  
 440 April 2000, EPA 815/B-00/001, and Method 531.2, "Measurement of N-  
 441 methylcarbamoyloximes and N-methylcarbamates in Water by Direct  
 442 Aqueous Injection HPLC with Postcolumn Derivatization," Revision 1.0,  
 443 September 2001, EPA 815/B/01/002, are both available on-line from  
 444 USEPA, Office of Ground Water and Drinking Water.

445  
 446 "USEPA Radioactivity Methods" means "Prescribed Procedures for  
 447 Measurement of Radioactivity in Drinking Water," EPA 600/4-80-032,  
 448 August 1980. Available from NTIS.

449  
 450 "USEPA Radiochemical Analyses" means "Radiochemical Analytical  
 451 Procedures for Analysis of Environmental Samples," March 1979.  
 452 Available from NTIS.

453  
 454 "USEPA Radiochemistry Methods" means "Radiochemistry Procedures  
 455 Manual," EPA 520/5-84-006, December 1987. Available from NTIS.

456  
 457 "USEPA Technical Notes" means "Technical Notes on Drinking Water  
 458 Methods," available from NTIS.

459  
 460 "USGS Methods" means "Methods of Analysis by the U.S. Geological  
 461 Survey National Water Quality Laboratory – Determination of Inorganic  
 462 and Organic Constituents in Water and Fluvial Sediments," available from  
 463 NTIS and USGS.

464  
 465 "Waters Method B-1011" means "Waters Test Method for the  
 466 Determination of Nitrite/Nitrate in Water Using Single Column Ion  
 467 Chromatography," available from Waters Corporation, Technical Services  
 468 Division.

469  
 470 b) The Board incorporates the following publications by reference:

471  
 472 Advanced Polymer Systems, 3696 Haven Avenue, Redwood City, CA  
 473 94063 415-366-2626.

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Amco-AEPA-1 Polymer. See 40 CFR 141.22(a) (2005)(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," 17<sup>th</sup> Edition, 1989 (referred to as "Standard Methods,  
17<sup>th</sup> ed.").

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

"Standard Methods for the Examination of Water and  
Wastewater," 19<sup>th</sup> Edition, 1995 (referred to as "Standard  
Methods, 19<sup>th</sup> ed.").

"Standard Methods for the Examination of Water and  
Wastewater," 20<sup>th</sup> Edition, 1998 (referred to as "Standard Methods,  
20<sup>th</sup> 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," 13<sup>th</sup> Edition, 1971 (referred to as "Standard Methods,  
13<sup>th</sup> ed.").

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

517	Method 303, Total Radioactive Strontium and Strontium 90
518	in Water.
519	
520	Method 304, Radium in Water by Precipitation.
521	
522	Method 305, Radium 226 by Radon in Water (Soluble,
523	Suspended, and Total).
524	
525	Method 306, Tritium in Water.
526	
527	"Standard Methods for the Examination of Water and
528	Wastewater," 17 <sup>th</sup> Edition, 1989 (referred to as "Standard Methods,
529	17 <sup>th</sup> ed.").
530	
531	Method 7110 B, Gross Alpha and Gross Beta Radioactivity
532	in Water (Total, Suspended, and Dissolved).
533	
534	Method 7500-Cs B, Radioactive Cesium, Precipitation
535	Method.
536	
537	Method 7500- <sup>3</sup> H B, Tritium in Water.
538	
539	Method 7500-I B, Radioactive Iodine, Precipitation
540	Method.
541	
542	Method 7500-I C, Radioactive Iodine, Ion-Exchange
543	Method.
544	
545	Method 7500-I D, Radioactive Iodine, Distillation Method.
546	
547	Method 7500-Ra B, Radium in Water by Precipitation.
548	
549	Method 7500-Ra C, Radium 226 by Radon in Water
550	(Soluble, Suspended, and Total).
551	
552	Method 7500-Ra D, Radium, Sequential Precipitation
553	Method (Proposed).
554	
555	Method 7500-Sr B, Total Radioactive Strontium and
556	Strontium 90 in Water.
557	
558	Method 7500-U B, Uranium, Radiochemical Method
559	(Proposed).

560	
561	Method 7500-U C, Uranium, Isotopic Method (Proposed).
562	
563	"Standard Methods for the Examination of Water and
564	Wastewater," 18 <sup>th</sup> Edition, 1992 (referred to as "Standard Methods,
565	18 <sup>th</sup> ed.").
566	
567	Method 2130 B, Turbidity, Nephelometric Method.
568	
569	Method 2320 B, Alkalinity, Titration Method.
570	
571	Method 2510 B, Conductivity, Laboratory Method.
572	
573	Method 2550, Temperature, Laboratory and Field Methods.
574	
575	Method 3111 B, Metals by Flame Atomic Absorption
576	Spectrometry, Direct Air-Acetylene Flame Method.
577	
578	Method 3111 D, Metals by Flame Atomic Absorption
579	Spectrometry, Direct Nitrous Oxide-Acetylene Flame
580	Method.
581	
582	Method 3112 B, Metals by Cold-Vapor Atomic Absorption
583	Spectrometry, Cold-Vapor Atomic Absorption
584	Spectrometric Method.
585	
586	Method 3113 B, Metals by Electrothermal Atomic
587	Absorption Spectrometry, Electrothermal Atomic
588	Absorption Spectrometric Method.
589	
590	Method 3114 B, Metals by Hydride Generation/Atomic
591	Absorption Spectrometry, Manual Hydride
592	Generation/Atomic Absorption Spectrometric Method.
593	
594	Method 3120 B, Metals by Plasma Emission Spectroscopy,
595	Inductively Coupled Plasma (ICP) Method.
596	
597	Method 3500-Ca D, Calcium, EDTA Titrimetric Method.
598	
599	Method 3500-Mg E, Magnesium, Calculation Method.
600	
601	Method 4110 B, Determination of Anions by Ion
602	Chromatography, Ion Chromatography with Chemical

603	Suppression of Eluent Conductivity.
604	
605	Method 4500-CN <sup>-</sup> C, Cyanide, Total Cyanide after
606	Distillation.
607	
608	Method 4500-CN <sup>-</sup> E, Cyanide, Colorimetric Method.
609	
610	Method 4500-CN <sup>-</sup> F, Cyanide, Cyanide-Selective Electrode
611	Method.
612	
613	Method 4500-CN <sup>-</sup> G, Cyanide, Cyanides Amenable to
614	Chlorination after Distillation.
615	
616	Method 4500-Cl D, Chlorine, Amperometric Titration
617	Method.
618	
619	Method 4500-Cl E, Chlorine, Low-Level Amperometric
620	Titration Method.
621	
622	Method 4500-Cl F, Chlorine, DPD Ferrous Titrimetric
623	Method.
624	
625	Method 4500-Cl G, Chlorine, DPD Colorimetric Method.
626	
627	Method 4500-Cl H, Chlorine, Syringaldazine (FACTS)
628	Method.
629	
630	Method 4500-Cl I, Chlorine, Iodometric Electrode Method.
631	
632	Method 4500-ClO <sub>2</sub> C, Chlorine Dioxide, Amperometric
633	Method I.
634	
635	Method 4500-ClO <sub>2</sub> D, Chlorine Dioxide, DPD Method.
636	
637	Method 4500-ClO <sub>2</sub> E, Chlorine Dioxide, Amperometric
638	Method II (Proposed).
639	
640	Method 4500-F <sup>-</sup> B, Fluoride, Preliminary Distillation Step.
641	
642	Method 4500-F <sup>-</sup> C, Fluoride, Ion-Selective Electrode
643	Method.
644	
645	Method 4500-F <sup>-</sup> D, Fluoride, SPADNS Method.

646	
647	Method 4500-F <sup>-</sup> E, Fluoride, Complexone Method.
648	
649	Method 4500-H <sup>+</sup> B, pH Value, Electrometric Method.
650	
651	Method 4500-NO <sub>2</sub> <sup>-</sup> B, Nitrogen (Nitrite), Colorimetric
652	Method.
653	
654	Method 4500-NO <sub>3</sub> <sup>-</sup> D, Nitrogen (Nitrate), Nitrate Electrode
655	Method.
656	
657	Method 4500-NO <sub>3</sub> <sup>-</sup> E, Nitrogen (Nitrate), Cadmium
658	Reduction Method.
659	
660	Method 4500-NO <sub>3</sub> <sup>-</sup> F, Nitrogen (Nitrate), Automated
661	Cadmium Reduction Method.
662	
663	Method 4500-O <sub>3</sub> B, Ozone (Residual) (Proposed), Indigo
664	Colorimetric Method.
665	
666	Method 4500-P E, Phosphorus, Ascorbic Acid Method.
667	
668	Method 4500-P F, Phosphorus, Automated Ascorbic Acid
669	Reduction Method.
670	
671	Method 4500-Si D, Silica, Molybdosilicate Method.
672	
673	Method 4500-Si E, Silica, Heteropoly Blue Method.
674	
675	Method 4500-Si F, Silica, Automated Method for
676	Molybdate-Reactive Silica.
677	
678	Method 6651, Glyphosate Herbicide (Proposed).
679	
680	Method 7110 B, Gross Alpha and Beta Radioactivity
681	(Total, Suspended, and Dissolved), Evaporation Method for
682	Gross Alpha-Beta.
683	
684	Method 7110 C, Gross Alpha and Beta Radioactivity
685	(Total, Suspended, and Dissolved), Coprecipitation Method
686	for Gross Alpha Radioactivity in Drinking Water
687	(Proposed).
688	

689	Method 7500-Cs B, Radioactive Cesium, Precipitation
690	Method.
691	
692	Method 7500-3 H B, Tritium, Liquid Scintillation
693	Spectrometric Method.
694	
695	Method 7500-I B, Radioactive Iodine, Precipitation
696	Method.
697	
698	Method 7500-I C, Radioactive Iodine, Ion-Exchange
699	Method.
700	
701	Method 7500-I D, Radioactive Iodine, Distillation Method.
702	
703	Method 7500-Ra B, Radium, Precipitation Method.
704	
705	Method 7500-Ra C, Radium, Emanation Method.
706	
707	Method 7500-Ra D, Radium, Sequential Precipitation
708	Method (Proposed).
709	
710	Method 7500-Sr B, Total Radioactive Strontium and
711	Strontium 90, Precipitation Method.
712	
713	Method 7500-U B, Uranium, Radiochemical Method
714	(Proposed).
715	
716	Method 7500-U C, Uranium, Isotopic Method (Proposed).
717	
718	Method 9215 B, Heterotrophic Plate Count, Pour Plate
719	Method.
720	
721	Method 9221 A, Multiple-Tube Fermentation Technique
722	for Members of the Coliform Group, Introduction.
723	
724	Method 9221 B, Multiple-Tube Fermentation Technique
725	for Members of the Coliform Group, Standard Total
726	Coliform Fermentation Technique.
727	
728	Method 9221 C, Multiple-Tube Fermentation Technique
729	for Members of the Coliform Group, Estimation of
730	Bacterial Density.
731	

732	Method 9221 D, Multiple-Tube Fermentation Technique
733	for Members of the Coliform Group, Presence-Absence (P-
734	A) Coliform Test.
735	
736	Method 9221 E, Multiple-Tube Fermentation Technique
737	for Members of the Coliform Group, Fecal Coliform
738	Procedure.
739	
740	Method 9222 A, Membrane Filter Technique for Members
741	of the Coliform Group, Introduction.
742	
743	Method 9222 B, Membrane Filter Technique for Members
744	of the Coliform Group, Standard Total Coliform Membrane
745	Filter Procedure.
746	
747	Method 9222 C, Membrane Filter Technique for Members
748	of the Coliform Group, Delayed-Incubation Total Coliform
749	Procedure.
750	
751	Method 9222 D, Membrane Filter Technique for Members
752	of the Coliform Group, Fecal Coliform Membrane Filter
753	Procedure.
754	
755	Method 9223, Chromogenic Substrate Coliform Test
756	(Proposed).
757	
758	"Supplement to the 18 <sup>th</sup> Edition of Standard Methods for the
759	Examination of Water and Wastewater," American Public Health
760	Association, 1994.
761	
762	Method 6610, Carbamate Pesticide Method.
763	
764	"Standard Methods for the Examination of Water and
765	Wastewater," 19 <sup>th</sup> Edition, 1995 (referred to as "Standard Methods,
766	19 <sup>th</sup> ed.").
767	
768	Method 2130 B, Turbidity, Nephelometric Method.
769	
770	Method 2320 B, Alkalinity, Titration Method.
771	
772	Method 2510 B, Conductivity, Laboratory Method.
773	
774	Method 2550, Temperature, Laboratory, and Field

775	Methods.
776	
777	Method 3111 B, Metals by Flame Atomic Absorption
778	Spectrometry, Direct Air-Acetylene Flame Method.
779	
780	Method 3111 D, Metals by Flame Atomic Absorption
781	Spectrometry, Direct Nitrous Oxide-Acetylene Flame
782	Method.
783	
784	Method 3112 B, Metals by Cold-Vapor Atomic Absorption
785	Spectrometry, Cold-Vapor Atomic Absorption
786	Spectrometric Method.
787	
788	Method 3113 B, Metals by Electrothermal Atomic
789	Absorption Spectrometry, Electrothermal Atomic
790	Absorption Spectrometric Method.
791	
792	Method 3114 B, Metals by Hydride Generation/Atomic
793	Absorption Spectrometry, Manual Hydride
794	Generation/Atomic Absorption Spectrometric Method.
795	
796	Method 3120 B, Metals by Plasma Emission Spectroscopy,
797	Inductively Coupled Plasma (ICP) Method.
798	
799	Method 3500-Ca D, Calcium, EDTA Titrimetric Method.
800	
801	Method 3500-Mg E, Magnesium, Calculation Method.
802	
803	Method 4110 B, Determination of Anions by Ion
804	Chromatography, Ion Chromatography with Chemical
805	Suppression of Eluent Conductivity.
806	
807	Method 4500-Cl D, Chlorine, Amperometric Titration
808	Method.
809	
810	Method 4500-Cl E, Chlorine, Low-Level Amperometric
811	Titration Method.
812	
813	Method 4500-Cl F, Chlorine, DPD Ferrous Titrimetric
814	Method.
815	
816	Method 4500-Cl G, Chlorine, DPD Colorimetric Method.
817	

818	Method 4500-Cl H, Chlorine, Syringaldazine (FACTS)
819	Method.
820	
821	Method 4500-Cl I, Chlorine, Iodometric Electrode Method.
822	
823	Method 4500-ClO <sub>2</sub> C, Chlorine Dioxide, Amperometric
824	Method I.
825	
826	Method 4500-ClO <sub>2</sub> D, Chlorine Dioxide, DPD Method.
827	
828	Method 4500-ClO <sub>2</sub> E, Chlorine Dioxide, Amperometric
829	Method II (Proposed).
830	
831	Method 4500-CN <sup>-</sup> C, Cyanide, Total Cyanide after
832	Distillation.
833	
834	Method 4500-CN <sup>-</sup> E, Cyanide, Colorimetric Method.
835	
836	Method 4500-CN <sup>-</sup> F, Cyanide, Cyanide-Selective Electrode
837	Method.
838	
839	Method 4500-CN <sup>-</sup> G, Cyanide, Cyanides Amenable to
840	Chlorination after Distillation.
841	
842	Method 4500-F <sup>-</sup> B, Fluoride, Preliminary Distillation Step.
843	
844	Method 4500-F <sup>-</sup> C, Fluoride, Ion-Selective Electrode
845	Method.
846	
847	Method 4500-F <sup>-</sup> D, Fluoride, SPADNS Method.
848	
849	Method 4500-F <sup>-</sup> E, Fluoride, Complexone Method.
850	
851	Method 4500-H <sup>+</sup> B, pH Value, Electrometric Method.
852	
853	Method 4500-NO <sub>2</sub> <sup>-</sup> B, Nitrogen (Nitrite), Colorimetric
854	Method.
855	
856	Method 4500-NO <sub>3</sub> <sup>-</sup> D, Nitrogen (Nitrate), Nitrate Electrode
857	Method.
858	
859	Method 4500-NO <sub>3</sub> <sup>-</sup> E, Nitrogen (Nitrate), Cadmium
860	Reduction Method.

861	
862	Method 4500-NO <sub>3</sub> <sup>-</sup> F, Nitrogen (Nitrate), Automated
863	Cadmium Reduction Method.
864	
865	Method 4500-O <sub>3</sub> B, Ozone (Residual) (Proposed), Indigo
866	Colorimetric Method.
867	
868	Method 4500-P E, Phosphorus, Ascorbic Acid Method.
869	
870	Method 4500-P F, Phosphorus, Automated Ascorbic Acid
871	Reduction Method.
872	
873	Method 4500-Si D, Silica, Molybdosilicate Method.
874	
875	Method 4500-Si E, Silica, Heteropoly Blue Method.
876	
877	Method 4500-Si F, Silica, Automated Method for
878	Molybdate-Reactive Silica.
879	
880	Method 5910 B, UV Absorbing Organic Constituents,
881	Ultraviolet Absorption Method.
882	
883	Method 6251 B, Disinfection Byproducts: Haloacetic
884	Acids and Trichlorophenol, Micro Liquid-Liquid
885	Extraction Gas Chromatographic Method.
886	
887	Method 6651, Glyphosate Herbicide (Proposed).
888	
889	Method 7110 B, Gross Alpha and Gross Beta
890	Radioactivity, Evaporation Method for Gross Alpha-Beta.
891	
892	Method 7110 C, Gross Alpha and Beta Radioactivity
893	(Total, Suspended, and Dissolved), Coprecipitation Method
894	for Gross Alpha Radioactivity in Drinking Water
895	(Proposed).
896	
897	Method 7120 B, Gamma-Emitting Radionuclides, Gamma
898	Spectrometric Method.
899	
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1562	I-2700-85
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c) The Board incorporates the following federal regulations by reference:

40 CFR 3.2, as added at 70 Fed. Reg. 59848 (Oct. 13, 2005) (How Does This Part Provide for Electronic Reporting?), referenced in Section 611.105.

40 CFR 3.3, as added at 70 Fed. Reg. 59848 (Oct. 13, 2005) (What Definitions Are Applicable to This Part?), referenced in Section 611.105.

40 CFR 3.10, as added at 70 Fed. Reg. 59848 (Oct. 13, 2005) (What Are the Requirements for Electronic Reporting to EPA?), referenced in Section 611.105.

40 CFR 3.2000, as added at 70 Fed. Reg. 59848 (Oct. 13, 2005) (What Are the Requirements Authorized State, Tribe, and Local Programs' Reporting Systems Must Meet?), referenced in Section 611.105.

Appendix B to 40 CFR 136 (2005), referenced in Sections 611.359, 611.609, and 611.646.; Appendix B and C (2003)

d) This Part incorporates no later amendments or editions.

(Source: Amended at 30 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 611.105 Electronic Reporting**

The filing of any document pursuant to any provision of this Part as an electronic document is subject to this Section.

a) Scope and Applicability.

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- 1) The USEPA, the Board, or the Agency may allow for the filing of electronic documents. This Section does not require submission of electronic documents in lieu of paper documents. This Section sets forth the requirements for the optional electronic filing of any report or document that must be submitted to the appropriate of the following:
    - A) To USEPA directly under Title 40 of the Code of Federal Regulations; or
    - B) To the Board or the Agency pursuant to any provision of 35 Ill. Adm. Code 702 through 705, 720 through 728, 730, 733, 738, or 739.
  - 2) Electronic document filing under this Section can begin only after USEPA has first done as follows:
    - A) As to filing with USEPA, USEPA has published a notice in the Federal Register announcing that USEPA is prepared to receive documents required or permitted by the identified part or subpart of Title 40 of the Code of Federal Regulations in an electronic format; or
    - B) As to filing with the State, USEPA has granted approval of any electronic document receiving system established by the Board or the Agency that meets the requirements of 40 CFR 3.2000, incorporated by reference in Section 611.102(c).
  - 3) This Section does not apply to any of the following documents, whether or not the document is a document submitted to satisfy the requirements cited in subsection (a)(1) of this Section:
    - A) Any document submitted via facsimile;
    - B) Any document submitted via magnetic or optical media, such as diskette, compact disc, digital video disc, or tape; or
    - C) Any data transfer between USEPA, any state, or any local government and either the Board or the Agency as part of administrative arrangements between the parties to the transfer to share data.
  - 4) Upon USEPA conferring approval for the filing of any types of documents as electronic documents, as described in subsection (a)(2)(B) of this

1675 Section, the Agency or the Board, as appropriate, must publish a Notice of  
1676 Public Information in the Illinois Register that describes the documents  
1677 approved for submission as electronic documents, the electronic document  
1678 receiving system approved to receive them, the acceptable formats and  
1679 procedures for their submission, and the date on which the Board or the  
1680 Agency will begin to receive those submissions. In the event of cessation  
1681 of USEPA approval or receiving any type of document as an electronic  
1682 document, the Board or the Agency must similarly cause publication of a  
1683 Notice of Public Information in the Illinois Register.  
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1685 BOARD NOTE: Subsection (a) of this Section is derived from 40 CFR 3.1, as  
1686 added at 70 Fed. Reg. 59848 (Oct. 13, 2005).  
1687

- 1688 b) Definitions. For the purposes of this Section, terms will have the meaning  
1689 attributed them in 40 CFR 3.3, incorporated by reference in 35 Ill. Adm. Code  
1690 611.102(c).  
1691  
1692 c) Procedures for submission of electronic documents to USEPA. Except as  
1693 provided in subsection (a)(3) of this Section, any person who is required under  
1694 Title 40 of the Code of Federal Regulations to create and submit or otherwise  
1695 provide a document to USEPA may satisfy this requirement with an electronic  
1696 document, in lieu of a paper document, provided the following conditions are met:  
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1698 1) The person satisfies the requirements of 40 CFR 3.10, incorporated by  
1699 reference in Section 611.102(c); and  
1700  
1701 2) USEPA has first published a notice in the Federal Register as described in  
1702 subsection (a)(2) of this Section.  
1703

1704 BOARD NOTE: Subsection (c) of this Section is derived from 40 CFR 3.2(a)  
1705 and subpart B of 40 CFR 3, as added at 70 Fed. Reg. 59848 (Oct. 13, 2005).  
1706

- 1707 d) Procedures for submission of electronic documents to the Board or the Agency.  
1708  
1709 1) The Board or the Agency may, but is not required to, establish procedures  
1710 for the electronic submission of documents that meet the requirements of  
1711 40 CFR 3.2 and 3.2000, incorporated by reference in Section 611.102(c).  
1712 The Board or the Agency must establish any such procedures under the  
1713 Administrative Procedure Act [5 ILCS 100/Art. 5].  
1714  
1715 2) The Board or the Agency may not accept electronic documents under this  
1716 Section until after USEPA has approved the procedures in writing, and the  
1717 Board or the Agency has published a notice of that approval in the Illinois

1718 Register. Nothing in this subsection (d) limits the authority of the Board  
1719 or the Agency under the Illinois Environmental Protection Act [415 ILCS  
1720 5] to accept documents filed electronically.

1721  
1722 BOARD NOTE: Subsection (d) of this Section is derived from 40 CFR 3.2(b)  
1723 and subpart D of 40 CFR 3, as added at 70 Fed. Reg. 59848 (Oct. 13, 2005).  
1724

1725 e) Effects of submission of an electronic document.  
1726

1727 1) If a person who submits a document as an electronic document fails to  
1728 comply with the requirements of this Section, that person is subject to the  
1729 penalties prescribed for failure to comply with the requirement that the  
1730 electronic document was intended to satisfy.

1731  
1732 2) Where a document submitted as an electronic document to satisfy a  
1733 reporting requirement bears an electronic signature, the electronic  
1734 signature legally binds, obligates, and makes the signer responsible to the  
1735 same extent as the signer's handwritten signature would on a paper  
1736 document submitted to satisfy the same reporting requirement.  
1737

1738 3) Proof that a particular signature device was used to create an electronic  
1739 signature will suffice to establish that the individual uniquely entitled to  
1740 use the device did so with the intent to sign the electronic document and  
1741 give it effect.  
1742

1743 4) Nothing in this Section limits the use of electronic documents or  
1744 information derived from electronic documents as evidence in  
1745 enforcement or other proceedings.  
1746

1747 BOARD NOTE: Subsection (e) of this Section is derived from 40 CFR 3.4 and  
1748 3.2000(c), as added at 70 Fed. Reg. 59848 (Oct. 13, 2005).  
1749

1750 f) Public document subject to State laws. Any electronic document filed with the  
1751 Board is a public document. The document, its filing, its retention by the Board,  
1752 and its availability for public inspection and copying are subject to various State  
1753 laws, including, but not limited to, the following:  
1754

1755 1) The Administrative Procedure Act [5 ILCS 100];  
1756

1757 2) The Freedom of Information Act [5 ILCS 140];  
1758

1759 3) The State Records Act [5 ILCS 160];  
1760

- 1761 4) The Electronic Commerce Security Act [5 ILCS 175];
- 1762
- 1763 5) The Environmental Protection Act [415 ILCS 5];
- 1764
- 1765 6) Regulations relating to public access to Board records (2 Ill. Adm. Code
- 1766 2175); and
- 1767
- 1768 7) Board procedural rules relating to protection of trade secrets and
- 1769 confidential information (35 Ill. Adm. Code 130).
- 1770

1771 g) Nothing in this Section or in any provisions adopted pursuant to subsection (c)(1)  
 1772 of this Section will create any right or privilege to submit any document as an  
 1773 electronic document.

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 1775 BOARD NOTE: Subsection (g) of this Section is derived from 40 CFR 3.2(c), as  
 1776 added at 70 Fed. Reg. 59848 (Oct. 13, 2005).

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 1778 BOARD NOTE: Derived from 40 CFR 3, as added, and 40 CFR 142.10(g) (2005), as amended  
 1779 at 70 Fed. Reg. 59848 (Oct. 13, 2005).

1780  
 1781 (Source: Added at 30 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

1782  
 1783 **Section 611.111 Relief Equivalent to SDWA Section 1415(a) Variances**

1784  
 1785 This Section is intended to describe how the Board grants State relief equivalent to that available  
 1786 from USEPA under section 1415(a)(1)(A) and (a)(1)(B) of the SDWA (42 USC 300g-4(a)(1)(A)  
 1787 and (a)(1)(B)). SDWA section 1415 variances do not require ultimate compliance within five  
 1788 years in every situation. Variances under Sections 35-37 of the Act [415 ILCS 5/35-37] do  
 1789 require compliance within five years in every case. Consequently, a PWS may have the option  
 1790 of seeking State regulatory relief equivalent to a SDWA section 1415 variance through one of  
 1791 three procedural mechanisms: a variance under Sections 35-37 of the Act [415 ILCS 5/35-37]  
 1792 and Subpart B of 35 Ill. Adm. Code 104; a site-specific rule under Sections 27-28 of the Act [415  
 1793 ILCS 5/27-28] and 35 Ill. Adm. Code 102; or an adjusted standard under Section 28.1 of the Act  
 1794 [415 ILCS 5/28.1] and Subpart D of 35 Ill. Adm. Code 104.

1795  
 1796 a) The Board will grant a PWS a variance, a site-specific rule, or an adjusted  
 1797 standard from an MCL or a treatment technique pursuant to this Section.

1798  
 1799 1) The PWS must file a petition pursuant to 35 Ill. Adm. Code 102 or 104,  
 1800 as applicable.

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 1802 2) If a State requirement does not have a federal counterpart, the Board may  
 1803 grant relief from the State requirements without following this Section.

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- b) Relief from an MCL.
  - 1) As part of the justification for relief from an MCL under this Section, the PWS must demonstrate the following:
    - A) Because of characteristics of the raw water sources and alternative sources that are reasonably available to the system, the PWS cannot meet the MCL; and
    - B) The PWS will install or has installed the best available technology (BAT) (as identified in Subpart F of this Part), treatment technique, or other means that the Agency finds available. BAT may vary depending on the following:
      - i) The number of persons served by the system;
      - ii) Physical conditions related to engineering feasibility; and
      - iii) Costs of compliance; and
    - C) The variance will not result in an unreasonable risk to health.
  - 2) In any order granting relief under this subsection, the Board will prescribe a schedule for the following:
    - A) Compliance, including increments of progress, by the PWS, with each MCL with respect to which the relief was granted; and
    - B) Implementation by the PWS of each additional control measure for each MCL with respect to which the relief is granted, during the period ending on the date compliance with such requirement is required.
  - 3) Schedule of compliance for relief from an MCL.
    - A) A schedule of compliance will require compliance with each MCL with respect to which the relief was granted as expeditiously as practicable.
    - B) If the Board prescribes a schedule requiring compliance with an MCL for which the relief is granted later than five years from the date of issuance of the relief, the Board will do the following:

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- i) Document its rationale for the extended compliance schedule;
  - ii) Discuss the rationale for the extended compliance schedule in the required public notice and opportunity for public hearing; and
  - iii) Provide the shortest practicable time schedule feasible under the circumstances.
- 1858 c) Relief from a treatment technique requirement.
- 1859
- 1) As part of the justification for relief from a treatment technique requirement under this Section, the PWS must demonstrate that the treatment technique is not necessary to protect the health of persons served because of the nature of the raw water source.
  - 2) The Board may prescribe monitoring and other requirements as a condition for relief from a treatment technique requirement.
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- 1868 d) The Board will hold at least one public hearing. In addition the Board will accept  
 1869 comments as appropriate pursuant to 35 Ill. Adm. Code 102 or104.  
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- 1871 e) The Board will not grant relief from any of the following:
- 1872
- 1) From the MCL for total coliforms. However, the Board may grant a variance from the total coliform MCL of Section 611.325 for PWSs that prove that the violation of the total coliform MCL is due to persistent growth of total coliform in the distribution system, rather than from fecal or pathogenic contamination, from a treatment lapse or deficiency, or from a problem in the operation or maintenance of the distribution system.
  - 2) From any of the treatment technique requirements of Subpart B of this Part.
  - 3) From the residual disinfectant concentration (RDC) requirements of Sections 611.241(c) and 611.242(b).
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- 1886 f) The Agency must promptly send USEPA the opinion and order of the Board  
 1887 granting relief pursuant to this Section. The Board may reconsider and modify a  
 1888 grant of relief, or relief conditions, if USEPA notifies the Board of a finding  
 1889 pursuant to section 1415 of the SDWA (42 USC 300g-4).

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- g) In addition to the requirements of this Section, the provisions of Section 611.130 or 611.131 may apply to relief granted pursuant to this Section.

BOARD NOTE: Derived from 40 CFR 141.4 (2005)(2002), from section 1415(a)(1)(A) and (a)(1)(B) of the SDWA and from the "Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems using Surface Water Sources", incorporated by reference in Section 611.102. USEPA has reserved the discretion to review and modify or nullify Board determinations made pursuant to this Section at 40 CFR 142.23 (2005)(2002).

(Source: Amended at 30 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

SUBPART B: FILTRATION AND DISINFECTION

**Section 611.212 Groundwater under Direct Influence of Surface Water**

The Agency shall, pursuant to Section 611.201, require all CWSs to demonstrate whether they are using "groundwater under the direct influence of surface water." The Agency must determine with information provided by the supplier whether a PWS uses "groundwater under the direct influence of surface water" on an individual basis. The Agency must determine that a groundwater source is under the direct influence of surface water based upon the following:

- a) Physical characteristics of the source: whether the source is obviously a surface water source, such as a lake or stream. Other sources that may be subject to influence from surface waters include: springs, infiltration galleries, wells, or other collectors in subsurface aquifers.
- b) Well construction characteristics and geology with field evaluation.
  - 1) The Agency may use the wellhead protection program's requirements, which include delineation of wellhead protection areas, assessment of sources of contamination and implementation of management control systems, to determine if the wellhead is under the influence of surface water.
  - 2) Wells less than or equal to 50 feet in depth are likely to be under the influence of surface water.
  - 3) Wells greater than 50 feet in depth are likely to be under the influence of surface water, unless they include the following:

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- A) A surface sanitary seal using bentonite clay, concrete, or similar material;
  - B) A well casing that penetrates consolidated (slowly permeable) material; and
  - C) A well casing that is only perforated or screened below consolidated (slowly permeable) material.
- 4) A source that is less than 200 feet from any surface water is likely to be under the influence of surface water.
- c) Any structural modifications to prevent the direct influence of surface water and eliminate the potential for *Giardia lamblia* cyst contamination.
  - d) Source water quality records. The following are indicative that a source is under the influence of surface water:
    - 1) A record of total coliform or fecal coliform contamination in untreated samples collected over the past three years;
    - 2) A history of turbidity problems associated with the source; or
    - 3) A history of known or suspected outbreaks of *Giardia lamblia*, *Cryptosporidium* or other pathogenic organisms associated with surface water that has been attributed to that source.
  - e) Significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH.
    - 1) A variation in turbidity of 0.5 NTU or more over one year is indicative of surface influence.
    - 2) A variation in temperature of nine° Fahrenheit degrees or more over one year is indicative of surface influence.
  - f) Significant and relatively rapid shifts in water characteristics such as turbidity, temperature, conductivity, or pH that closely correlate to climatological or surface water conditions are indicative of surface water influence.
    - 1) Evidence of particulate matter associated with the surface water; or,
    - 2) Turbidity or temperature data that correlates to that of a nearby surface

1976 water source.

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- g) Particulate analysis: Significant occurrence of insects or other macroorganisms, algae, or large diameter pathogens such as Giardia lamblia is indicative of surface influence.

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- 1) "Large diameter" particulates are those over seven~~7~~ micrometers.

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- 2) Particulates must be measured as specified in the "Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems using Surface Water Sources," incorporated by reference in Section 611.102.

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- h) The potential for contamination by small-diameter pathogens, such as bacteria or viruses, does not alone render the source "under the direct influence of surface water":

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BOARD NOTE: Derived from the definition of "groundwater under the direct influence of surface water" in 40 CFR 141.2 (2005)(2002); from the Preamble at 54 Fed. Reg. 27489 (June 29, 1989); and from the USEPA "Guidance Manual for Compliance with the Filtration and Disinfection Requirements for Public Water Systems using Surface Water Sources," incorporated by reference in Section 611.102.

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(Source: Amended at 30 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

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SUBPART G: LEAD AND COPPER

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**Section 611.359 Analytical Methods**

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Analyses for lead, copper, pH, conductivity, calcium, alkalinity, orthophosphate, silica, and temperature must be conducted using the methods set forth in Section 611.611(a).

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- a) Analyses for lead and copper performed for the purposes of compliance with this Subpart G must only be conducted by laboratories that have been certified by USEPA or the Agency. To obtain certification to conduct analyses for lead and copper, laboratories must do the following:

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- 1) Analyze performance evaluation samples that include lead and copper provided by USEPA Environmental Monitoring and Support Laboratory or equivalent samples provided by the Agency; and

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- 2) Achieve quantitative acceptance limits as follows:

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- 2019 A) For lead:  $\pm 30$  percent of the actual amount in the performance
- 2020 evaluation sample when the actual amount is greater than or equal
- 2021 to 0.005 mg/l (the PQL for lead is 0.005 mg/l);
- 2022
- 2023 B) For copper:  $\pm 10$  percent of the actual amount in the performance
- 2024 evaluation sample when the actual amount is greater than or equal
- 2025 to 0.050 mg/l (the PQL for copper is 0.050 mg/l);
- 2026
- 2027 C) Achieve the method detection limit (MDL) for lead (0.001 mg/l,
- 2028 as defined in Section 611.350(a)) according to the procedures in 35
- 2029 Ill. Adm. Code 186 and appendix B to 40 CFR 136, Appendix B:
- 2030 "Definition and Procedure for the Determination of the Method
- 2031 Detection Limit – Revision 1.11" (2005), incorporated by
- 2032 reference in Section 611.102(c)(2002). This need only be
- 2033 accomplished if the laboratory will be processing source water
- 2034 composite samples under Section 611.358(a)(1)(C); and
- 2035
- 2036 D) Be currently certified by USEPA or the Agency to perform
- 2037 analyses to the specifications described in subsection (a)(2) of this
- 2038 Section.
- 2039

2040 BOARD NOTE: Subsection (a) is derived from 40 CFR 141.89(a) and (a)(1)

2041 (2005)(2002).

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- 2043 b) The Agency must, by a SEP issued pursuant to Section 611.110, allow a supplier
- 2044 to use previously collected monitoring data for the purposes of monitoring under
- 2045 this Subpart G if the data were collected and analyzed in accordance with the
- 2046 requirements of this Subpart G.
- 2047

2048 BOARD NOTE: Subsection (b) is derived from 40 CFR 141.89(a)(2)

2049 (2005)(2002).

2050

- 2051 c) Reporting lead and copper levels.
- 2052

- 2053 1) All lead and copper levels greater than or equal to the lead and copper
- 2054 PQL ( $Pb \geq 0.005$  mg/l and  $Cu \geq 0.050$  mg/l) must be reported as
- 2055 measured.
- 2056

- 2057 2) All lead and copper levels measured less than the PQL and greater than
- 2058 the MDL ( $0.005$  mg/l  $> Pb > MDL$  and  $0.050$  mg/l  $> Cu > MDL$ ) must be
- 2059 either reported as measured or as one-half the PQL set forth in subsection
- 2060 (a) of this Section (i.e., reported as 0.0025 mg/l for lead or 0.025 mg/l for
- 2061 copper).

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- 3) All lead and copper levels below the lead and copper MDL (MDL > Pb) must be reported as zero.

BOARD NOTE: Subsection (c) is derived from 40 CFR 141.89(a)(3) and (a)(4) (2005)(2002).

(Source: Amended at 30 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

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

**Section 611.380 General Requirements**

- a) The requirements of this Subpart I constitute NPDWRs.
  - 1) The regulations in this Subpart I establish standards under which a CWS supplier or an NTNCWS supplier that adds a chemical disinfectant to the water in any part of the drinking water treatment process ~~or which provides water that contains a chemical disinfectant~~ must modify its practices to meet MCLs and MRDLs in Sections 611.312 and 611.313, respectively, and must meet the treatment technique requirements for DBP precursors in Section 611.385.
  - 2) The regulations in this Subpart I establish standards under which a transient non-CWS supplier that uses chlorine dioxide as a disinfectant or oxidant must modify its practices to meet the MRDL for chlorine dioxide in Section 611.313.
  - 3) The Board has established MCLs for TTHM and HAA5 and treatment technique requirements for DBP precursors to limit the levels of known and unknown DBPs that may have adverse health effects. These DBPs may include chloroform, bromodichloromethane, dibromochloromethane, bromoform, dichloroacetic acid, and trichloroacetic acid.
- b) Compliance dates.
  - 1) CWSs and NTNCWSs. Unless otherwise noted, a supplier must comply with the requirements of this Subpart I as follows: A Subpart B system supplier serving 10,000 or more persons must comply with this Subpart I beginning January 1, 2002. A Subpart B system supplier serving fewer than 10,000 persons or a supplier using only groundwater not under the direct influence of surface water must comply with this Subpart I beginning January 1, 2004.

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- 2) Transient non-CWSs. A Subpart B system supplier serving 10,000 or more persons and using chlorine dioxide as a disinfectant or oxidant must comply with any requirements for chlorine dioxide in this Subpart I beginning January 1, 2002. A Subpart B system supplier serving fewer than 10,000 persons and using chlorine dioxide as a disinfectant or oxidant or a supplier using only groundwater not under the direct influence of surface water and using chlorine dioxide as a disinfectant or oxidant must comply with any requirements for chlorine dioxide in this Subpart I beginning January 1, 2004.
- c) Each CWS or NTNCWS supplier regulated under subsection (a) of this Section must be operated by qualified personnel who meet the requirements specified in 35 Ill. Adm. Code 680.
- d) Control of disinfectant residuals. Notwithstanding the MRDLs in Section 611.313, a supplier may increase residual disinfectant levels in the distribution system of chlorine or chloramines (but not chlorine dioxide) to a level and for a time necessary to protect public health, to address specific microbiological contamination problems caused by circumstances such as, but not limited to, distribution line breaks, storm run-off events, source water contamination events, or cross-connection events.

BOARD NOTE: Derived from 40 CFR 141.130 (2005)(2002).

(Source: Amended at 30 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**SUBPART N: INORGANIC MONITORING AND ANALYTICAL REQUIREMENTS**

**Section 611.609 Determining Compliance**

Compliance with the MCLs of Section 611.300 or 611.301 (as appropriate) must be determined based on the analytical results obtained at each sampling point.

- a) For suppliers that monitor at a frequency greater than annual, compliance with the MCLs for antimony, arsenic (effective January 22, 2004), asbestos, barium, beryllium, cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, or thallium is determined by a running annual average at each sampling point. Effective January 22, 2004, if a system fails to collect the required number of samples, compliance (average concentration) will be based on the total number of samples collected.
- 1) If the average at any sampling point is greater than the MCL, then the

2148 supplier is out of compliance.

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2150 2) If any one sample would cause the annual average to be exceeded, then the  
2151 supplier is out of compliance immediately.

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2153 3) Any sample below the method detection limit must be calculated at zero  
2154 for the purpose of determining the annual average.

2155

2156 BOARD NOTE: The "method detection limit" is different from the  
2157 "detection limit," as set forth in Section 611.600. The "method detection  
2158 limit" is the level of contaminant that can be determined by a particular  
2159 method with a 95 percent degree of confidence, as determined by the  
2160 method outlined in appendix B to 40 CFR 136, ~~Appendix B~~, incorporated  
2161 by reference at Section 611.102.

2162

2163 b) For suppliers that monitor annually or less frequently, compliance with the MCLs  
2164 for antimony, arsenic (effective January 22, 2004), asbestos, barium, beryllium,  
2165 cadmium, chromium, cyanide, fluoride, mercury, nickel, selenium, or thallium is  
2166 determined by the level of the contaminant at any sampling point. If confirmation  
2167 samples are required by the Agency, the determination of compliance will be  
2168 based on the average of the annual average of the initial MCL exceedence and any  
2169 Agency-required confirmation samples. Effective January 22, 2004, if a supplier  
2170 fails to collect the required number of samples, compliance (average  
2171 concentration) will be based on the total number of samples collected.

2172

2173 c) Compliance with the MCLs for nitrate and nitrite is determined based on one  
2174 sample if the levels of these contaminants are below the MCLs. If the levels of  
2175 nitrate or nitrite in the initial sample exceed the MCLs, Section 611.606 requires  
2176 confirmation sampling, and compliance is determined based on the average of the  
2177 initial and confirmation samples.

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2179 d) Arsenic sampling results must be reported to the nearest 0.001 mg/ℓ.

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2181 BOARD NOTE: Derived from 40 CFR 141.23(i) (2005)~~(2002)~~.

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2183 (Source: Amended at 30 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

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2185 **SUBPART O: ORGANIC MONITORING AND ANALYTICAL REQUIREMENTS**

2186

2187 **Section 611.646 Phase I, Phase II, and Phase V Volatile Organic Contaminants**

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2189 Monitoring of the Phase I, Phase II, and Phase V VOCs for the purpose of determining  
2190 compliance with the MCL must be conducted as follows:

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a) Definitions. As used in this Section the following have the given meanings:

"Detect" and "detection" mean that the contaminant of interest is present at a level greater than or equal to the "detection limit."

"Detection limit" means 0.0005 mg/ℓ.

BOARD NOTE: Derived from 40 CFR 141.24(f)(7), (f)(11), (f)(14)(i), and (f)(20) (2005)(2003). This is a "trigger level" for Phase I, Phase II, and Phase V VOCs inasmuch as it prompts further action. The use of the term "detect" in this Section is not intended to include any analytical capability of quantifying lower levels of any contaminant, or the "method detection limit." Note, however, that certain language at the end of federal paragraph (f)(20) is capable of meaning that the "method detection limit" is used to derive the "detection limit." The Board has chosen to disregard that language at the end of paragraph (f)(20) in favor of the more direct language of paragraphs (f)(7) and (f)(11).

"Method detection limit," as used in subsections (q) and (t) of this Section means the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero and is determined from analysis of a sample in a given matrix containing the analyte.

BOARD NOTE: Derived from appendix B to 40 CFR 136, ~~Appendix B (2005)(2003)~~. The method detection limit is determined by the procedure set forth in appendix B to 40 CFR 136, incorporated by reference in Section 611.102(c) ~~Appendix B~~. See subsection (t) of this Section.

b) Required sampling. Each supplier must take a minimum of one sample at each sampling point at the times required in subsection (u) of this Section.

c) Sampling points.

1) Sampling points for a GWS. Unless otherwise provided by a SEP granted by the Agency pursuant to Section 611.110, a GWS supplier must take at least one sample from each of the following points: each entry point that is representative of each well after treatment.

2) Sampling points for an SWS or mixed system supplier. Unless otherwise provided by a SEP granted by the Agency pursuant to Section 611.110, an SWS or mixed system supplier must sample from each of the following

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points:

- A) Each entry point after treatment; or
- B) Points in the distribution system that are representative of each source.

- 3) The supplier must take each sample at the same sampling point unless the Agency has granted a SEP pursuant to Section 611.110 that designates another location as more representative of each source, treatment plant, or within the distribution system.
- 4) If a system draws water from more than one source, and the sources are combined before distribution, the supplier must sample at an entry point during periods of normal operating conditions when water is representative of all sources being used.

BOARD NOTE: Subsections (b) and (c) of this Section derived from 40 CFR 141.24(f)(1) through (f)(3) (2005)(2003).

- d) Each CWS and NTNCWS supplier must take four consecutive quarterly samples for each of the Phase I VOCs, excluding vinyl chloride, and Phase II VOCs during each compliance period, beginning in the compliance period starting in the initial compliance period.
- e) Reduction to annual monitoring frequency. If the initial monitoring for the Phase I, Phase II, and Phase V VOCs, as allowed in subsection (r)(1) of this Section, was completed by December 31, 1992, and the supplier did not detect any of the Phase I VOCs, including vinyl chloride; Phase II VOCs; or Phase V VOCs, then the supplier must take one sample annually beginning in the initial compliance period.
- f) GWS reduction to triennial monitoring frequency. After a minimum of three years of annual sampling, GWS suppliers that have not previously detected any of the Phase I VOCs, including vinyl chloride; Phase II VOCs; or Phase V VOCs must take one sample during each three-year compliance period.
- g) A CWS or NTNCWS supplier that has completed the initial round of monitoring required by subsection (d) of this Section and which did not detect any of the Phase I VOCs, including vinyl chloride; Phase II VOCs; and Phase V VOCs may apply to the Agency for a SEP pursuant to Section 611.110 that releases it from the requirements of subsection (e) or (f) of this Section. A supplier that serves fewer than 3300 service connections may apply to the Agency for a SEP that

2277 releases it from the requirements of subsection (d) of this Section as to 1,2,4-  
 2278 trichlorobenzene.

2279  
 2280 BOARD NOTE: Derived from 40 CFR 141.24(f)(7) and (f)(10) ~~(2005)(2003)~~,  
 2281 and the discussion at 57 Fed. Reg. 31825 (July 17, 1992). Provisions concerning  
 2282 the term of the waiver appear in subsections (i) and (j) of this Section. The  
 2283 definition of "detect," parenthetically added to the federal counterpart paragraph,  
 2284 is in subsection (a) of this Section.

2285  
 2286 h) Vulnerability assessment. The Agency must consider the factors of Section  
 2287 611.110(e) in granting a SEP from the requirements of subsection (d), (e), or (f)  
 2288 of this Section sought pursuant to subsection (g) of this Section.

2289  
 2290 i) A SEP issued to a GWS pursuant to subsection (g) of this Section is for a  
 2291 maximum of six years, except that a SEP as to the subsection (d) of this Section  
 2292 monitoring for 1,2,4-trichlorobenzene must apply only to the initial round of  
 2293 monitoring. As a condition of a SEP, except as to a SEP from the initial round  
 2294 of subsection (d) of this Section monitoring for 1,2,4-trichlorobenzene, the  
 2295 supplier shall, within 30 months after the beginning of the period for which the  
 2296 waiver was issued, reconfirm its vulnerability assessment required by subsection  
 2297 (h) of this Section and submitted pursuant to subsection (g) of this Section, by  
 2298 taking one sample at each sampling point and reapplying for a SEP pursuant to  
 2299 subsection (g) of this Section. Based on this application, the Agency must do  
 2300 either of the following:

- 2301  
 2302 1) If it determines that the PWS meets the standard of Section 611.610(e),  
 2303 issue a SEP that reconfirms the prior SEP for the remaining three-year  
 2304 compliance period of the six-year maximum term; or  
 2305  
 2306 2) Issue a new SEP requiring the supplier to sample annually.

2307  
 2308 BOARD NOTE: Subsection (i) of this Section does not apply to an SWS or  
 2309 mixed system supplier.

- 2310  
 2311 j) Special considerations for a SEP for an SWS or mixed-system supplier.  
 2312  
 2313 1) The Agency must determine that an SWS is not vulnerable before issuing  
 2314 a SEP pursuant to Section 611.110 to an SWS supplier. A SEP issued to  
 2315 an SWS or mixed system supplier pursuant to subsection (g) of this  
 2316 Section is for a maximum of one compliance period; and  
 2317  
 2318 2) The Agency may require, as a condition to a SEP issued to an SWS or  
 2319 mixed supplier, that the supplier take such samples for Phase I, Phase II,

2320 and Phase V VOCs at such a frequency as the Agency determines are  
2321 necessary, based on the vulnerability assessment.

2322  
2323 BOARD NOTE: There is a great degree of similarity between 40 CFR  
2324 141.24(f)(7) (2005)(2003), the provision applicable to GWSs, and 40 CFR  
2325 141.24(f)(10) (2005)(2003), the provision for SWSs. The Board has consolidated  
2326 the common requirements of both paragraphs into subsection (g) of this Section.  
2327 Subsection (j) of this Section represents the elements unique to an SWSs or mixed  
2328 system, and subsection (i) of this Section relates to a GWS supplier. Although 40  
2329 CFR 141.24(f)(7) and (f)(10) are silent as to a mixed system supplier, the Board  
2330 has included a mixed system supplier with an SWS supplier because this best  
2331 follows the federal scheme for all other contaminants.

- 2332  
2333 k) If one of the Phase I VOCs, excluding vinyl chloride; a Phase II VOC; or a Phase  
2334 V VOC is detected in any sample, then the following must occur:  
2335  
2336 1) The supplier must monitor quarterly for that contaminant at each sampling  
2337 point that resulted in a detection.  
2338  
2339 2) Annual monitoring.  
2340  
2341 A) The Agency must grant a SEP pursuant to Section 611.110 that  
2342 allows a supplier to reduce the monitoring frequency to annual at a  
2343 sampling point if it determines that the sampling point is reliably  
2344 and consistently below the MCL.  
2345  
2346 B) A request for a SEP must include the following minimal  
2347 information:  
2348  
2349 i) For a GWS, two quarterly samples.  
2350  
2351 ii) For an SWS or mixed system supplier, four quarterly  
2352 samples.  
2353  
2354 C) In issuing a SEP, the Agency must specify the level of the  
2355 contaminant upon which the "reliably and consistently"  
2356 determination was based. Any SEP that allows less frequent  
2357 monitoring based on an Agency "reliably and consistently"  
2358 determination must include a condition requiring the supplier to  
2359 resume quarterly monitoring pursuant to subsection (k)(1) of this  
2360 Section if it violates the MCL specified by Section 611.311.  
2361  
2362 3) Suppliers that monitor annually must monitor during the quarters that

- 2363 previously yielded the highest analytical result.  
2364  
2365 4) Suppliers that do not detect a contaminant at a sampling point in three  
2366 consecutive annual samples may apply to the Agency for a SEP pursuant  
2367 to Section 611.110 that allows it to discontinue monitoring for that  
2368 contaminant at that point, as specified in subsection (g) of this Section.  
2369  
2370 5) A GWS supplier that has detected one or more of the two-carbon  
2371 contaminants listed in subsection (k)(5)(A) of this Section must monitor  
2372 quarterly for vinyl chloride as described in subsection (k)(5)(B) of this  
2373 Section, subject to the limitation of subsection (k)(5)(C) of this Section.  
2374  
2375 A) "Two-carbon contaminants" (Phase I or II VOC) are the following:  
2376  
2377 1,2-Dichloroethane (Phase I)  
2378  
2379 1,1-Dichloroethylene (Phase I)  
2380  
2381 cis-1,2-Dichloroethylene (Phase II)  
2382  
2383 trans-1,2-Dichloroethylene (Phase II)  
2384  
2385 Tetrachloroethylene (Phase II)  
2386  
2387 1,1,1-Trichloroethylene (Phase I)  
2388  
2389 Trichloroethylene (Phase I)  
2390  
2391 B) The supplier must sample quarterly for vinyl chloride at each  
2392 sampling point at which it detected one or more of the two-carbon  
2393 contaminants listed in subsection (k)(5)(A) of this Section.  
2394  
2395 C) The Agency must grant a SEP pursuant to Section 611.110 that  
2396 allows the supplier to reduce the monitoring frequency for vinyl  
2397 chloride at any sampling point to once in each three-year  
2398 compliance period if it determines that the supplier has not  
2399 detected vinyl chloride in the first sample required by subsection  
2400 (k)(5)(B) of this Section.  
2401  
2402 l) Quarterly monitoring following MCL violations.  
2403  
2404 1) Suppliers that violate an MCL for one of the Phase I VOCs, including  
2405 vinyl chloride; Phase II VOCs; or Phase V VOCs, as determined by

- 2406 subsection (o) of this Section, must monitor quarterly for that contaminant,  
2407 at the sampling point where the violation occurred, beginning the next  
2408 quarter after the violation.  
2409
- 2410 2) Annual monitoring.
- 2411
- 2412 A) The Agency must grant a SEP pursuant to Section 611.110 that  
2413 allows a supplier to reduce the monitoring frequency to annually if  
2414 it determines that the sampling point is reliably and consistently  
2415 below the MCL.  
2416
- 2417 B) A request for a SEP must include the following minimal  
2418 information: four quarterly samples.  
2419
- 2420 C) In issuing a SEP, the Agency must specify the level of the  
2421 contaminant upon which the "reliably and consistently"  
2422 determination was based. Any SEP that allows less frequent  
2423 monitoring based on an Agency "reliably and consistently"  
2424 determination must include a condition requiring the supplier to  
2425 resume quarterly monitoring pursuant to subsection (l)(1) of this  
2426 Section if it violates the MCL specified by Section 611.311.  
2427
- 2428 D) The supplier must monitor during the quarters that previously  
2429 yielded the highest analytical result.  
2430
- 2431 m) Confirmation samples. The Agency may issue a SEP pursuant to Section 610.110  
2432 to require a supplier to use a confirmation sample for results that it finds dubious  
2433 for whatever reason. The Agency must state its reasons for issuing the SEP if the  
2434 SEP is Agency-initiated.  
2435
- 2436 1) If a supplier detects any of the Phase I, Phase II, or Phase V VOCs in a  
2437 sample, the supplier must take a confirmation sample as soon as possible,  
2438 but no later than 14 days after the supplier receives notice of the detection.  
2439
- 2440 2) Averaging is as specified in subsection (o) of this Section.  
2441
- 2442 3) The Agency must delete the original or confirmation sample if it  
2443 determines that a sampling error occurred, in which case the confirmation  
2444 sample will replace the original or confirmation sample.  
2445
- 2446 n) This subsection (n) corresponds with 40 CFR 141.24(f)(14), an optional USEPA  
2447 provision relating to compositing of samples that USEPA does not require for  
2448 state programs. This statement maintains structural consistency with USEPA

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rules.

- o) Compliance with the MCLs for the Phase I, Phase II, and Phase V VOCs must be determined based on the analytical results obtained at each sampling point. Effective January 22, 2004, if one sampling point is in violation of an MCL, the system is in violation of the MCL.
  - 1) Effective January 22, 2004, for a supplier that monitors more than once per year, compliance with the MCL is determined by a running annual average at each sampling point.
  - 2) Effective January 22, 2004, a supplier that monitors annually or less frequently whose sample result exceeds the MCL must begin quarterly sampling. The system will not be considered in violation of the MCL until it has completed one year of quarterly sampling.
  - 3) Effective January 22, 2004, if any sample result will cause the running annual average to exceed the MCL at any sampling point, the supplier is out of compliance with the MCL immediately.
  - 4) Effective January 22, 2004, if a supplier fails to collect the required number of samples, compliance will be based on the total number of samples collected.
  - 5) Effective January 22, 2004, if a sample result is less than the detection limit, zero will be used to calculate the annual average.
  - 6) Until January 22, 2004, for a supplier that conducts monitoring at a frequency greater than annual, compliance is determined by a running annual average of all samples taken at each sampling point.
    - A) If the annual average of any sampling point is greater than the MCL, then the supplier is out of compliance.
    - B) If the initial sample or a subsequent sample would cause the annual average to exceed the MCL, then the supplier is out of compliance immediately.
    - C) Any samples below the detection limit must be deemed as zero for purposes of determining the annual average.
  - 7) Until January 22, 2004, if monitoring is conducted annually, or less frequently, the supplier is out of compliance if the level of a contaminant

2492 at any sampling point is greater than the MCL. Until January 22, 2004, if  
2493 a confirmation sample is taken, the determination of compliance is based  
2494 on the average of two samples.  
2495

2496 p) This subsection (p) corresponds with 40 CFR 141.24(f)(16), which USEPA  
2497 removed and reserved. This statement maintains structural consistency with the  
2498 federal regulations.  
2499

2500 q) Analysis under this Section must only be conducted by laboratories that have  
2501 received certification by USEPA or the Agency according to the following  
2502 conditions:  
2503

2504 1) To receive certification to conduct analyses for the Phase I VOCs,  
2505 excluding vinyl chloride; Phase II VOCs; and Phase V VOCs, the  
2506 laboratory must do the following:  
2507

2508 A) It must analyze performance evaluation (PE) samples that include  
2509 these substances provided by the Agency pursuant to 35 Ill. Adm.  
2510 Code 186.170;  
2511

2512 B) It must achieve the quantitative acceptance limits under  
2513 subsections (q)(1)(C) and (q)(1)(D) of this Section for at least 80  
2514 percent of the regulated organic contaminants in the PE sample;  
2515

2516 C) It must achieve quantitative results on the analyses performed  
2517 under subsection (q)(1)(A) of this Section that are within  $\pm 20$   
2518 percent of the actual amount of the substances in the PE sample  
2519 when the actual amount is greater than or equal to 0.010 mg/l;  
2520

2521 D) It must achieve quantitative results on the analyses performed  
2522 under subsection (q)(1)(A) of this Section that are within  $\pm 40$   
2523 percent of the actual amount of the substances in the PE sample  
2524 when the actual amount is less than 0.010 mg/l; and  
2525

2526 E) It must achieve a method detection limit of 0.0005 mg/l, according  
2527 to the procedures in appendix B to 40 CFR 136, ~~appendix B~~,  
2528 incorporated by reference in Section 611.102.  
2529

2530 2) To receive certification to conduct analyses for vinyl chloride the  
2531 laboratory must do the following:  
2532

2533 A) It must analyze PE samples provided by the Agency pursuant to 35  
2534 Ill. Adm. Code 186.170;

- 2535
- 2536 B) It must achieve quantitative results on the analyses performed
- 2537 under subsection (q)(2)(A) of this Section that are within  $\pm 40$
- 2538 percent of the actual amount of vinyl chloride in the PE sample;
- 2539
- 2540 C) It must achieve a method detection limit of 0.0005 mg/ $\ell$ , according
- 2541 to the procedures in appendix B to 40 CFR 136, ~~appendix B~~,
- 2542 incorporated by reference in Section 611.102; and
- 2543
- 2544 D) It must obtain certification pursuant to subsection (q)(1) of this
- 2545 Section for Phase I VOCs, excluding vinyl chloride; Phase II
- 2546 VOCs; and Phase V VOCs.
- 2547
- 2548 r) This subsection (r) corresponds with 40 CFR 141.24(f)(18), an obsolete provision
- 2549 that relates to the initial compliance period from 1993 through 1995. This
- 2550 statement maintains consistency with the federal regulations.
- 2551
- 2552
- 2553 s) The Agency shall, by a SEP issued pursuant to Section 611.110, increase the
- 2554 number of sampling points or the frequency of monitoring if it determines that it
- 2555 is necessary to detect variations within the PWS.
- 2556
- 2557 t) Each laboratory certified for the analysis of Phase I, Phase II, or Phase V VOCs
- 2558 pursuant to subsection (q)(1) or (q)(2) of this Section shall do the following:
- 2559
- 2560 1) Determine the method detection limit (MDL), as defined in appendix B to
- 2561 40 CFR 136, ~~Appendix B~~, incorporated by reference in Section 611.102,
- 2562 at which it is capable of detecting the Phase I, Phase II, and Phase V
- 2563 VOCs; and,
- 2564
- 2565 2) Achieve an MDL for each Phase I, Phase II, and Phase V VOC that is less
- 2566 than or equal to 0.0005 mg/ $\ell$ .
- 2567
- 2568 u) Each supplier must monitor, within each compliance period, at the time
- 2569 designated by the Agency by SEP pursuant to Section 611.110.
- 2570
- 2571 v) A new system supplier or a supplier that uses a new source of water that begins
- 2572 operation after January 22, 2004 must demonstrate compliance with the MCL
- 2573 within a period of time specified by a permit issued by the Agency. The supplier
- 2574 must also comply with the initial sampling frequencies specified by the Agency to
- 2575 ensure the supplier can demonstrate compliance with the MCL. Routine and
- 2576 increased monitoring frequencies must be conducted in accordance with the
- 2577 requirements in this Section.

2578

2579

BOARD NOTE: Derived from 40 CFR 141.24(f) (2005)~~(2003)~~.

2580

2581

(Source: Amended at 30 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

2582 **Section 611.APPENDIX D Defined Substrate Method for the Simultaneous Detection of**  
2583 **Total Coliforms and Escherichia Coli from Drinking Water**

2584  
2585 Autoanalysis Colilert Presence-Absence (AC P-A) Method.

2586  
2587 The AC P-A test format must be either a 100-ml 10-tube most probable number test (one tube  
2588 positive denoting the presence of total coliforms in that sample) or a single vessel containing  
2589 sufficient reagent to receive 100 ml of sample. The reagent is available from Access Medical  
2590 Systems, Branford Connecticut.

2591  
2592 The AC P-A method must be performed as follows:

- 2593
- 2594 1. For the 10-tube method, add 10 ml of water sample to each test tube. For the  
2595 single-vessel method, add 100 ml of water sample to the vessel.
  - 2596
  - 2597 2. Dissolve the reagent powder by agitation. (This should produce a colorless  
2598 solution.)
  - 2599
  - 2600 3. Incubate the test tubes or vessel at 35° C for 24 hours.
  - 2601
  - 2602 4. Development of yellow during incubation denotes the presence of total coliforms  
2603 in either the test tube or the vessel.
  - 2604
  - 2605 5. Expose each positive (yellow) test tube or vessel to a fluorescent (366 nm) light  
2606 source. Fluorescence specifically demonstrates the presence of Escherichia coli.
  - 2607

2608 BOARD NOTE: Derived from S. Edberg, M. Allen & D. Smith, "National Field  
2609 Evaluation of a Defined Substrate Method for the Simultaneous Detection of  
2610 Total Coliforms and Escherichia coli from Drinking Water: Comparison with  
2611 Presence-Absence Techniques," Applied and Environmental Microbiology, vol.  
2612 55, pp. 1003-1008, as incorporated by reference at 40 CFR 141.21(f)(6)(iii)  
2613 (2005)(2002). This method is for use in conjunction with the requirements of  
2614 Section 611.526.

2615  
2616 (Source: Amended at 30 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)