# TITLE 35: ENVIRONMENTAL PROTECTION

### SUBTITLE F: PUBLIC WATER SUPPLIES

#### CHAPTER II: ENVIRONMENTAL PROTECTION AGENCY

## PART 651

## INTRODUCTION AND DEFINITIONS

Section

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AUTHORITY: Implementing and authorized by Section 14 through 19 of the Environmental Protection Act [415 ILCS 5/14 through 19] (see P.A. 90-773).

SOURCE: Adopted December 30, 1974, amended at 2 Ill. Reg. 51, p. 219, effective December 17, 1978; rules repealed and new rules adopted and codified at 8 Ill. Reg. 8450, effective June 5, 1984; amended at 23 Ill. Reg. 8982, effective July 29, 1999.

#### Section 651.101 Introduction to Agency Rules for Public Water Supplies

The Agency Rules for Public Water Supplies included in 35 Ill. Adm. Code 651 through 654 define the design, operational, and maintenance criteria established by the Agency pursuant to 35 Ill. Adm. Code 602.115 for owners, operators and official custodians of community water supplies. The design, operational, and maintenance criteria are defined and established for persons involved in the design, construction, maintenance or operation of community water supplies. Adoption of any amendment or substantive change to Agency Rules for Public Water Supplies must be in compliance with the provisions of the Illinois Administrative Procedure Act [5 ILCS 100].

(SOURCE: Amended at 23 Ill. Reg. 8982, effective July 29, 1999.)

### Section 651.102 Definitions

In addition to these definitions, all definitions of the Illinois Environmental Protection Act [415 ILCS 5] and 35 Ill. Adm. Code 601 and 611 shall apply to the Agency Rules for Public Water Supplies.

"Act" means the Illinois 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.

"AWWA Standards" means those standards published by the American Water Works Association as of June 1999.

"Board" means the Illinois Pollution Control Board.

"Capacity" means the ability to plan for, achieve and maintain compliance with applicable drinking water standards. Capacity has three components: technical, managerial and financial. Adequate capability in all three areas is necessary for a system to have "capacity". "Capacity development" is the process of water systems acquiring and maintaining adequate technical, managerial, and financial capabilities to consistently provide safe drinking water. The federal Safe Drinking Water Act amendments of 1996 provide a framework for states and water systems to work together to ensure that systems acquire and maintain the technical, managerial and financial capacity needed to meet the Act=s public health protection objectives. The definitions of technical, managerial, and financial capacities are as follows:

"Technical capacity" means the physical and operational ability of a water system to achieve and maintain federal drinking water requirements and State drinking water requirements as described in the Act and 35 Ill. Adm. Code: Subtitle F, Chapters I and II. Technical capacity means the physical infrastructure of the water system and includes but is not limited to adequacy of source water and treatment, storage and distribution components, as well as the ability of system personnel to adequately operate and maintain the system.

"Managerial capacity" means the ability of a water system to conduct its business in a manner that enables the system to achieve and maintain compliance with federal drinking water requirements and State drinking water requirements as described in the Act and 35 III. Adm. Code: Subtitle F, Chapters I and II. Managerial capacity includes the system=s institutional and administrative capabilities, and is assessed using data documenting ownership accountability, staffing and organization, and effective external linkages with water customers, external resource agencies, and regulators.

"Financial capacity" means the ability of a water system to acquire and manage sufficient financial resources to enable the system to achieve and maintain compliance with federal drinking water requirements and State drinking water requirements as described in the Act and 35 Ill. Adm. Code: Subtitle F, Chapters I and II. Financial capacity includes revenue sufficiency, credit worthiness, and use of budgeting, accounting, and financial planning practices, as well as documentation of financial management through record keeping and revenue management.

"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) shall be given in expressing the chlorine demand in a given water.

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

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

"Total chlorine" means the sum of the free chlorine and the combined chlorine.

"Cross-connection" B

"Cross-connection" means any physical connection or arrangement between two otherwise separate piping systems, one of which contains potable water and the other contains water of unknown or questionable safety or steam, gases or chemicals, if there may be a flow from one system to the other.

"Direct cross-connection" means a cross-connection formed when a water system is physically joined to a source of unknown or unsafe substance.

"Indirect cross-connection" means a cross-connection formed when an unknown substance can be forced, drawn by vacuum or otherwise introduced into a safe water system.

"DPD method" means an analytical method for determining chlorine residual utilizing the reagent DPD (n-diethyl-pphenylenylenediamine).

"Effective external linkage" is the ability of a water system to communicate and exchange information with water customers, regulators, technical and financial assistance organizations, and other entities that routinely interact with the water system.

"Infrastructure" means all mains, pipes including water service lines, 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.

"New public water supply" (new PWS) means, beginning after October 1, 1999, all new community water supplies and new non-transient non-community water supplies and those water supplies that expand their infrastructure to serve or intend to serve at least 25 persons at least 60 days per year. Any water system not currently PWS that adds persons without constructing additional infrastructure will become a PWS, but will not be required to demonstrate capacity under 35 Ill. Adm. Code 652.701 unless the PWS is on restricted status as required by 35 Ill. Adm. Code 602.106.

"Properly certified operator" means an operator certified in accordance with the Public Water Supply Operations Act [415 ILCS 45].

"Public Water Supply" (PWS) 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. (Section 3.28 of the Act)

"Satellite supply" means any community water supply that:

purchases all finished water from another community water supply; does not provide any treatment other than chlorination; and distributes finished water to the consumers.

"Standards" means the Recommended Standards for Water Works as adopted by the Great Lakes-Upper Mississippi River Board of State Sanitary Engineers, 1982 edition.

"Water Service Line" means any pipe from the water main or source of potable water supply that serves or is accessible to not more than one property, dwelling, or rental unit of the user. Each water service line must also meet the applicable requirements of these rules (35 III. Adm. Code 651through 654) and the applicable requirements of the Illinois Plumbing Code (77 III. Adm. Code 890).

(SOURCE: Amended at 23 Ill. Reg. 8982, effective July 29, 1999.)

### Section 651.103 Other Terms

Terms used in the Agency Rules for Public Water Supplies, and not specifically defined in Section 651.102 are in accordance with the Glossary-Water and Wastewater Control Engineering published jointly by the American Public Health Association, the American Society of Civil Engineers, the American Water Works Association and the Water Pollution Control Federation, 1981 edition.

(SOURCE: Amended at 23 Ill. Reg. 8982, effective July 29, 1999.)

# Section 651.104 Metric System

Although English measurements are used throughout the Agency Rules for Public Water Supplies, equivalent measurements in the metric system are acceptable.

(SOURCE: Amended at 23 Ill. Reg. 8982, effective July 29, 1999.)