

**From:** [McGill, Richard](#)  
**To:** [Brown, Don](#)  
**Cc:** [Horton, Vanessa](#)  
**Subject:** FW: R18-26 proposed first notice changes  
**Date:** Monday, February 27, 2023 5:01:09 PM  
**Attachments:** [image001.png](#)  
[35-601 Board responses.pdf](#)  
[35-601RG-P r01 \(46-22\).pdf](#)

---

Good evening, Mr. Clerk:

Please docket this email exchange with JCAR, including the two attachments, as a public comment in R18-26.

Thank you.

Richard R. McGill, Jr.  
Senior Attorney for Research & Writing  
Illinois Pollution Control Board  
60 E. Van Buren St., Suite 630  
Chicago, Illinois 60605  
[richard.mcgill@illinois.gov](mailto:richard.mcgill@illinois.gov) (312) 814-6983



---

**From:** McGill, Richard  
**Sent:** Monday, February 27, 2023 4:47 PM  
**To:** Eastvold, Jonathan C. <[JonathanE@ilga.gov](mailto:JonathanE@ilga.gov)>  
**Subject:** RE: R18-26 proposed first notice changes

Good evening, Jonathan:

I've attached two documents. The first document contains Board staff responses to your proposed Part 601 changes emailed to me on June 24, 2022. The second document is the JCAR line-numbered r01 referenced in your changes and our responses. Our responses include related changes prompted by your suggestions.

Thank you for your careful review. Please let me know if you have any questions.

Best regards,

Richard

Richard R. McGill, Jr.  
Senior Attorney for Research & Writing  
Illinois Pollution Control Board  
60 E. Van Buren St., Suite 630  
Chicago, Illinois 60605

[richard.mcgill@illinois.gov](mailto:richard.mcgill@illinois.gov) (312) 814-6983



---

**From:** Eastvold, Jonathan C. <[JonathanE@ilga.gov](mailto:JonathanE@ilga.gov)>  
**Sent:** Friday, June 24, 2022 9:39 AM  
**To:** McGill, Richard <[Richard.McGill@illinois.gov](mailto:Richard.McGill@illinois.gov)>  
**Subject:** [External] R18-26 proposed first notice changes

Here are some possible technical changes, sorted by Part, for the Board to consider. Any of these changes that you wish to make can be simply copied into your first notice changes document.

Thanks in advance for your consideration.

Sincerely,

Jonathan C. Eastvold, Ph.D.  
Rules Analyst III

Illinois General Assembly  
Joint Committee on Administrative Rules  
700 Stratton Building  
Springfield IL 62706  
217-524-9010

State of Illinois - CONFIDENTIALITY NOTICE: The information contained in this communication is confidential, may be attorney-client privileged or attorney work product, may constitute inside information or internal deliberative staff communication, and is intended only for the use of the addressee. Unauthorized use, disclosure or copying of this communication or any part thereof is strictly prohibited and may be unlawful. If you have received this communication in error, please notify the sender immediately by return e-mail and destroy this communication and all copies thereof, including all attachments. Receipt by an unintended recipient does not waive attorney-client privilege, attorney work product privilege, or any other exemption from disclosure.

**From:** Eastvold, Jonathan C. <JonathanE@ilga.gov>  
**Sent:** Friday, June 24, 2022 9:39 AM  
**To:** McGill, Richard <Richard.McGill@illinois.gov>  
**Subject:** [External] R18-26 proposed first notice changes

Here are some possible technical changes, sorted by Part, for the Board to consider. Any of these changes that you wish to make can be simply copied into your first notice changes document.

Thanks in advance for your consideration.

Sincerely,

Jonathan C. Eastvold, Ph.D.  
Rules Analyst III

Illinois General Assembly  
Joint Committee on Administrative Rules  
700 Stratton Building  
Springfield IL 62706  
217-524-9010

**Board staff responses and related changes (2/27/23) appear in bold, red font below.**

**Rulemaking:** Introduction (35 Ill. Adm. Code 601; 46 Ill. Reg. 8604)

**Changes:**

1. In line 75, after "financial" add a comma.
  - a. Agree.**
  - b. In lines 10 and 61, delete “Subtitle” and restore “Chapter”.**
  - c. In lines 55-56, delete “in finished water must not exceed the secondary MCLs”.**
  - d. In line 56, delete the colon.**
  - e. In lines 56-57, restore “should not be exceeded in the finished water.”.**
  - f. In lines 63 and 68, delete “Subtitle” and add “Chapter”.**
2. In line 85, strike "regulations" and add "rules". **a. Agree.** Strike "with" and add "to". **b. Agree.**
3. In line 87, after "1417(a)" add a comma.
  - a. Agree.**
  - b. Strike “Sections” and add “sections”.**
4. In line 89, after "300g-6(a)" add a comma.  
**Agree.**
5. In line 90, strike "regulations" and add "rules".

- a. Agree.**  
**b. In line 121, strike “these rules” and add “this Chapter or its”. Strike “is adjudged invalid, or if the”.**
6. In line 122, strike "adjudged" and add "determined to be".  
**a. Disagree. The word “adjudged” indicates judicial action and is used in the recently adopted severability provision at 35 Ill. Adm. Code 845.160.**  
**b. After the comma add “that adjudication”.**  
**c. Delete “the” and strike “invalidity”.**  
**d. In line 123, delete “Subtitle” and restore “Chapter”. After “whole” strike the comma.**
7. In line 123, strike "part, sub-part, sentence or clause" and add "Part, Subpart, Section, section, sentence, or clause".  
**a. Disagree. After “any” add “portion”. Strike “other part, sub-part, sentence or clause”.**  
**b. In line 124, delete “will” and “be”.**
8. In lines 130-131, strike "and regulations" and add "in this Subtitle F".  
**Agree.**
9. In line 131, after "monitoring" add a comma.  
**Agree.**
10. In line 143, after "603" add a comma.  
**a. Agree.**  
**b. Strike “purposes of”.**
11. In line 157, after "transmissivity" add a comma.  
**Agree.**
12. In line 158, after "head" add a comma.  
**Agree.**
13. In line 168, strike the comma.  
**Agree.**
14. In line 175, after "pH" add a comma.  
**Agree.**
15. In line 192, strike "water bearing" and add "water-bearing".  
**Agree.**
16. In line 217, strike "phenylenediamine" and add "phenylenediamine".  
**Agree.**

17. In line 228, after "pressure head" add a comma.  
**Agree.**
18. In line 232, strike "cross section" and add "cross-section".  
**Disagree as "cross section" is a noun.**
19. In line 237, after "pipes" add a comma.  
**Agree.**
20. In line 239, after "tanks" add a comma.  
**Agree.**
21. In lines 240-241, strike "for the purpose of furnishing" and add "to furnish".  
**Agree.**
22. In line 246, after "means" add "the".  
**Agree.**
23. EITHER:
  - a. In line 252, strike "serves" and add "serve". **Agree to option a.**
  - OR
  - b. The following:
    - i. In line 249, strike "all" and add "a".
    - ii. In line 250, strike "supplies" and add "supply" twice.
    - iii. In line 250, strike "and those" and add "or a".
    - iv. In line 250, strike "expand their" and add "expands its".
    - v. In line 251, after "residents or" add "that".
24. In line 252, after "supply" add "that is".  
**Agree.**
25. In line 253, strike "that" and add "but".  
**Agree (for the first "that").**
26. In line 255, strike the comma.  
**Agree.**
27. In line 270, after "*pipes*" add a comma.  
**Agree.**
28. In line 273, after "*tanks*" add a comma.  
**Agree.**
29. In line 294, strike "these regulations" and add "this Subtitle F".  
**Disagree. Strike "these regulations" and add "this Chapter".**
30. In line 324, strike "for" and add "with".

**Disagree. Strike “the purpose of”.**

31. In lines 325 and 329, after "dwelling" add a comma.  
**a. Agree.**  
**b. In line 362, delete “Subtitle” and restore “Chapter”.**
32. In line 370, after "by" add "ASTM International (formerly the".  
**Agree.**
33. In line 371, after "Materials" add ")".  
**Agree.**
34. In lines 376-377, strike "the National Science Foundation International" and add "NSF International (formerly the National Sanitation Foundation)".  
**Agree.**
35. In line 542, after "NSF" strike ". National Sanitation Foundation".  
**Agree.**
36. In lines 542-543, strike "3475 Plymouth Road, PO Box 130140" and add "789 Dixboro Road".  
**Disagree. Strike "3475 Plymouth Road, PO Box 130140" and add "789 N. Dixboro Road".**
37. In line 543, strike "48113-0140" and add "48105".  
**Agree.**
38. In line 561, strike "PO Box 7126" and add "821 Corning Tower".  
**Agree.**
39. In line 562, strike "12224" and add "12237". **a. Agree.** Strike "439-7286" and add "431-1200". **b. Agree.**
40. In line 570, strike "on-line" and add "online".  
**Agree.**

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.~~ USC 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

# 1<sup>st</sup> Notice

JCAR350601-2208604r01

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



# 1<sup>st</sup> Notice

JCAR350601-2208604r01

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 ~~Subtitle~~Chapter

- 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) under~~pursuant 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

## 1<sup>st</sup> Notice

JCAR350601-2208604r01

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.  
98

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, ~~the such~~ invalidity ~~will shall~~ not affect the  
123 validity of this ~~Subtitle Chapter~~ as a whole, or any other part, sub-part, sentence or clause  
124 ~~will thereof~~ 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 ~~must shall~~ be made according to the methods described in 35 Ill. Adm. Code 611,  
133 the National Primary Drinking Water Regulations (40 CFR 141), ~~or and~~ any other  
134 method specifically approved by the Agency.  
135

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.

138  
139  
140  
141  
142  
143  
144  
145  
146  
147  
148  
149  
150  
151  
152  
153  
154  
155  
156  
157  
158  
159  
160  
161  
162  
163  
164  
165  
166  
167  
168  
169  
170  
171  
172  
173  
174  
175  
176  
177  
178  
179  
180

(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.

## 1<sup>st</sup> Notice

JCAR350601-2208604r01

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<sub>calc</sub>" 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

## 1<sup>st</sup> Notice

JCAR350601-2208604r01

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 (ft<sup>2</sup>) under a unit hydraulic gradient (gpd/ft<sup>2</sup>).

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

## 1<sup>st</sup> Notice

JCAR350601-2208604r01

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:  
285  
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.

307

## 1<sup>st</sup> Notice

JCAR350601-2208604r01

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.

310  
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).

323  
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. USE](#) 300h-7).

350

## 1<sup>st</sup> Notice

JCAR350601-2208604r01

- 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

### 359 **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



## 1<sup>st</sup> Notice

JCAR350601-2208604r01

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

## 1<sup>st</sup> Notice

JCAR350601-2208604r01

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

## 1<sup>st</sup> Notice

JCAR350601-2208604r01

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

## 1<sup>st</sup> Notice

JCAR350601-2208604r01

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", 2<sup>nd</sup> 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~~NSF/ANSI ~~60-2014~~~~60-2013~~ Drinking Water Treatment  
549 Chemicals – Health Effects, April 2014.  
550  
551 NSF/ANSI ~~61-2014~~~~61-2013~~ 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

**1st Notice**

JCAR350601-2208604r01

564 "Standard Specifications for Water and Sewer Main Construction in  
565 Illinois", 7<sup>th</sup> 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.~~

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

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