

From: [Knudson, Cheryl J.](#)
To: [McGill, Richard](#)
Cc: [Eastvold, Jonathan C.](#)
Subject: [External] RE: First Notice Documents from JCAR
Date: Wednesday, May 25, 2022 4:08:24 PM
Attachments: [35-601NT-P JCAR.docx](#)
[35-601RG-P r01 \(46-22\).docx](#)
[Redline - 35-601RG-P Agency for DELTA and 35-601RG-P r01 \(46-22\).pdf](#)

First Notice documents are attached for your review:

- [Notice Page](#)
- **Ist Notice** – [Numbered Line Version](#)
- [Agency vs. JCAR r01](#)

If you have any questions or concerns, please contact Jonathan Eastvold @ 217-524-9010.

Thank you,
Cheryl

Cheryl Knudson
Joint Committee on Administrative Rules
Illinois General Assembly
700 Stratton Building
Springfield, IL 62706

217.785.8993
cherylk@ilga.gov

POLLUTION CONTROL BOARD

NOTICE OF PROPOSED AMENDMENTS

- 1) Heading of the Part: Introduction
- 2) Code Citation: 35 Ill. Adm. Code 601
- 3)

<u>Section Numbers:</u>	<u>Proposed Actions:</u>
601.101	Amendment
601.102	Amendment
601.103	Amendment
601.104	Amendment
601.105	Amendment
601.115	Amendment
601.APPENDIX A	Repealed
- 4) Statutory Authority: Implementing Section 17 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/17 and 27].
- 5) A Complete Description of the Subjects and Issues Involved: The rulemaking pertains to the Board's public water supply rules and contain the requirements necessary for owners and official custodians of public water supplies in the State to provide, "continuous operation and maintenance of public water supply facilities to assure that the water is safe in quality, clean, adequate in quantity, and of satisfactory mineral characteristics for ordinary domestic consumption." 35 Ill. Adm. Code 601.101(a). In this rulemaking, the Board proposes non-substantive amendments to remove redundant or unnecessary language, replace outdated language, update statutory references, and reorganize provisions for clarity. The rulemaking also proposes amendments to delete outdated provisions, appropriately match incorporations by reference, eliminate redundancies and correct citations.
- 6) Published studies or reports, and sources of underlying data, used to compose this rulemaking: No
- 7) Will this rulemaking replace an emergency rule currently in effect? No
- 8) Does this rulemaking contain an automatic repeal date? No
- 9) Does this proposed rulemaking contain incorporations by reference? Yes

ASME. American Society of Mechanical Engineers, Two Park Avenue, New York NY 10016, (800) 843-2763, www.asme.org.

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ASME BPVC-VIII-1-2015, Boiler & Pressure Vessel Code (BPVC),
Section VIII—Rules for Construction of Pressure Vessels, Division 1:
Rules for Construction and Pressure Vessels, 2015.

ASTM. American Society for Testing and Materials, 100 Barr Harbor Drive, PO
Box C700, West Conshohocken PA 19428-2959, (610)832-9500.

ASTM C 76-16, Standard Specification for Reinforced Concrete Culvert,
Storm Drain, and Sewer Pipe, approved November 1, 2016.

ASTM C 361-16, Standard Specification for Reinforced Concrete Low-
Head Pressure Pipe, approved September 1, 2016.

ASTM C 443-12, Standard Specification for Joints for Concrete Pipe and
Manholes, Using Rubber Gaskets, approved September 1, 2012.

ASTM D 1784-11, Standard Specification for Rigid Poly(Vinyl Chloride)
(PVC) Compounds and Chlorinated Poly(Vinyl Chloride) (CPVC)
Compounds, approved May 1, 2011.

ASTM D 1785-15, Standard Specification for Poly(Vinyl Chloride) (PVC)
Plastic Pipe, Schedules 40, 80, and 120, approved August 1, 2015.

ASTM D 2241-09, Standard Specification for Poly(Vinyl Chloride) (PVC)
Pressure-Rated Pipe (SDR Series), approved December 1, 2009.

ASTM D 2464-15, Standard Specification for Threaded Poly(Vinyl
Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved March 1,
2015.

ASTM D 2466-15, Standard Specification for Poly(Vinyl Chloride) (PVC)
Plastic Pipe Fittings, Schedule 40, approved March 1, 2015.

ASTM D 2467-15, Standard Specification for Poly(Vinyl Chloride) (PVC)
Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.

ASTM D 2564-12, Standard Specification for Solvent Cements for
Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved August 1,
2012.

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ASTM D 3139-11, Standard Specification for Joints for Plastic Pressure Pipes Using Flexible Elastomeric Seals, February 1, 2011.

ASTM F 437-15, Standard Specification for Threaded Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80, approved March 1, 2015.

ASTM F 438-15, Standard Specification for Socket-Type Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 40, approved March 1, 2015.

ASTM F 439-13, Standard Specification for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80, approved August 1, 2013.

ASTM F 441/F 441M-15, Standard Specification for Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe, Schedules 40 and 80, approved August 1, 2015.

ASTM F 442/F 442M-13, Standard Specification for Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe (SDR-PR), approved June 1, 2013.

ASTM F 477-14, Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe, approved September 15, 2014.

ASTM F 493-14, Standard Specification for Solvent Cements for Chlorinated Poly (Vinyl Chloride) (CPVC) Plastic Pipe and Fittings, approved November 1, 2014.

ASTM F 1216-16, Standard Practice for Rehabilitation of Existing Pipelines and Conduits by the Inversion and Curing of a Resin-Imregnated Tube, approved August 1, 2016.

AWWA. American Water Works Association et al., 6666 West Quincy Ave., Denver CO 80235, (303)794-7711.

AWWA A100-06, Water Wells, approved February 2, 2006, effective August 1, 2006.

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AWWA B100-09, Granular Filter Material, approved January 25, 2009, effective March 1, 2010.

AWWA C151/A21.51-09, Ductile-Iron Pipe, Centrifugally Cast, approved January 25, 2009, effective September 1, 2009.

AWWA C200-12, Steel Water Pipe, 6 In. (150 mm) and Larger, approved June 10, 2012, effective September 1, 2012.

AWWA C301-07, Prestressed Concrete Pressure Pipe, Steel-Cylinder Type, approved January 21, 2007, effective June 1, 2007.

AWWA C651-05, Disinfecting Water Mains, approved January 16, 2005, effective June 1, 2005.

AWWA C652-11, Disinfection of Water Storage Facilities, approved June 12, 2011, effective October 1, 2011.

AWWA C653-03, Disinfection of Water Treatment Plants, approved January 19, 2003, effective June 1, 2003.

AWWA C654-03, Disinfection of Wells, approved January 19, 2003, effective November 1, 2003.

AWWA C900-07 Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 4 In. Through 12 In. (100 mm Through 300 mm), for Water Transmission and Distribution, 2007.

AWWA C905-10, Polyvinyl Chloride (PVC) Pressure Pipe and Fabricated Fittings, 14 In. Through 48 In. (350 mm Through 1,200 mm), approved January 17, 2010, effective April 1, 2010.

AWWA C906-07 Polyethylene (PE) Pressure Pipe and Fittings, 4 In. (100 mm) Through 63 In. (1,600 mm) for Water Distribution and Transmission, 2007.

AWWA C907-12 Injection-Molded Polyvinyl Chloride (PVC) Pressure Fittings, 4 In. Through 12 In. (100 mm Through 300 mm), for Water, Wastewater, and Reclaimed Water Service, effective March 1, 2012.

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AWWA C909-09 Molecularly Oriented Polyvinyl Chloride (PVCO) Pressure Pipe, 4 In. through 24 In. (100 mm through 600 mm) for Water, Wastewater, and Reclaimed Water Service, effective March 1, 2010.

AWWA D100-11, Welded Carbon Steel Tanks for Storage, approved January 23, 2011, effective July 1, 2011.

AWWA D103-09, Factory Coated Bolted Carbon Steel Tanks for Water Storage, approved January 25, 2009, effective November 1, 2009.

AWWA D107-10, Composite Elevated Tanks for Water Storage, approved January 17, 2010, effective December 1, 2010.

"Improving Clearwell Design for CT Compliance" (1999).

"The Water Dictionary", 2nd Edition, 2010.

The Chlorine Institute, 1300 Wilson Boulevard, Suite 525, Arlington VA 22209, (703) 894-4140, pubs@CL2.com.

Pamphlet 6: Piping Systems for Dry Chlorine, Edition 16, March 2013.

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

NSF/ANSI 14-2012 Plastics Piping System Components and Related Materials, March 2013.

NSF/ANSI 60-2014 Drinking Water Treatment Chemicals – Health Effects, April 2014.

NSF/ANSI 61-2014 Drinking Water System Components – Health Effects, March 2014.

NSF/ANSI 372-2011 Drinking Water System Components—Lead Content, July 2013.

"Recommended Standards for Water Works – Policies for the Review and Approval of Plans and Specifications for Public Water Supplies", 2012 Edition, Great Lakes – Upper Mississippi River Board of State and Provincial Public

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Health and Environmental Managers, Health Research Inc., Health Education Services Division, PO Box 7126, Albany NY 12224, (518)439-7286.

"Standard Specifications for Water and Sewer Main Construction in Illinois", 7th Edition, 2014, Illinois Society of Professional Engineers, 100 East Washington Street, Springfield IL 62701, (217)544-7424.

USEPA, NSCEP. United States Environmental Protection Agency, National Service Center for Environmental Publications, P.O. Box 42419, Cincinnati, OH 45242-0419 (accessible on-line and available by download from <http://www.epa.gov/nscep/>).

Disinfection Profiling and Benchmarking Guidance Manual, August 1999, EPA 815-R-99-013.

Optimal Corrosion Control Treatment Evaluation Technical Recommendations for Primacy Agencies and Public Water Systems, March 2016, EPA 816-B-16-003.

- 10) Are there any proposed rulemakings to this Part pending? No
- 11) Statement of Statewide Policy Objectives: This proposed amendment does not create or enlarge a state mandate as defined in Section 3(b) of the State Mandates Act. [30 ILCS 805/3].
- 12) Time, Place, and Manner in which interested persons may comment on this proposed rulemaking: The Board will accept written public comments on this proposal for a period of at least 45 days after the date of publication in the *Illinois Register*. Public comments should refer to Docket R18-26 and be filed electronically through the Clerk's Office On-Line (COOL) on the Board's website at pcb.illinois.gov. Public comments may be addressed to:

Clerk's Office
Illinois Pollution Control Board
100 W. Randolph St., Suite 11-500
Chicago, IL 60601

Interested persons may download copies of the Board's opinions and orders in R18-26 from the Board's Web site at pcb.illinois.gov and may also request copies by calling the Clerk's office at 312-814-3620.

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- 13) Initial Regulatory Flexibility Analysis:
- A) Types of small businesses, small municipalities and not for profit corporations affected: None
 - B) Reporting, bookkeeping or other procedures required for compliance: The proposed amendments in this rulemaking will not themselves require recordkeeping or reporting procedures for compliance.
 - C) Types of Professional skills necessary for compliance: None
- 14) Small Business Impact Analysis: The Board does not expect that the proposed rules will impact small business.
- 15) Regulatory Agenda on which this rulemaking was summarized: This rule did not appear in a regulatory agenda.

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

PART 601
INTRODUCTION

Section

- 601.101 General Requirements
- 601.102 Applicability and Organization of this ~~Subtitle~~Chapter
- 601.103 Severability
- 601.104 Analytical Testing
- 601.105 Definitions
- 601.115 Incorporation by Reference

601.APPENDIX A References to Former Rules (Repealed)

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

SOURCE: Filed with Secretary of State January 1, 1978; amended at 2 Ill. Reg. 36, p. 72, effective August 29, 1978; amended at 3 Ill. Reg. 13, p. 236, effective March 30, 1979; amended and codified at 6 Ill. Reg. 11497, effective September 14, 1982; amended at 6 Ill. Reg. 14344, effective November 3, 1982; amended in R84-12 at 14 Ill. Reg. 1379, effective January 8, 1990; amended in R89-5 at 16 Ill. Reg. 1585, effective January 10, 1992; amended in R96-18 at 21 Ill. Reg. 6537, effective May 8, 1997; amended in R15-22 at 40 Ill. Reg. 6784, effective April 15, 2016; amended in R18-17 at 43 Ill. Reg. 8016, effective July 26, 2019; amended in R18-26 at 46 Ill. Reg. _____, effective _____.

Section 601.101 General Requirements

- a) Owners and official custodians of a public water supply in the State of Illinois must provide, under the Act, Board Rules, and the Safe Drinking Water Act (42 ~~U.S.C.~~USE 300f et seq.), continuous operation and maintenance of public water supply facilities to assure that the water is safe in quality, clean, adequate in quantity, and of satisfactory mineral characteristics for ordinary domestic consumption.
- b) Finished Water Quality
 - 1) The finished water delivered to any user at any point in the distribution system must contain no impurity at a concentration that may be hazardous to the health of the consumer or that would be excessively corrosive or

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44 otherwise deleterious to the water supply. Drinking water delivered to any
45 user at any point in the distribution system must contain no impurity that
46 could reasonably be expected to cause offense to the sense of sight, taste,
47 or smell.

48
49 2) ~~Any~~ substance used in treatment ~~must not~~~~should~~ remain in the water at
50 a concentration greater than that required by good practice. A substance
51 that may have a deleterious physiological effect, or one for which
52 physiological effects are not known, must not be used in a manner that
53 would permit it to reach the consumer.

54
55 3) Concentrations of constituents in finished water must not exceed the
56 secondary MCLs listed in the following chart: ~~should not be exceeded in~~
57 ~~the finished water.~~

58

<u>Contaminant</u>	<u>Secondary MCL</u>	<u>Noticeable Effects above the Secondary MCL</u>
Aluminum	0.2 mg/L	colored water
Chloride	250 mg/L	salty taste
Color	15 color units	visible tint
Copper	1 mg/L	metallic taste; blue-green staining
Fluoride	2.0 mg/L	tooth discoloration
Foaming Agents	0.5 mg/L	frothy, cloudy; bitter taste; odor
Iron	0.3 mg/L	rusty color; sediment; metallic taste; reddish or orange staining
Manganese	0.05 mg/L	black to brown color; black staining; bitter metallic taste
Odor	3 T.O.N. (Threshold Odor Number)	"rotten-egg", musty or chemical smell
Silver	0.1 mg/L	skin discoloration; graying of the white part of the eye

Sulfate	250 mg/L	salty taste
Total Dissolved Solids	500 mg/L	hardness; deposits; colored water; staining; salty taste

(Source: Amended at 46 Ill. Reg. _____, effective _____)

Section 601.102 Applicability and Organization of this SubtitleChapter

- a) ~~This Subtitle applies~~The provisions of this Chapter shall apply to groundwater and public water supplies, except for those designated as non-community water supplies. A public water supply ~~ends~~shall be considered to end at each service connection.
- b) The ~~rules in this Subtitle~~Board regulations adopted in this Chapter are organized as ~~follows:~~provided in this Section.
 - 1) Part 601 contains definitions, analytical testing requirements, and incorporations by reference applicable to Parts 601, 602, 603, and ~~604~~607.
 - 2) Part 602 contains permitting requirements and standards for community water supplies and technical, financial and managerial capacity requirements for new community water supplies.
 - 3) Part 603 contains ownership and responsible personnel requirements for community water supplies.
 - 4) ~~Part 604 contains design, operation, and maintenance criteria for community water supplies.~~Part 607 contains requirements for emergency operation and cross-connection control.
 - 5) Part 611 contains regulations identical in substance with federal regulations promulgated by the United States Environmental Protection Agency (USEPA) ~~underpursuant to~~ Sections 1412(b), 1414(c), 1417(a) and 1445(a) of the Safe Drinking Water Act (SDWA) (42 ~~U.S.C.~~USC 300g-1(b), 300g-3(c), 300g-6(a) and 300j-4(a)). Part 611 establishes primary drinking water regulations and includes definitions and incorporations by reference applicable to Part 611.
 - 6) Part 615 contains requirements and standards for the protection of groundwater for certain types of existing facilities or units located wholly

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95 or partially within a setback zone or a regulated recharge area. Part 615
96 includes definitions and incorporations by reference applicable to Part
97 615.
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99 7) Part 616 contains requirements and standards for the protection of
100 groundwater for certain types of new facilities or units located wholly or
101 partially within a setback zone or a regulated recharge area. Part 616
102 includes definitions applicable to Part 616.
103

104 8) Part 617 contains the requirements and standards for regulated recharge
105 areas. Part 617 includes definitions and an incorporation by reference
106 applicable to Part 617.
107

108 9) Part 618 contains requirements and standards for maximum setback zones.
109 Part 618 includes definitions applicable to Part 618.
110

111 10) Part 620 contains the method of classification of groundwater,
112 nondegradation provisions, the groundwater quality standards, and
113 procedures and protocols for the management and protection of
114 groundwater. Part 620 includes definitions and incorporations by
115 reference applicable to Part 620.
116

117 (Source: Amended at 46 Ill. Reg. _____, effective _____)
118

119 **Section 601.103 Severability**

120
121 If any provision of these rules ~~or regulations~~ is adjudged invalid, or if the application ~~thereof~~ to
122 any person or in any circumstance is adjudged invalid, ~~thesueh~~ invalidity ~~willshall~~ not affect the
123 validity of this ~~SubtitleChapter~~ as a whole, or any other part, sub-part, sentence or clause
124 ~~willthereof~~ not ~~be~~ adjudged invalid.
125

126 (Source: Amended at 46 Ill. Reg. _____, effective _____)
127

128 **Section 601.104 Analytical Testing**

129
130 a) To determine compliance with the community water supplies rules and
131 regulations ~~(35 Ill. Adm. Code Subtitle F)~~, all sampling, monitoring and testing
132 ~~mustshall~~ be made according to the methods described in 35 Ill. Adm. Code 611,
133 the National Primary Drinking Water Regulations (40 CFR 141), ~~orand~~ any other
134 method specifically approved by the Agency.
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136 b) All analyses for substances other than those listed in 35 Ill. Adm. Code 611 must
137 be performed by methods acceptable to the Agency.

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(Source: Amended at 46 Ill. Reg. _____, effective _____)

Section 601.105 Definitions

a) For purposes of 35 Ill. Adm. Code 601, 602, 603 and 604, unless a different meaning of a word or term is clear from the context:

"Act" means the Environmental Protection Act [415 ILCS 5].

"Agency" means the Illinois Environmental Protection Agency.

"Air Gap" means the unobstructed vertical distance through the free atmosphere between the water discharge point and the flood level rim of the receptacle.

"Atmospheric Vacuum Breaker" means a device designed to admit atmospheric pressure into a piping system whenever a vacuum is caused on the upstream side of the receptacle.

"Aquifer Property Data" means the porosity, hydraulic conductivity, transmissivity and storage coefficient of an aquifer, head and hydraulic gradient.

"Board" means the Illinois Pollution Control Board.

"Boil Order" means a notice to boil all drinking and culinary water for at least five minutes before use, issued by the proper authorities to the consumers of a public water supply affected, whenever the water being supplied may have become microbiologically contaminated.

"Certified Laboratory" means any laboratory certified under Section 4(o) of the Act, or certified by USEPA for the specific parameters to be examined.

"Chlorine"

"Chlorine Demand" means the difference between the amount of chlorine applied to a given water and the amount of total available chlorine remaining at the end of the contact period. All test conditions (contact time, pH and temperature) must be given, expressing the chlorine demand in a given water.

"Combined Chlorine" means the reaction product formed when chlorine has reacted with ammonia to form chloramines.

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181 "Free Chlorine" means the residual chlorine existing in water as the sum
182 of hypochlorous acid and hypochlorite ion.

183
184 "Total Chlorine" means the sum of the free chlorine and the combined
185 chlorine.

186
187 "Community Water Supply" or "CWS" means a public water supply which serves
188 or is intended to serve at least 15 service connections used by residents or
189 regularly serves at least 25 residents. [\[415 ILCS 5/3.145\]](#)(~~Section 3.145 of the~~
190 ~~Act~~)

191
192 "Confined Geologic Formations" are geologic water bearing formations protected
193 against the entrance of contamination by other geologic formations.

194
195 "Conventional Filtration Treatment" means a series of processes, including
196 coagulation, flocculation, sedimentation, and filtration resulting in substantial
197 particulate removal.

198
199 "Cross-connection" means any physical connection or arrangement between two
200 otherwise separate piping systems where flow from one system to the other is
201 possible.

202
203 "CT" or "CT_{calc}" is the product of "residual disinfectant concentration" (RDC or
204 C) in mg/L determined before or at the first customer, and the corresponding
205 "disinfectant contact time" (T) in minutes. If a supplier applies disinfectants at
206 more than one point prior to the first customer, it must determine the CT of each
207 disinfectant sequence before or at the first customer to determine the total percent
208 inactivation or "total inactivation ratio". In determining the total inactivation
209 ratio, the supplier must determine the RDC of each disinfection sequence and
210 corresponding contact time before any subsequent disinfection application points.

211
212 "Disinfectant" means any agent, including chlorine, chlorine dioxide,
213 chloramines, and ozone, added to water in any part of the treatment or distribution
214 process, that is intended to kill or inactivate pathogenic microorganisms.

215
216 "DPD Method" means an analytical method for determining chlorine residual
217 utilizing the reagent DPD (n-diethyl-p-phenylenediamine).

218
219 "Effective External Linkage" is the ability of a water system to communicate and
220 exchange information with water customers, regulators, technical and financial
221 assistance organizations, and other entities that routinely interact with the water
222 system.

223

224 "Groundwater" means underground water which occurs within the saturated zone
225 and geologic materials where the fluid pressure in the pore space is equal to or
226 greater than atmospheric pressure. [\[415 ILCS 5/3.210\]](#)~~(Section 3.210 of the Act)~~
227

228 "Head" means the sum of the elevation head, pressure head and velocity head at a
229 given point in an aquifer.
230

231 "Hydraulic Conductivity" means the rate of flow in gallons per day (gpd) through a
232 cross section of one square foot (ft²) under a unit hydraulic gradient (gpd/ft²).
233

234 "Hydraulic Gradient" means the rate of change of total head per unit distance of
235 flow in a given direction.
236

237 "Infrastructure" means all mains, pipes and structures through which water is
238 obtained and distributed to the public, including wells and well structures, intakes
239 and cribs, pumping stations, treatment plants, reservoirs, storage tanks and
240 appurtenances, collectively or severally, actually used or intended to be used for the
241 purpose of furnishing water for drinking or general domestic use.
242

243 "Interconnection" means a physical connection between two or more community
244 water supply systems.
245

246 "Maximum Average Daily Demand" or "Maximum Demand" means highest
247 average daily production over seven consecutive days.
248

249 "New Community Water Supply" means, beginning after October 1, 1999, all new
250 community water supplies and those water supplies that expand their infrastructure
251 to serve or intend to serve at least 15 service connections used by residents or
252 regularly serves at least 25 residents. Any water supply not currently a community
253 water supply that adds residents so that the total served is 25 residents or more
254 without constructing additional infrastructure will become a community water
255 supply, but will not be required to demonstrate capacity under 35 Ill. Adm. Code
256 602.103 unless the community water supply is on restricted status as required by 35
257 Ill. Adm. Code 602.106.
258

259 "Non-community Water Supply" means a public water supply that is not a
260 community water supply. [\[415 ILCS 5/3.145\]](#)~~(Section 3.145 of the Act)~~
261

262 "Official Custodian" means an individual who is an officer of an entity that is the
263 owner of a community water supply and acts as the owner's agent in matters
264 concerning the community water supply. [\[415 ILCS 45/9.4\]](#)
265

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266 "Porosity" means the percentage of the bulk volume of a rock or soil that is
267 occupied by interstices, whether isolated or connected, as defined by the ratio of the
268 pore volume to the total volume of a representative sample of the medium.

269
270 *"Public Water Supply" means all mains, pipes and structures through which*
271 *water is obtained and distributed to the public, including wells and well*
272 *structures, intakes and cribs, pumping stations, treatment plants, reservoirs,*
273 *storage tanks and appurtenances, collectively or severally, actually used or*
274 *intended for use for the purpose of furnishing water for drinking or general*
275 *domestic use and which serve at least 15 service connections or which regularly*
276 *serve at least 25 persons at least 60 days per year. [\[415 ILCS 5/3.365\]](#)([Section](#)
277 [3.365 of the Act](#))*

278
279 "Responsible Operator in Charge" means an individual who is designated as a
280 Responsible Operator in Charge of a community water supply under Section 1 of
281 the Public Water Supply Operations Act [415 ILCS 45/1] and 35 Ill. Adm. Code
282 603. [415 ILCS 45/9.6]

283
284 "Satellite Supply" means any community water supply that:

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286 purchases all finished water from another community water supply;
287
288 does not provide any treatment other than chlorination or corrosion
289 control; and
290
291 distributes finished water to the consumers.

292
293 "Sell Water" means to deliver or provide potable water, obtained from a public
294 water supply subject to these regulations, to the consumer, who is then
295 individually or specifically billed for water service, or where any monetary
296 assessment is levied or required and specifically used for water service. Water
297 supply facilities owned or operated by political subdivisions, homeowners'
298 associations, and not-for-profit associations, as well as privately owned utilities
299 regulated by the Illinois Commerce Commission, are considered to sell water
300 whether or not a charge is specifically made for water.

301
302 "SEP" means special exception permit.

303
304 "Service Connection" is the opening, including all fittings and appurtenances, at
305 the water main through which water is supplied to the user through a water
306 service line.

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308 "Storage Coefficient" means the volume of water an aquifer releases from or takes
309 into storage per unit surface area of the aquifer per unit change in head.

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311 "Surface Water" means all tributary streams and drainage basins, including
312 natural lakes and artificial reservoirs, which may affect a specific water supply
313 above the point of water supply intake.

314
315 "Surface Water Supply Source" means any surface water used as a water source
316 for a public water supply.

317
318 "Supply" means a community water supply.

319
320 "Transmissivity" means the rate in gallons per minute (gpm), at which water is
321 transmitted horizontally through a unit width by the total saturated thickness of an
322 aquifer, in feet (ft), under a unit hydraulic gradient (gpm/ft).

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324 "Water Main" means any pipe for the purpose of distributing potable water that
325 serves or is accessible to more than one property, dwelling or rental unit and is
326 exterior to buildings.

327
328 "Water Service Line" means any pipe from the water main or source of potable
329 water supply that serves or is accessible to not more than one property, dwelling or
330 rental unit of the user.

331
332 "Well Hydraulics" means equations that are applied to understand the effect that a
333 pumping well structure has on inducing the movement of water through permeable
334 rock formations and certain aquifer properties to determine the rate of withdrawal
335 of the well. This term is inclusive of equations that quantify wellbore skin
336 effects/well loss.

337
338 "Wellhead Protection Area" or "WHPA" means the surface and subsurface recharge
339 area surrounding a community water supply well or well field, delineated outside of
340 any applicable setback zones (under Section 17.1 of the Act) established under
341 Illinois' Wellhead Protection Program, through which contaminants are reasonably
342 likely to move toward the well or well field.

343
344 "Wellhead Protection Measures" means management practices needed to mitigate
345 existing and future threats to the water quality within the delineated WHPA.

346
347 "Wellhead Protection Program" means the Wellhead Protection Program for the
348 State of Illinois, approved by USEPA under section 1428 of the SDWA (42
349 [U.S.C. USC 300h-7](#)).

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- 351 b) Terms not specifically defined in subsection (a), will have the meanings ascribed
352 in 35 Ill. Adm. Code 611.
353
354 c) Terms not specifically defined in subsection (a) or (b) will have the meanings
355 specified in The Water Dictionary, incorporated by reference in Section 601.115.
356
357 (Source: Amended at 46 Ill. Reg. _____, effective _____)
358

Section 601.115 Incorporations by Reference

- 360
361 a) Abbreviations and Short-name Listing of References. The following names and
362 abbreviated names are used in this Subtitle Chapter I to refer to materials
363 incorporated by reference:
364
365 "ANSI" means those standards published by American National Standards
366 Institute.
367
368 "ASME" means the American Society of Mechanical Engineers.
369
370 "ASTM" means those standards published by American Society for Testing and
371 Materials.
372
373 "AWWA" means those standards published by the American Water Works
374 Association.
375
376 "NSF" means those standards published by the National Science Foundation
377 International.
378
379 "Recommended Standards" means "Recommended Standards for Water Works –
380 Policies for the Review and Approval of Plans and Specifications for Public
381 Water Supplies".
382
383 b) The Board Agency incorporates the following materials by reference:
384
385 ASME. American Society of Mechanical Engineers, Two Park Avenue,
386 New York NY 10016, (800)843-2763, www.asme.org.
387
388 ASME BPVC-VIII-1-2015, Boiler & Pressure Vessel Code
389 (BPVC), Section VIII – Rules for Construction of Pressure
390 Vessels, Division 1: Rules for Construction and Pressure Vessels,
391 2015.
392

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393 ASTM. American Society for Testing and Materials, 100 Barr Harbor
394 Drive, PO Box C700, West Conshohocken PA 19428-2959,
395 (610)832-9500.
396
397 ASTM C 76-16, Standard Specification for Reinforced Concrete
398 Culvert, Storm Drain, and Sewer Pipe, approved November 1,
399 2016.
400
401 ASTM C 361-16, Standard Specification for Reinforced Concrete
402 Low-Head Pressure Pipe, approved September 1, 2016.
403
404 ASTM C 443-12, Standard Specification for Joints for Concrete
405 Pipe and Manholes, Using Rubber Gaskets, approved September 1,
406 2012.
407
408 ASTM D 1784-11, Standard Specification for Rigid Poly(Vinyl
409 Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl
410 Chloride) (CPVC) Compounds, approved May 1, 2011.
411
412 ASTM D 1785-15, Standard Specification for Poly(Vinyl
413 Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120, approved
414 August 1, 2015.
415
416 ASTM D 2241-09, Standard Specification for Poly(Vinyl
417 Chloride) (PVC) Pressure-Rated Pipe (SDR Series), approved
418 December 1, 2009.
419
420 ASTM D 2464-15, Standard Specification for Threaded
421 Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80,
422 approved March 1, 2015.
423
424 ASTM D 2466-15, Standard Specification for Poly(Vinyl
425 Chloride) (PVC) Plastic Pipe Fittings, Schedule 40, approved
426 March 1, 2015.
427
428 ASTM D 2467-15, Standard Specification for Poly(Vinyl
429 Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved
430 March 1, 2015.
431
432 ASTM D 2564-12, Standard Specification for Solvent Cements for
433 Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved
434 August 1, 2012.
435

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436 ASTM D 3139-11, Standard Specification for Joints for Plastic
437 Pressure Pipes Using Flexible Elastomeric Seals, February 1, 2011.
438
439 ASTM F 437-15, Standard Specification for Threaded Chlorinated
440 Poly(Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80,
441 approved March 1, 2015.
442
443 ASTM F 438-15, Standard Specification for Socket-Type
444 Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe Fittings,
445 Schedule 40, approved March 1, 2015.
446
447 ASTM F 439-13, Standard Specification for Chlorinated Poly
448 (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80,
449 approved August 1, 2013.
450
451 ASTM F 441/F 441M-15, Standard Specification for Chlorinated
452 Poly(Vinyl Chloride) (CPVC) Plastic Pipe, Schedules 40 and 80,
453 approved August 1, 2015.
454
455 ASTM F 442/F 442M-13, Standard Specification for Chlorinated
456 Poly(Vinyl Chloride) (CPVC) Plastic Pipe (SDR-PR), approved
457 June 1, 2013.
458
459 ASTM F 477-14, Standard Specification for Elastomeric Seals
460 (Gaskets) for Joining Plastic Pipe, approved September 15, 2014.
461
462 ASTM F 493-14, Standard Specification for Solvent Cements for
463 Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe and
464 Fittings, approved November 1, 2014.
465
466 ASTM F 1216-16, Standard Practice for Rehabilitation of Existing
467 Pipelines and Conduits by the Inversion and Curing of a Resin-
468 Impregnated Tube, approved August 1, 2016.
469
470 AWWA. American Water Works Association et al., 6666 West
471 Quincy Ave., Denver CO 80235, (303)794-7711.
472
473 AWWA A100-06, Water Wells, approved February 2, 2006,
474 effective August 1, 2006.
475
476 AWWA B100-09, Granular Filter Material, approved January 25,
477 2009, effective March 1, 2010.
478

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479 AWWA C151/A21.51-09, Ductile-Iron Pipe, Centrifugally Cast,
480 approved January 25, 2009, effective September 1, 2009.
481
482 AWWA C200-12, Steel Water Pipe, 6 In. (150 mm) and Larger,
483 approved June 10, 2012, effective September 1, 2012.
484
485 AWWA C301-07, Prestressed Concrete Pressure Pipe, Steel-
486 Cylinder Type, approved January 21, 2007, effective June 1, 2007.
487
488 AWWA C651-05, Disinfecting Water Mains, approved January
489 16, 2005, effective June 1, 2005.
490
491 AWWA C652-11, Disinfection of Water Storage Facilities,
492 approved June 12, 2011, effective October 1, 2011.
493
494 AWWA C653-03, Disinfection of Water Treatment Plants,
495 approved January 19, 2003, effective June 1, 2003.
496
497 AWWA C654-03, Disinfection of Wells, approved January 19,
498 2003, effective November 1, 2003.
499
500 AWWA C900-07 Polyvinyl Chloride (PVC) Pressure Pipe and
501 Fabricated Fittings, 4 In. Through 12 In. (100 mm Through 300
502 mm), for Water Transmission and Distribution, 2007.
503
504 AWWA C905-10, Polyvinyl Chloride (PVC) Pressure Pipe and
505 Fabricated Fittings, 14 In. Through 48 In. (350 mm Through 1,200
506 mm), approved January 17, 2010, effective April 1, 2010.
507
508 AWWA C906-07 Polyethylene (PE) Pressure Pipe and Fittings, 4
509 In. (100 mm) Through 63 In. (1,600 mm) for Water Distribution
510 and Transmission, 2007.
511
512 AWWA C907-12 Injection-Molded Polyvinyl Chloride (PVC)
513 Pressure Fittings, 4 In. Through 12 In. (100 mm Through 300
514 mm), for Water, Wastewater, and Reclaimed Water Service,
515 effective March 1, 2012.
516
517 AWWA C909-09 Molecularly Oriented Polyvinyl Chloride
518 (PVCO) Pressure Pipe, 4 In. through 24 In. (100 mm through 600
519 mm) for Water, Wastewater, and Reclaimed Water Service,
520 effective March 1, 2010.
521

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522 AWWA D100-11, Welded Carbon Steel Tanks for Storage,
523 approved January 23, 2011, effective July 1, 2011.
524
525 AWWA D103-09, Factory Coated Bolted Carbon Steel Tanks for
526 Water Storage, approved January 25, 2009, effective November 1,
527 2009.
528
529 AWWA D107-10, Composite Elevated Tanks for Water Storage,
530 approved January 17, 2010, effective December 1, 2010.
531
532 "Improving Clearwell Design for CT Compliance" (1999).
533
534 "The Water Dictionary", 2nd Edition, 2010.
535
536 The Chlorine Institute, 1300 Wilson Boulevard, Suite 525, Arlington VA
537 22209, (703)894-4140, pubs@CL2.com.
538
539 Pamphlet 6: Piping Systems for Dry Chlorine, Edition 16, March
540 2013.
541
542 NSF. National Sanitation Foundation International, 3475 Plymouth Road,
543 PO Box 130140, Ann Arbor MI 48113-0140, (734)769-8010.
544
545 NSF/ANSI 14-2012 Plastics Piping System Components and
546 Related Materials, March 2013.
547
548 [NSF/NFS/ANSI 60-201460-2013](#) Drinking Water Treatment
549 Chemicals – Health Effects, April 2014.
550
551 [NSF/ANSI 61-201461-2013](#) Drinking Water System Components
552 – Health Effects, March 2014.
553
554 NSF/ANSI 372-2011 Drinking Water System Components – Lead
555 Content, July 2013.
556
557 "Recommended Standards for Water Works – Policies for the Review and
558 Approval of Plans and Specifications for Public Water Supplies", 2012
559 Edition, Great Lakes – Upper Mississippi River Board of State and
560 Provincial Public Health and Environmental Managers, Health Research
561 Inc., Health Education Services Division, PO Box 7126, Albany NY
562 12224, (518) 439-7286.
563

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564 "Standard Specifications for Water and Sewer Main Construction in
565 Illinois", 7th Edition, 2014, Illinois Society of Professional Engineers, 100
566 East Washington Street, Springfield IL 62701, (217)544-7424.

567
568 USEPA, NSCEP. United States Environmental Protection Agency,
569 National Service Center for Environmental Publications, P.O. Box 42419,
570 Cincinnati, OH 45242-0419 (accessible on-line and available by download
571 from <http://www.epa.gov/nscep/>).

572
573 Disinfection Profiling and Benchmarking Guidance Manual,
574 August 1999, EPA 815-R-99-013.

575
576 Optimal Corrosion Control Treatment Evaluation Technical
577 Recommendations for Primacy Agencies and Public Water
578 Systems, March 2016, EPA 816-B-16-003.

579
580 c) No later amendments to or editions of the materials listed in subsection (b) are
581 incorporated.

582
583 (Source: Amended at 46 Ill. Reg. _____, effective _____)
584

585 **Section 601.APPENDIX A References to Former Rules (Repealed)**

586
587 ~~The following table is provided to aid in referencing former Board rule numbers to section~~
588 ~~numbers pursuant to codification.~~

589

Chapter 6: Public Water Supplies	35 Ill. Adm. Code
Part I: Introduction	Part 601
Rule 101	Section 601.101
Rule 102	Deleted
Rule 103	Deleted
Rule 104	Section 601.105
Rule 105	Section 601.104
Rule 106	Section 601.102
Rule 107	Section 601.103

590
591 (Source: Repealed at 46 Ill. Reg. _____, effective _____)

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

PART 601
INTRODUCTION

Section

- 601.101 General Requirements
- 601.102 Applicability and Organization of this Subtitle
- 601.103 Severability
- 601.104 Analytical Testing
- 601.105 Definitions
- 601.115 Incorporation by Reference

601.APPENDIX A References to Former Rules (Repealed)

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

SOURCE: Filed with Secretary of State January 1, 1978; amended at 2 Ill. Reg. 36, p. 72, effective August 29, 1978; amended at 3 Ill. Reg. 13, p. 236, effective March 30, 1979; amended and codified at 6 Ill. Reg. 11497, effective September 14, 1982; amended at 6 Ill. Reg. 14344, effective November 3, 1982; amended in R84-12 at 14 Ill. Reg. 1379, effective January 8, 1990; amended in R89-5 at 16 Ill. Reg. 1585, effective January 10, 1992; amended in R96-18 at 21 Ill. Reg. 6537, effective May 8, 1997; amended in R15-22 at 40 Ill. Reg. 6784, effective April 15, 2016; amended in R18-17 at 43 Ill. Reg. 8016, effective July 26, 2019; amended in R18-26 at 46 Ill. Reg. _____, effective _____.

Section 601.101 General Requirements

- a) Owners and official custodians of a public water supply in the State of Illinois must provide, under the Act, Board Rules, and the Safe Drinking Water Act (42 U.S.C. 300f et seq.), continuous operation and maintenance of public water supply facilities to assure that the water is safe in quality, clean, adequate in quantity, and of satisfactory mineral characteristics for ordinary domestic consumption.
- b) Finished Water Quality
 - 1) The finished water delivered to any user at any point in the distribution system must contain no impurity at a concentration that may be hazardous to the health of the consumer or that would be excessively corrosive or otherwise deleterious to the water supply. Drinking water delivered to any

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45 user at any point in the distribution system must contain no impurity that
46 could reasonably be expected to cause offense to the sense of sight, taste,
47 or smell.

48
49 2) Any substance used in treatment must not remain in the water at a
50 concentration greater than that required by good practice. A substance
51 that may have a deleterious physiological effect, or one for which
52 physiological effects are not known, must not be used in a manner that
53 would permit it to reach the consumer.

54
55 3) Concentrations of constituents in finished water must not exceed the
56 secondary MCLs listed in the following chart:
57

<u>Contaminant</u>	<u>Secondary MCL</u>	<u>Noticeable Effects above the Secondary MCL</u>
Aluminum	0.2 mg/L	colored water
Chloride	250 mg/L	salty taste
Color	15 color units	visible tint
Copper	1 mg/L	metallic taste; blue-green staining
Fluoride	2.0 mg/L	tooth discoloration
Foaming Agents	0.5 mg/L	frothy, cloudy; bitter taste; odor
Iron	0.3 mg/L	rusty color; sediment; metallic taste; reddish or orange staining
Manganese	0.05 mg/L	black to brown color; black staining; bitter metallic taste
Odor	3 T.O.N. (Threshold Odor Number)	"rotten-egg", musty or chemical smell
Silver	0.1 mg/L	skin discoloration; graying of the white part of the eye
Sulfate	250 mg/L	salty taste

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Total Dissolved Solids 500 mg/L hardness; deposits;
colored water; staining; salty
taste

(Source: Amended at 46 Ill. Reg. _____, effective _____)

Section 601.102 Applicability and Organization of this Subtitle

- a) This Subtitle applies to groundwater and public water supplies, except for those designated as non-community water supplies. A public water supply ends at each service connection.
- b) The rules in this Subtitle are organized as follows:
 - 1) Part 601 contains definitions, analytical testing requirements, and incorporations by reference applicable to Parts 601, 602, 603, and 604.
 - 2) Part 602 contains permitting requirements and standards for community water supplies and technical, financial and managerial capacity requirements for new community water supplies.
 - 3) Part 603 contains ownership and responsible personnel requirements for community water supplies.
 - 4) Part 604 contains design, operation, and maintenance criteria for community water supplies.
 - 5) Part 611 contains regulations identical in substance with federal regulations promulgated by the United States Environmental Protection Agency (USEPA) under Sections 1412(b), 1414(c), 1417(a) and 1445(a) of the Safe Drinking Water Act (SDWA) (42 U.S.C. 300g-1(b), 300g-3(c), 300g-6(a) and 300j-4(a)). Part 611 establishes primary drinking water regulations and includes definitions and incorporations by reference applicable to Part 611.
 - 6) Part 615 contains requirements and standards for the protection of groundwater for certain types of existing facilities or units located wholly or partially within a setback zone or a regulated recharge area. Part 615 includes definitions and incorporations by reference applicable to Part 615.
 - 7) Part 616 contains requirements and standards for the protection of groundwater for certain types of new facilities or units located wholly or partially within a setback zone or a regulated recharge area. Part 616

98 includes definitions applicable to Part 616.
99

- 100 8) Part 617 contains the requirements and standards for regulated recharge
101 areas. Part 617 includes definitions and an incorporation by reference
102 applicable to Part 617.
103
104 9) Part 618 contains requirements and standards for maximum setback zones.
105 Part 618 includes definitions applicable to Part 618.
106
107 10) Part 620 contains the method of classification of groundwater,
108 nondegradation provisions, the groundwater quality standards, and
109 procedures and protocols for the management and protection of
110 groundwater. Part 620 includes definitions and incorporations by
111 reference applicable to Part 620.
112

113 (Source: Amended at 46 Ill. Reg. _____, effective _____)
114

115 **Section 601.103 Severability**
116

117 If any provision of these rules is adjudged invalid, or if the application to any person or in any
118 circumstance is adjudged invalid, the invalidity will not affect the validity of this Subtitle as a
119 whole, or any other part, sub-part, sentence or clause will not be adjudged invalid.
120

121 (Source: Amended at 46 Ill. Reg. _____, effective _____)
122

123 **Section 601.104 Analytical Testing**
124

- 125 a) To determine compliance with the community water supplies rules and
126 regulations, all sampling, monitoring and testing must be made according to the
127 methods described in 35 Ill. Adm. Code 611, the National Primary Drinking
128 Water Regulations (40 CFR 141), or any other method specifically approved by
129 the Agency.
130
131 b) All analyses for substances other than those listed in 35 Ill. Adm. Code 611 must
132 be performed by methods acceptable to the Agency.
133

134 (Source: Amended at 46 Ill. Reg. _____, effective _____)
135

136 **Section 601.105 Definitions**
137

- 138 a) For purposes of 35 Ill. Adm. Code 601, 602, 603 and 604, unless a different
139 meaning of a word or term is clear from the context:

140 "Act" means the Environmental Protection Act [415 ILCS 5].
141

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142
143 "Agency" means the Illinois Environmental Protection Agency.
144
145 "Air Gap" means the unobstructed vertical distance through the free atmosphere
146 between the water discharge point and the flood level rim of the receptacle.
147
148 "Atmospheric Vacuum Breaker" means a device designed to admit atmospheric
149 pressure into a piping system whenever a vacuum is caused on the upstream side
150 of the receptacle.
151
152 "Aquifer Property Data" means the porosity, hydraulic conductivity, transmissivity
153 and storage coefficient of an aquifer, head and hydraulic gradient.
154
155 "Board" means the Illinois Pollution Control Board.
156
157 "Boil Order" means a notice to boil all drinking and culinary water for at least
158 five minutes before use, issued by the proper authorities to the consumers of a
159 public water supply affected, whenever the water being supplied may have
160 become microbiologically contaminated.
161
162 "Certified Laboratory" means any laboratory certified under Section 4(o) of the
163 Act, or certified by USEPA for the specific parameters to be examined.
164
165 "Chlorine"
166
167 "Chlorine Demand" means the difference between the amount of chlorine
168 applied to a given water and the amount of total available chlorine
169 remaining at the end of the contact period. All test conditions (contact
170 time, pH and temperature) must be given, expressing the chlorine demand
171 in a given water.
172
173 "Combined Chlorine" means the reaction product formed when chlorine
174 has reacted with ammonia to form chloramines.
175
176 "Free Chlorine" means the residual chlorine existing in water as the sum
177 of hypochlorous acid and hypochlorite ion.
178
179 "Total Chlorine" means the sum of the free chlorine and the combined
180 chlorine.
181
182 "Community Water Supply" or "CWS" *means a public water supply which serves*
183 *or is intended to serve at least 15 service connections used by residents or*
184 *regularly serves at least 25 residents. [415 ILCS 5/3.145]*
185

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186 "Confined Geologic Formations" are geologic water bearing formations protected
187 against the entrance of contamination by other geologic formations.

188
189 "Conventional Filtration Treatment" means a series of processes, including
190 coagulation, flocculation, sedimentation, and filtration resulting in substantial
191 particulate removal.

192
193 "Cross-connection" means any physical connection or arrangement between two
194 otherwise separate piping systems where flow from one system to the other is
195 possible.

196
197 "CT" or "CT_{calc}" is the product of "residual disinfectant concentration" (RDC or
198 C) in mg/L determined before or at the first customer, and the corresponding
199 "disinfectant contact time" (T) in minutes. If a supplier applies disinfectants at
200 more than one point prior to the first customer, it must determine the CT of each
201 disinfectant sequence before or at the first customer to determine the total percent
202 inactivation or "total inactivation ratio". In determining the total inactivation
203 ratio, the supplier must determine the RDC of each disinfection sequence and
204 corresponding contact time before any subsequent disinfection application points.

205
206 "Disinfectant" means any agent, including chlorine, chlorine dioxide,
207 chloramines, and ozone, added to water in any part of the treatment or distribution
208 process, that is intended to kill or inactivate pathogenic microorganisms.

209
210 "DPD Method" means an analytical method for determining chlorine residual
211 utilizing the reagent DPD (n-diethyl-p-phenylenediamine).

212
213 "Effective External Linkage" is the ability of a water system to communicate and
214 exchange information with water customers, regulators, technical and financial
215 assistance organizations, and other entities that routinely interact with the water
216 system.

217
218 "*Groundwater*" means *underground water which occurs within the saturated zone*
219 *and geologic materials where the fluid pressure in the pore space is equal to or*
220 *greater than atmospheric pressure.* [415 ILCS 5/3.210]

221
222 "Head" means the sum of the elevation head, pressure head and velocity head at a
223 given point in an aquifer.

224
225 "Hydraulic Conductivity" means the rate of flow in gallons per day (gpd) through a
226 cross section of one square foot (ft²) under a unit hydraulic gradient (gpd/ft²).

227
228 "Hydraulic Gradient" means the rate of change of total head per unit distance of
229 flow in a given direction.

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"Infrastructure" means all mains, pipes and structures through which water is obtained and distributed to the public, including wells and well structures, intakes and cribs, pumping stations, treatment plants, reservoirs, storage tanks and appurtenances, collectively or severally, actually used or intended to be used for the purpose of furnishing water for drinking or general domestic use.

"Interconnection" means a physical connection between two or more community water supply systems.

"Maximum Average Daily Demand" or "Maximum Demand" means highest average daily production over seven consecutive days.

"New Community Water Supply" means, beginning after October 1, 1999, all new community water supplies and those water supplies that expand their infrastructure to serve or intend to serve at least 15 service connections used by residents or regularly serves at least 25 residents. Any water supply not currently a community water supply that adds residents so that the total served is 25 residents or more without constructing additional infrastructure will become a community water supply, but will not be required to demonstrate capacity under 35 Ill. Adm. Code 602.103 unless the community water supply is on restricted status as required by 35 Ill. Adm. Code 602.106.

"Non-community Water Supply" means *a public water supply that is not a community water supply.* [415 ILCS 5/3.145]

"Official Custodian" means *an individual who is an officer of an entity that is the owner of a community water supply and acts as the owner's agent in matters concerning the community water supply.* [415 ILCS 45/9.4]

"Porosity" means the percentage of the bulk volume of a rock or soil that is occupied by interstices, whether isolated or connected, as defined by the ratio of the pore volume to the total volume of a representative sample of the medium.

"Public Water Supply" means all mains, pipes and structures through which water is obtained and distributed to the public, including wells and well structures, intakes and cribs, pumping stations, treatment plants, reservoirs, storage tanks and appurtenances, collectively or severally, actually used or intended for use for the purpose of furnishing water for drinking or general domestic use and which serve at least 15 service connections or which regularly serve at least 25 persons at least 60 days per year. [415 ILCS 5/3.365]

"Responsible Operator in Charge" means *an individual who is designated as a Responsible Operator in Charge of a community water supply under Section 1 of*

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274 the Public Water Supply Operations Act [415 ILCS 45/1] and 35 Ill. Adm. Code
275 603. [415 ILCS 45/9.6]

276

277 "Satellite Supply" means any community water supply that:

278

279 purchases all finished water from another community water supply;

280

281 does not provide any treatment other than chlorination or corrosion
282 control; and

283

284 distributes finished water to the consumers.

285

286 "Sell Water" means to deliver or provide potable water, obtained from a public
287 water supply subject to these regulations, to the consumer, who is then
288 individually or specifically billed for water service, or where any monetary
289 assessment is levied or required and specifically used for water service. Water
290 supply facilities owned or operated by political subdivisions, homeowners'
291 associations, and not-for-profit associations, as well as privately owned utilities
292 regulated by the Illinois Commerce Commission, are considered to sell water
293 whether or not a charge is specifically made for water.

294

295 "SEP" means special exception permit.

296

297 "Service Connection" is the opening, including all fittings and appurtenances, at
298 the water main through which water is supplied to the user through a water
299 service line.

300

301 "Storage Coefficient" means the volume of water an aquifer releases from or takes
302 into storage per unit surface area of the aquifer per unit change in head.

303

304 "Surface Water" means all tributary streams and drainage basins, including
305 natural lakes and artificial reservoirs, which may affect a specific water supply
306 above the point of water supply intake.

307

308 "Surface Water Supply Source" means any surface water used as a water source
309 for a public water supply.

310

311 "Supply" means a community water supply.

312

313 "Transmissivity" means the rate in gallons per minute (gpm), at which water is
314 transmitted horizontally through a unit width by the total saturated thickness of an
315 aquifer, in feet (ft), under a unit hydraulic gradient (gpm/ft).

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317 "Water Main" means any pipe for the purpose of distributing potable water that
318 serves or is accessible to more than one property, dwelling or rental unit and is
319 exterior to buildings.

320
321 "Water Service Line" means any pipe from the water main or source of potable
322 water supply that serves or is accessible to not more than one property, dwelling or
323 rental unit of the user.

324
325 "Well Hydraulics" means equations that are applied to understand the effect that a
326 pumping well structure has on inducing the movement of water through permeable
327 rock formations and certain aquifer properties to determine the rate of withdrawal
328 of the well. This term is inclusive of equations that quantify wellbore skin
329 effects/well loss.

330
331 "Wellhead Protection Area" or "WHPA" means the surface and subsurface recharge
332 area surrounding a community water supply well or well field, delineated outside of
333 any applicable setback zones (under Section 17.1 of the Act) established under
334 Illinois' Wellhead Protection Program, through which contaminants are reasonably
335 likely to move toward the well or well field.

336
337 "Wellhead Protection Measures" means management practices needed to mitigate
338 existing and future threats to the water quality within the delineated WHPA.

339
340 "Wellhead Protection Program" means the Wellhead Protection Program for the
341 State of Illinois, approved by USEPA under section 1428 of the SDWA (42 U.S.C.
342 300h-7).

343
344 b) Terms not specifically defined in subsection (a), will have the meanings ascribed
345 in 35 Ill. Adm. Code 611.

346
347 c) Terms not specifically defined in subsection (a) or (b) will have the meanings
348 specified in The Water Dictionary, incorporated by reference in Section 601.115.

349
350 (Source: Amended at 46 Ill. Reg. _____, effective _____)

351

352 **Section 601.115 Incorporations by Reference**

353

354 a) Abbreviations and Short-name Listing of References. The following names and
355 abbreviated names are used in this Subtitle to refer to materials incorporated by
356 reference:

357

358 "ANSI" means those standards published by American National Standards
359 Institute.

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- 361 "ASME" means the American Society of Mechanical Engineers.
362
363 "ASTM" means those standards published by American Society for Testing and
364 Materials.
365
366 "AWWA" means those standards published by the American Water Works
367 Association.
368
369 "NSF" means those standards published by the National Science Foundation
370 International.
371
372 "Recommended Standards" means "Recommended Standards for Water Works –
373 Policies for the Review and Approval of Plans and Specifications for Public
374 Water Supplies".
375
- b) The Board incorporates the following materials by reference:
377
378 ASME. American Society of Mechanical Engineers, Two Park Avenue,
379 New York NY 10016, (800)843-2763, www.asme.org.
380
381 ASME BPVC-VIII-1-2015, Boiler & Pressure Vessel Code
382 (BPVC), Section VIII – Rules for Construction of Pressure
383 Vessels, Division 1: Rules for Construction and Pressure Vessels,
384 2015.
385
386 ASTM. American Society for Testing and Materials, 100 Barr Harbor
387 Drive, PO Box C700, West Conshohocken PA 19428-2959,
388 (610)832-9500.
389
390 ASTM C 76-16, Standard Specification for Reinforced Concrete
391 Culvert, Storm Drain, and Sewer Pipe, approved November 1,
392 2016.
393
394 ASTM C 361-16, Standard Specification for Reinforced Concrete
395 Low-Head Pressure Pipe, approved September 1, 2016.
396
397 ASTM C 443-12, Standard Specification for Joints for Concrete
398 Pipe and Manholes, Using Rubber Gaskets, approved September 1,
399 2012.
400
401 ASTM D 1784-11, Standard Specification for Rigid Poly(Vinyl
402 Chloride) (PVC) Compounds and Chlorinated Poly(Vinyl
403 Chloride) (CPVC) Compounds, approved May 1, 2011.
404

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405 ASTM D 1785-15, Standard Specification for Poly(Vinyl
406 Chloride) (PVC) Plastic Pipe, Schedules 40, 80, and 120, approved
407 August 1, 2015.

408
409 ASTM D 2241-09, Standard Specification for Poly(Vinyl
410 Chloride) (PVC) Pressure-Rated Pipe (SDR Series), approved
411 December 1, 2009.

412
413 ASTM D 2464-15, Standard Specification for Threaded
414 Poly(Vinyl Chloride) (PVC) Plastic Pipe Fittings, Schedule 80,
415 approved March 1, 2015.

416
417 ASTM D 2466-15, Standard Specification for Poly(Vinyl
418 Chloride) (PVC) Plastic Pipe Fittings, Schedule 40, approved
419 March 1, 2015.

420
421 ASTM D 2467-15, Standard Specification for Poly(Vinyl
422 Chloride) (PVC) Plastic Pipe Fittings, Schedule 80, approved
423 March 1, 2015.

424
425 ASTM D 2564-12, Standard Specification for Solvent Cements for
426 Poly(Vinyl Chloride) (PVC) Plastic Piping Systems, approved
427 August 1, 2012.

428
429 ASTM D 3139-11, Standard Specification for Joints for Plastic
430 Pressure Pipes Using Flexible Elastomeric Seals, February 1, 2011.

431
432 ASTM F 437-15, Standard Specification for Threaded Chlorinated
433 Poly(Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80,
434 approved March 1, 2015.

435
436 ASTM F 438-15, Standard Specification for Socket-Type
437 Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe Fittings,
438 Schedule 40, approved March 1, 2015.

439
440 ASTM F 439-13, Standard Specification for Chlorinated Poly
441 (Vinyl Chloride) (CPVC) Plastic Pipe Fittings, Schedule 80,
442 approved August 1, 2013.

443
444 ASTM F 441/F 441M-15, Standard Specification for Chlorinated
445 Poly(Vinyl Chloride) (CPVC) Plastic Pipe, Schedules 40 and 80,
446 approved August 1, 2015.

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448 ASTM F 442/F 442M-13, Standard Specification for Chlorinated
449 Poly(Vinyl Chloride) (CPVC) Plastic Pipe (SDR-PR), approved
450 June 1, 2013.
451
452 ASTM F 477-14, Standard Specification for Elastomeric Seals
453 (Gaskets) for Joining Plastic Pipe, approved September 15, 2014.
454
455 ASTM F 493-14, Standard Specification for Solvent Cements for
456 Chlorinated Poly(Vinyl Chloride) (CPVC) Plastic Pipe and
457 Fittings, approved November 1, 2014.
458
459 ASTM F 1216-16, Standard Practice for Rehabilitation of Existing
460 Pipelines and Conduits by the Inversion and Curing of a Resin-
461 Impregnated Tube, approved August 1, 2016.
462
463 AWWA. American Water Works Association et al., 6666 West
464 Quincy Ave., Denver CO 80235, (303)794-7711.
465
466 AWWA A100-06, Water Wells, approved February 2, 2006,
467 effective August 1, 2006.
468
469 AWWA B100-09, Granular Filter Material, approved January 25,
470 2009, effective March 1, 2010.
471
472 AWWA C151/A21.51-09, Ductile-Iron Pipe, Centrifugally Cast,
473 approved January 25, 2009, effective September 1, 2009.
474
475 AWWA C200-12, Steel Water Pipe, 6 In. (150 mm) and Larger,
476 approved June 10, 2012, effective September 1, 2012.
477
478 AWWA C301-07, Prestressed Concrete Pressure Pipe, Steel-
479 Cylinder Type, approved January 21, 2007, effective June 1, 2007.
480
481 AWWA C651-05, Disinfecting Water Mains, approved January
482 16, 2005, effective June 1, 2005.
483
484 AWWA C652-11, Disinfection of Water Storage Facilities,
485 approved June 12, 2011, effective October 1, 2011.
486
487 AWWA C653-03, Disinfection of Water Treatment Plants,
488 approved January 19, 2003, effective June 1, 2003.
489
490 AWWA C654-03, Disinfection of Wells, approved January 19,
491 2003, effective November 1, 2003.

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492
493 AWWA C900-07 Polyvinyl Chloride (PVC) Pressure Pipe and
494 Fabricated Fittings, 4 In. Through 12 In. (100 mm Through 300
495 mm), for Water Transmission and Distribution, 2007.
496
497 AWWA C905-10, Polyvinyl Chloride (PVC) Pressure Pipe and
498 Fabricated Fittings, 14 In. Through 48 In. (350 mm Through 1,200
499 mm), approved January 17, 2010, effective April 1, 2010.
500
501 AWWA C906-07 Polyethylene (PE) Pressure Pipe and Fittings, 4
502 In. (100 mm) Through 63 In. (1,600 mm) for Water Distribution
503 and Transmission, 2007.
504
505 AWWA C907-12 Injection-Molded Polyvinyl Chloride (PVC)
506 Pressure Fittings, 4 In. Through 12 In. (100 mm Through 300
507 mm), for Water, Wastewater, and Reclaimed Water Service,
508 effective March 1, 2012.
509
510 AWWA C909-09 Molecularly Oriented Polyvinyl Chloride
511 (PVCO) Pressure Pipe, 4 In. through 24 In. (100 mm through 600
512 mm) for Water, Wastewater, and Reclaimed Water Service,
513 effective March 1, 2010.
514
515 AWWA D100-11, Welded Carbon Steel Tanks for Storage,
516 approved January 23, 2011, effective July 1, 2011.
517
518 AWWA D103-09, Factory Coated Bolted Carbon Steel Tanks for
519 Water Storage, approved January 25, 2009, effective November 1,
520 2009.
521
522 AWWA D107-10, Composite Elevated Tanks for Water Storage,
523 approved January 17, 2010, effective December 1, 2010.
524
525 "Improving Clearwell Design for CT Compliance" (1999).
526
527 "The Water Dictionary", 2nd Edition, 2010.
528
529 The Chlorine Institute, 1300 Wilson Boulevard, Suite 525, Arlington VA
530 22209, (703)894-4140, pubs@CL2.com.
531
532 Pamphlet 6: Piping Systems for Dry Chlorine, Edition 16, March
533 2013.
534

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535 NSF. National Sanitation Foundation International, 3475 Plymouth Road,
536 PO Box 130140, Ann Arbor MI 48113-0140, (734)769-8010.

537
538 NSF/ANSI 14-2012 Plastics Piping System Components and
539 Related Materials, March 2013.

540
541 NSF/ANSI 60-2014 Drinking Water Treatment Chemicals –
542 Health Effects, April 2014.

543
544 NSF/ANSI 61-2014 Drinking Water System Components – Health
545 Effects, March 2014.

546
547 NSF/ANSI 372-2011 Drinking Water System Components – Lead
548 Content, July 2013.

549
550 "Recommended Standards for Water Works – Policies for the Review and
551 Approval of Plans and Specifications for Public Water Supplies", 2012
552 Edition, Great Lakes – Upper Mississippi River Board of State and
553 Provincial Public Health and Environmental Managers, Health Research
554 Inc., Health Education Services Division, PO Box 7126, Albany NY
555 12224, (518) 439-7286.

556
557 "Standard Specifications for Water and Sewer Main Construction in
558 Illinois", 7th Edition, 2014, Illinois Society of Professional Engineers, 100
559 East Washington Street, Springfield IL 62701, (217)544-7424.

560
561 USEPA, NSCEP. United States Environmental Protection Agency,
562 National Service Center for Environmental Publications, P.O. Box 42419,
563 Cincinnati, OH 45242-0419 (accessible on-line and available by download
564 from <http://www.epa.gov/nscep/>).

565
566 Disinfection Profiling and Benchmarking Guidance Manual,
567 August 1999, EPA 815-R-99-013.

568
569 Optimal Corrosion Control Treatment Evaluation Technical
570 Recommendations for Primacy Agencies and Public Water
571 Systems, March 2016, EPA 816-B-16-003.

572
573 c) No later amendments to or editions of the materials listed in subsection (b) are
574 incorporated.

575
576 (Source: Amended at 46 Ill. Reg. _____, effective _____)

577
578 **Section 601.APPENDIX A References to Former Rules (Repealed)**

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581

(Source: Repealed at 46 Ill. Reg. _____, effective _____)