

ILLINOIS POLLUTION CONTROL BOARD  
March 2, 2023

IN THE MATTER OF: )  
 )  
AMENDMENTS TO 35 ILL. ADM. CODE ) R18-26  
SUBTITLE F: PUBLIC WATER SUPPLY ) (Rulemaking – Public Water Supply)

**ADDENDUM**

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

PART 601  
INTRODUCTION

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601.101	General Requirements
601.102	Applicability and Organization of this 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601.APPENDIX A References to Former Rules (Repealed)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 47 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 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 otherwise deleterious to the water supply. Drinking water delivered to any user at any point in the distribution system must contain no impurity that could reasonably be expected to cause offense to the sense of sight, taste, or smell.
- 2) Any ~~No~~ substance used in treatment must not ~~should~~ remain in the water at a concentration greater than that required by good practice. A substance that may have a deleterious physiological effect, or one for which physiological effects are not known, must not be used in a manner that would permit it to reach the consumer.
- 3) Concentrations of constituents in finished water must not exceed the secondary MCLs listed in the following chart: should not be exceeded in the finished water.

<b>Contaminant</b>	<b>Secondary MCL</b>	<b>Noticeable Effects above the Secondary MCL</b>
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 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### Section 601.102 Applicability and Organization of this Chapter

- a) ~~This~~ ~~The provisions of this Chapter shall apply~~ ~~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 ~~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 rules ~~regulations~~ identical in substance ~~to~~with federal regulations promulgated by the United States Environmental Protection Agency (USEPA) under pursuant to sections~~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 rules~~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 includes definitions applicable to Part 616.
- 8) Part 617 contains the requirements and standards for regulated recharge areas. Part 617 includes definitions and an incorporation by reference applicable to Part 617.
- 9) Part 618 contains requirements and standards for maximum setback zones. Part 618 includes definitions applicable to Part 618.
- 10) Part 620 contains the method of classification of groundwater, nondegradation provisions, the groundwater quality standards, and procedures and protocols for the management and protection of groundwater. Part 620 includes definitions and incorporations by reference applicable to Part 620.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 601.103 Severability**

If any provision of ~~this Chapter or its~~ these rules or regulations is adjudged invalid, or if the application thereof to any person or in any circumstance is adjudged invalid, that adjudication ~~the such invalidity will~~ shall not affect the validity of this Chapter as a whole, or any portion ~~other part, sub-part, sentence or clause~~ will thereof not be adjudged invalid.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 601.104 Analytical Testing**

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

(Source: Amended at 47 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.

"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.

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

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

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

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

"CT" or "CT<sub>calc</sub>" is the product of "residual disinfectant concentration" (RDC or C) in mg/L determined before or at the first customer, and the corresponding "disinfectant contact time" (T) in minutes. If a supplier applies disinfectants at more than one point prior to the first customer, it must determine the CT of each disinfectant sequence before or at the first customer to determine the total percent inactivation or "total inactivation ratio". In determining the total inactivation ratio, the supplier must determine the RDC of each disinfection sequence and corresponding contact time before any subsequent disinfection application points.

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

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

"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.

"Groundwater" means *underground water which occurs within the saturated zone and geologic materials where the fluid pressure in the pore*

*space is equal to or greater than atmospheric pressure. [415 ILCS 5/3.210] (~~Section 3.210 of the Act~~)*

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

"Hydraulic Conductivity" means the rate of flow in gallons per day (gpd) through a cross section of one square foot (ft<sup>2</sup>) under a unit hydraulic gradient (gpd/ft<sup>2</sup>).

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

"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 to furnish ~~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 the 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 ~~serve~~ serve at least 25 residents. Any water supply that is not currently a community water supply but 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] (~~Section 3.145 of the Act~~)*

"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] (~~Section 3.365 of the Act~~)

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

"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 or corrosion control; and

distributes finished water to the consumers.

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

"SEP" means special exception permit.

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

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

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

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

"Supply" means a community water supply.

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

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

"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.

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

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

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

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

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

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

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### Section 601.115 Incorporations by Reference

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

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

"ASME" means the American Society of Mechanical Engineers.

"ASTM" means those standards published by ASTM International (formerly the American Society for Testing and Materials).

"AWWA" means those standards published by the American Water Works Association.

"NSF" means those standards published by the NSF International (formerly the National Sanitation Foundation)~~National Science Foundation International~~.

"Recommended Standards" means "Recommended Standards for Water Works – Policies for the Review and Approval of Plans and Specifications for Public Water Supplies".

- b) The ~~Board~~Agency incorporates the following materials by reference:

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

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.

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- Impregnated 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.

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.

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", 2<sup>nd</sup> 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, 789 N. Dixboro Road, 48105-48113-0140, (734)769-8010.~~  
 NSF—National Sanitation Foundation International, 789 N. Dixboro Road, 48105-48113-0140, (734)769-8010.

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

~~NSF/ANSI 60-2014~~ ~~60-2013~~ NSF/ANSI 60-2013 Drinking Water Treatment Chemicals – Health Effects, April 2014.

~~NSF/ANSI 61-2014~~ ~~61-2013~~ NSF/ANSI 61-2013 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 Health and Environmental Managers, Health Research Inc., Health Education Services Division, 821 Corning Tower ~~PO Box 7126~~, Albany NY 12237-1224, (518)431-1200 ~~439-7286~~.

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

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

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

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

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

~~35 Ill. Adm. Code Part 601~~  
~~Part I: Introduction~~

<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>

(Source: Repealed at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

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

PART 602  
PERMITS

SUBPART A: GENERAL PERMIT PROVISIONS

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#### SUBPART F: SPECIAL EXCEPTION PERMITS

Section  
602.600 Special Exception Permits

602.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 and codified at 6 Ill. Reg. 11497, effective September 14, 1982; amended at 8 Ill. Reg. 2157, effective February 7, 1984; emergency amendment at 9 Ill. Reg. 13371, effective August 16, 1985, for a maximum of 150 days; amended at 10 Ill. Reg. 7337, effective April 22, 1986; amended in R96-18 at 21 Ill. Reg. 6562, effective May 8, 1997; amended in R03-21 at 27 Ill. Reg.18030, effective November 12, 2003; amended in R15-22 at 40 Ill. Reg. 6799, effective April 15, 2016; amended in R18-17 at 43 Ill. Reg. 8036, effective July 26, 2019; amended in R18-26 at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

SUBPART A: GENERAL PERMIT PROVISIONS

**Section 602.101 Purpose**

The purpose of this Part is to establish ~~and enforce~~ minimum standards for the permitting of community water supplies. The definitions in 35 Ill. Adm. Code 601.105 apply to this Part.

- a) ~~A~~ No person ~~must not~~shall *construct, install, or operate a community water supply without a permit granted by the Agency.* [415 ILCS 5/18(a)(3)]
- b) *Owners are required to submit plans and specifications to the Agency and obtain written approval before construction, installation, changes, or additions to a community water supply, except as provided in Section 602.104.* [415 ILCS 5/15(a)]-

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 602.104 Emergency Permits**

- a) Whenever emergency conditions require immediate action, the Agency may issue construction and operating permits by telephone to the owner, official custodian, or Responsible Operator in Charge; with whatever special conditions the Agency ~~considers~~deems to be necessary for the proper safeguarding of the health of the water consumers.
- b) Emergency conditions are hazards or threats to public health caused by:
  - 1) accidents;

- 2) equipment failures;
  - 3) human error; or
  - 4) natural disasters.
- c) The Agency ~~must shall~~ confirm to a permit applicant, in writing, within 10 days after issuance, its granting of an emergency permit. The confirmation will be conditioned upon the Agency's receipt and approval, ~~by the Agency,~~ of as-built plans and specifications.
- d) As-built plans and specifications covering the work performed under the emergency permit and any information required by special conditions in the emergency permit must be submitted to the Agency within 60 days after issuance of the emergency permit, unless otherwise stated by the Agency in writing.
- e) The Agency may request that the community water supply make modifications after review of the as-built plans and specifications covering the work performed under the emergency permit. Modifications must be made within 90 days after the Agency's written request, unless otherwise stated by the Agency.
- f) The Agency can be contacted by calling:
- 1) Bureau of Water, Division of Public Water Supplies Permit Section (217/782-1724); or
  - 2) after normal business hours, the State emergency number (217/782-3637 (STA-EMER) or 800/782-7860).
- g) *Each applicant for an emergency permit to install or extend a water main must submit the appropriate fee, as specified in Section 16.1 of the Act, to the Agency within 10 calendar days from the date of issuance of the emergency construction permit. [415 ILCS 5/16.1]*

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 602.105 Standards for Issuance**

- a) Construction Permits and Operating Permits
- 1) The Agency must not issue any construction or operating permit required by this Part unless the applicant submits adequate proof that the community water supply will be constructed, modified, or operated so as not to cause a violation of the Act or Board rules.

- 2) Except as provided in subsection (a)(3), the Agency must not issue any construction or operating permit required by this Part unless the applicant submits adequate proof that the community water supply facility conforms to the following design criteria. When the design criteria in the documents listed in this subsection (a)(2) conflict, the applicant must comply with the design criteria listed in subsection (a)(2)(A).
  - A) Criteria promulgated by the Board under 35 Ill. Adm. Code 604;
  - B) Recommended Standards for Water Works, incorporated by reference at 35 Ill. Adm. Code 601.115; and
  - C) AWWA, ASTM, ANSI, or NSF standards incorporated by reference at 35 Ill. Adm. Code 601.115.
  
- 3) When the documents listed in subsection (a)(2) do not provide design criteria for the proposed community water supply facility, the Agency must not issue the construction or operating permit unless the applicant submits adequate proof that the community water supply facility conforms to other design criteria that will produce consistently satisfactory results. When necessary for adequate proof, the Agency may require a pilot study.
  
- 4) The Agency must not issue any construction permit required by this Part unless the applicant submits proof that all plan and specification documents required by this Section and Subpart B have been prepared by a person licensed under the Illinois Architecture Practice Act of 1989 [225 ILCS 305], the Illinois Professional Engineering Practice Act of 1989 [225 ILCS 325], the Illinois Structural Engineering Licensing Practice Act of 1989 [225 ILCS 340], ~~or, for site and groundwater conditions, under the Professional Geologist Licensing Act [225 ILCS 745] (for site and groundwater conditions),~~ or any required combination of these Acts.
  
- 5) The Agency must not issue a construction permit unless the community water supply has filed a notification of ownership under 35 Ill. Adm. Code 603.101.
  
- 6) The existence of a violation of the Act, Board ~~rule regulation~~, or Agency ~~rule regulation~~ will not prevent the issuance of a construction permit if:
  - A) the applicant has been granted a variance or an adjusted standard from the ~~rule regulation~~ by the Board;
  - B) the permit application is for the construction or installation of equipment to alleviate or correct a violation;
  - C) the permit application is for a water main extension to serve

existing residences or commercial facilities when the permit applicant can show that those residences or commercial facilities are ~~being~~ served by a source of water of a quality or quantity that violates the primary drinking water standards of 35 Ill. Adm. Code 611; or

D) the Agency determines the permit application is for the construction or installation of equipment necessary to produce water that is assuredly safe, as required by 35 Ill. Adm. Code 601.101.

- b) **Algicide or Aquatic Pesticide Permit**  
The Agency must not issue an algicide or pesticide permit required by this Part unless the applicant submits adequate proof that the application of the algicide or aquatic pesticide will not cause a violation of the Act or, Board or Agency rules ~~rule regulation, or Agency regulation.~~

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 602.106 Restricted Status**

- a) Restricted status is defined as the Agency determination, under Section 39(a) of the Act and Section 602.105, that all or part of a community water supply facility, ~~or portion of thereof~~, may no longer be issued a construction permit without causing a violation of the Act or Board or Agency rules. ~~Violations of Board rules whose violation that~~ can result in a restricted status determination include ~~rules regulations~~ regulations establishing maximum contaminant levels, treatment techniques, source water quantity requirements, treatment unit loading rates, storage volume requirements, and minimum pressure for a distribution system.
- 1) When the Agency cannot issue a construction permit to a community water supply because that issuance would extend an existing violation of the Act or Board or Agency rules, the Agency must place the community water supply on restricted status.
  - 2) Except as specified in Section 602.105(a)(6), the Agency must not issue a permit for water main extension construction when the water main would extend an existing violation of the Act or Board or Agency rules.
- b) The Agency must publish on its website and in the Environmental Register and update, at intervals of not more than three months, a comprehensive list of community water supplies subject to restricted ~~restrictive~~ status. This list will be entitled the "Restricted Status List".
- c) The Agency must notify the owners or official custodian and Responsible Operator in Charge of a community water supply when the community water

supply is initially placed on restricted status by the Agency.

- d) The restricted status list must include a statement of the potential or existing violation of the Act or Board ~~rules/regulations~~ that caused the community water supply's inclusion on the list.
- e) Owners or official custodians of community water supplies that have been placed on restricted status must notify any person requesting construction of a water main extension of this status.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 602.107 Critical Review**

- a) The Agency must publish in the Environmental Register and on its webpage, at the same frequency as the Restricted Status List under Section 602.106(b), a list of ~~these~~ community water supplies that according to Agency records indicate exceed 80 percent of the rate of any of the quantity requirements in the Board's or Agency's rules. This list will be entitled the "Critical Review List".
- b) The Critical Review List must include a description of the cause of the community water supply's inclusion on the list.
- c) The Agency must notify the owner or official custodian and the Responsible Operator in Charge of the community water supply when the community water supply is initially placed on critical review status by the Agency.
- d) Owners or official custodians of community water supplies that have been placed on critical review status must notify of this status any person requesting construction of a water main extension.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 602.108 Right of Inspection**

The permittee must allow the Agency and its duly authorized representatives to perform inspections as authorized by ~~in accordance with its authority under~~ the Act, including ~~but not limited to:~~

- a) entering at reasonable times the permittee's premises where treatment or distribution facilities are located or where any activity is to be conducted under ~~pursuant to~~ a permit;
- b) having access to and copying at reasonable times any records required to be kept under the terms and conditions of a permit;

- c) inspecting at reasonable times, including during any hours of operation:
  - 1) equipment constructed or operated under the permit;
  - 2) equipment or monitoring methodology; or
  - 3) equipment required to be kept, used, operated, calibrated, and maintained under the permit;
- d) obtaining and removing at reasonable times samples of any raw or finished water or any, discharge or emission of pollutants; and
- e) entering at reasonable times to use any photographic, recording, testing, monitoring, or other equipment to preserve, test, monitor, or record for the purpose of preserving, testing, monitoring or recording any raw or finished water or any, activity, discharge, or emission authorized by a permit.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 602.111 Application Forms and Additional Information**

The Agency may prescribe the form in which all information required under this Part ~~must shall~~ be submitted and may require such additional information as is necessary to determine whether the community water supply will meet the requirements of the Act and this Chapter Subtitle ~~Chapter~~.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 602.112 Filing and Final Action by Agency on Permit Applications**

- a) For permits without a fee under Section 602.109:
  - 1) An application for a permit is considered ~~shall be deemed~~ to be filed on the date of initial receipt by the Agency of the application documents. The Agency ~~must shall~~ send the applicant written notification of the receipt of the complete application.
  - 2) Except for emergency permits, applications for construction permits must be filed at least 90 days before the expected start of construction.
  - 3) If the Agency fails to take final action, by granting or denying the permit as requested or with conditions, within 90 days from the filing of the completed application, the applicant may considered ~~deem~~ the permit granted for ~~a period~~ of one year.
  - 4) Any applicant for a permit may waive in writing the requirement that the

Agency must take final action within 90 days from the filing of the application.

- b) For permits with a fee under Section 602.109:
- 1) An application for a permit is considered ~~must be deemed~~ to be filed on the date the Agency has received the application documents and required fee. The Agency must send the applicant written notification of the receipt of the complete application.
  - 2) Except for emergency construction permits, applications for construction permits must be filed at least 45 days before the expected start of construction.
  - 3) The Agency must deny construction permit applications that do not contain the entire fee.
  - 4) The Agency must take final action by granting or denying permits within 45 days after the filing of an application and the payment of the required fee. If the Agency fails to take final action within 45 days after filing the application and payment of the required fee, the applicant may consider ~~deem~~ the permit issued.
- c) The Agency must maintain a progress record of all permit applications, including interim and final action dates. This information is available to the applicant upon request.
- d) The Agency must send all notices of final action by U.S. mail. The Agency is ~~considered~~ ~~must be deemed~~ to have taken final action on the date that the notice is mailed.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 602.113 Duration**

- a) Construction Permits
- 1) Construction permits for community water supply facilities expire one year ~~after~~ ~~from~~ the date issued or renewed ~~of issuance or renewal~~, unless construction has started. If construction does not start ~~commence~~ within one year ~~after the~~ ~~from the date~~ issued or renewed ~~of issuance or renewal~~, the permit may be renewed for additional one year periods at the discretion of the Agency, upon written request of the applicant.
  - 2) If construction starts ~~commences~~ within one year ~~after~~ ~~from the date~~ of

~~issuance or renewal~~ of the construction permit was issued or renewed, the permit expires five years from the date issued or renewed ~~of issuance or renewal~~. ~~Afterward~~ Thereafter, the permit may be renewed for periods specified by the Agency at its discretion, upon written request of the applicant.

- 3) For the purposes of this Section, construction is considered to have started ~~must be deemed commenced~~ when work at the site has been initiated and proceeds in a reasonably continuous manner to completion.
- b) Operating permits will ~~shall~~ be valid until revoked unless otherwise stated in the permit.
- c) Algicide permits must be issued for fixed terms of five years.
- d) Aquatic pesticide permits must be valid for a fixed term, not to exceed one year.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 602.116 Requirement for As-Built Plans**

If any portion of a community water supply has been constructed without a construction permit as required by Section 602.101, or an emergency permit issued under ~~pursuant to~~ Section 602.104, the community water supply must submit to the Agency as-built plans and specifications and a construction permit application. As-built plans and specifications must be prepared by a qualified person as described in Section 602.105(a)(4). All plans and specifications submitted to the Agency under this Section must be clearly marked "as-built" or "record drawings". Any deficiencies requiring correction, as determined by the Agency, must be corrected within a reasonable time limit set by the Agency. Submission of as-built plans and the correction of any deficiencies does not relieve the owner or official custodian from any liability for construction without a permit.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 602.117 Existence of Permit No Defense**

The existence of a permit under this ~~Subtitle Chapter~~ Chapter ~~is~~ ~~does~~ ~~shall~~ ~~not~~ ~~constitute~~ a defense to a violation of the Act or a Board or Agency rule ~~regulation, or Agency regulation~~ except for the requirements to secure construction, operating, algicide, aquatic pesticide, or emergency permits.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 602.118 Appeal of Final Agency Action on a Permit Application**

- a) If the Agency denies a permit required under this Part, the applicant may petition

the Board to appeal the Agency's final decision ~~under~~ pursuant to Section 40 of the Act.

- b) An applicant may consider any condition imposed by the Agency in a permit as ~~the Agency's refusal~~ a refusal by the Agency to grant a permit that ~~must shall~~, which entitles ~~entitle~~ the applicant to appeal the Agency's decision to the Board ~~under~~ pursuant to Section 40 of the Act.
- c) All appeals must be filed with the Board within 35 days after the date on which the Agency served its decision on the applicant. *However, the 35-day period to appeal may be extended for an additional period not to exceed 90 days by written notice provided to the Board from the applicant and the Agency within the initial appeal period.* [415 ILCS 5/40(a)(1)]

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_ effective \_\_\_\_\_)

### Section 602.119 Revocations

~~Failure~~ Violation of any permit conditions or failure to comply with a permit condition, the Act, or a Board or Agency rule regulation or Agency regulation ~~is will~~ shall be grounds for an enforcement ~~action~~ actions as provided in the Act, including revocation of a permit. Revocation of a permit ~~must shall~~ be sought by filing a complaint with the Board ~~under~~ pursuant to Title VIII of the Act.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_ effective \_\_\_\_\_)

## SUBPART B: CONSTRUCTION PERMITS

### Section 602.205 Preliminary Plans

- a) To expedite the review of subsequent construction permit application plan documents, preliminary plans may be submitted prior to the submission of a construction permit application. No construction permit ~~may shall~~ be issued until the completed application, required fee, plans, and specifications have been submitted.
- b) If preliminary plans are submitted, as directed under the Illinois Drinking Water Revolving Loan Funding Process (see 35 Ill. Adm. Code 664), the documents must include a description of alternate solutions, a discussion of the alternatives, and reasons for selecting the alternative recommended.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_ effective \_\_\_\_\_)

### Section 602.225 Engineer's Report

Upon request from the Agency, an applicant for a construction permit must submit an Engineer's Report. Types of construction projects for which the Agency may request an Engineer's Report include, ~~but are not limited to,~~ the construction of a new community water supply, a new source location, or a new water treatment process other than chemical feeding only. The Engineer's Report may be submitted as a preliminary plan ~~under pursuant to~~ Section 602.205. An Engineer's Report submitted under pursuant to this Section must contain the information specified by this Section.

- a) General information, including:
  - 1) a description of the existing community water supply;
  - 2) a description of the sewerage facilities;
  - 3) a description of the municipality or area to be served; and
  - 4) the name and mailing address of the owner or official custodian of the community water supply.
  
- b) The extent of the community water supply system, including:
  - 1) a map of the area to be served with water and any provisions for extending the community water supply system;
  - 2) maps of additional areas to be served and an appraisal of the future requirements for service; and
  - 3) present and prospective industrial and commercial water supply needs that are likely to be required in the near future.
  
- c) Water consumption data, including:
  - 1) population trends, as indicated by available records;
  - 2) an estimate of the number of consumers, based on population trends, who will be served by the proposed or expanded water supply system 20 years in the future;
  - 3) present and future water consumption values used as the basis of design;
  - 4) present and estimated future yield of the water sources for a community water supply; and
  - 5) estimated water loss in the distribution system based on available records.

- d) A justification for the project when two or more solutions exist for providing community water supply facilities, as directed under the Illinois Drinking Water Revolving Loan Funding Process (35 Ill. Adm. Code 662), each of which is feasible and practicable. The Engineer's Report must discuss the alternatives and provide reasons for selecting the one recommended, including financial considerations, operational requirements, operator qualifications, reliability, and water quality considerations.
- e) Sources of Water Supply. The Engineer's Report must describe the proposed source or sources of water supply to be developed and the reasons for their selection, and provide information as follows:
- 1) For surface water sources:
    - A) hydrological data, stream flow, and weather records;
    - B) safe yield, including all factors that may affect it;
    - C) documentation of the structural safety of any spillway or dam to assure ~~that~~the spillway or dam can continue to provide a source of water during extreme weather;
    - D) description of the watershed, noting any existing or potential sources of contamination (such as highways, railroads, chemical facilities, and land/water use activities, ~~etc.~~) that may affect water quality;
    - E) summarized quality of the raw water, with special reference to fluctuations in quality and, changing meteorological conditions, ~~etc.~~; and
    - F) source water protection issues or measures, including erosion and siltation control structures, that need to be considered or implemented.
  - 2) For groundwater sources:
    - A) the sites considered;
    - B) advantages of the site selected;
    - C) the elevations above mean sea level of the site selected;
    - D) the probable character of geologic formations through which the source is to be developed;

- E) hydrogeologic conditions affecting the site, such as anticipated interference between proposed and existing wells;
  - F) sources of possible contamination, such as sewers and sewage treatment/disposal facilities, highways, railroads, landfills, outcroppings of consolidated ~~water-bearing~~ ~~water-bearing~~ formations, chemical facilities, waste disposal wells, and agricultural uses;
  - G) the test well depth and method of construction, including placement of liners or screens;
  - H) test pumping rates and their duration, including water levels and specific yield;
  - I) test well water quality information; and
  - J) wellhead protection measures being considered.
- f) Project sites, including:
- 1) a discussion of the various sites considered and the advantages of the chosen one;
  - 2) the proximity of residences, industries, and other establishments; and
  - 3) any potential sources of pollution that may influence the quality of the supply or interfere with the effective operation of the water works system, such as sewage absorption systems, septic tanks, privies, cesspools, sink holes, sanitary landfills, and refuse and garbage dumps, ~~etc.~~
- g) Proposed Treatment Processes. The Engineer's Report ~~must shall~~ describe all proposed treatment processes necessary to meet the requirements of this Subtitle Chapter~~Chapter~~ and provide any available supporting data.
- h) Automation. The Engineer's Report must provide supporting data justifying automatic equipment, including the servicing and operator training to be provided, and must provide for manual override for of any automatic controls.
- i) Power. The Engineer's Report must include the following power description:
- 1) the main source of power;

- 2) dedicated standby power capable of providing power to operate the community water supply's water source, treatment plant, and distribution facilities during power outages; and
  - 3) outside emergency power sources that are available.
- j) Soil characteristics, groundwater conditions, and foundation problems, including:
- 1) the character of the soil through which water mains are to be laid;
  - 2) the foundation conditions prevailing at sites of proposed structures; and
  - 3) the approximate elevation of groundwater relative to mean sea level at its expected highest level in relation to subsurface structures.
- k) Flow requirements, including a hydraulic analysis based on flow demands and pressure requirements.

BOARD NOTE: Fire flows, when fire protection is provided, should meet the recommendations of the Illinois Department of Insurance~~Insurance Services Office~~ or other similar agency for the service area involved.

- l) Water Plant Wastes. When waste treatment facilities are necessary for the addition of a new process or an increase in water treatment plant capacity, those facilities must be included as part of the engineering plans and specifications, and the Engineer's Report must include the following:
- 1) an estimate of the character and volume of the waste that will be generated and its proposed disposition; and
  - 2) the type of waste treatment, discharge location, and frequency of discharge.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_ effective \_\_\_\_\_)

### **Section 602.245 Source Construction Applications**

- a) Construction permit applications for the construction of a new, or the modification of an existing, well or surface water intake; or the construction of a water main to transport water purchased from another community water supply must include the following:
- 1) Existing and proposed finished water quality, including:
    - A) Hardness;

- B) Calcium;
  - C) Alkalinity;
  - D) pH;
  - E) Orthophosphate;
  - F) Silicate;
  - G) Total Dissolved Solids;
  - H) Oxidation-reduction potential (ORP);
  - I) Temperature;
  - J) Chloride;
  - K) Sulfate;
  - L) Iron;
  - M) Manganese;
  - N) Chlorine residual (total); and
  - O) Chlorine residual (free).
- 2) A recommendation of the treatment necessary to reduce corrosion in household plumbing.
- b) Well construction permit applications must specify the following:
- 1) the latitude and longitude of the well location;
  - 2) the location and nature of all potential routes, potential primary sources, and potential secondary sources of contamination within 2,500 feet of the well location;
  - 3) for sites subject to flooding, the well casing heights and the maximum flood level based upon the highest flood level specified in the best available information, such as the flood of record, the 100-year flood projection, or the 500-year flood projection;
  - 4) a general aquifer description;

- 5) the total well depth;
  - 6) the well casing diameter, material, depth, weight, height above ground, and thickness;
  - 7) the grout type, thickness, and depth;
  - 8) the screen diameter, material, slot size, and length, if applicable;
  - 9) temporary capping and security measures during well construction;
  - 10) proposed pump test procedures;
  - 11) sampling procedures, if necessary under 35 Ill. Adm. Code 611.212, for wells that may be subject to surface water influences;
  - 12) the type, design capacity, head rating, and depth of pump setting;
  - 13) the column pipe diameter, length, material, and joint;
  - 14) the discharge pipe diameter, depth of cover, material, and valving;
  - 15) the casing vent diameter;
  - 16) the airline length;
  - 17) the location of the raw water sample tap;
  - 18) a description of how the top of the well casing is sealed;
  - 19) a description of access to the well site; and
  - 20) well hydraulics and aquifer property data.
- c) The following information must be submitted on plans for well construction permit applications:
- 1) the well location with the following information:
    - A) a 2,500-foot radius showing the location of potential routes, potential primary sources, and potential secondary sources of contamination;
    - B) cleanup sites within 2,500 feet of the proposed well site with any of the following:

- i) No Further Remediation (NFR) letter;
  - ii) Groundwater Management Zone (GMZ);
  - iii) Environmental Land Use Covenant (ELUC); or
  - iv) an ordinance that restricts the use of groundwater; and
- C) a 400-foot radius showing the location of the sources of pollution listed in 35 Ill. Adm. Code 604.150(a);
- 2) a ~~cross section~~cross-section of the well showing finished grade, natural ground surface, vent, casing, column pipe, screen, well depth, pump depth, grout, gravel pack, and discharge piping;
- 3) all discharge piping, including pressure gauge, meter, sample tap, check valve, shut-off valve, and vacuum/air release valve, if applicable;
- 4) well house construction, if provided;
- 5) the locations of all electrical junction boxes;
- 6) the locations of all observation wells; and
- 7) piping showing the ability to pump to waste.
- d) The following information must be submitted on plans for surface water intake construction permit applications:
  - 1) plan and profile views of the intake structure showing the location, elevation of intake ports, fish screens, valves, piping, and pumps, if applicable;
  - 2) for sites subject to flooding, the maximum flood level based upon the highest flood level specified in the best available information, such as the flood of record, the 100-year flood projection, or the 500-year flood projection;
  - 3) location of inspection manholes, if applicable; and
  - 4) location of chemical treatment, if applicable.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 602.250 Treatment Construction Applications**

The following information must be submitted on plans for the construction of treatment facilities:

- a) all appurtenances, specific structures, or equipment having any connection with the planned water treatment improvements;
- b) detailed hydraulic profiles of water flowing through treatment systems;
- c) schematic plumbing for all structures and equipment;
- d) location of feeders, piping layout, and points of application;
- e) locations of the sources of pollution listed in 35 Ill. Adm. Code 604.150(a);
- f) for sites subject to flooding, the maximum flood level based upon the highest flood level specified in the best available information, such as the flood of record, the 100-year flood projection, or the 500-year flood projection;
- g) security provisions; and
- h) stability and corrosion control:
  - 1) existing and proposed finished water quality, including:
    - A) Hardness;
    - B) Calcium;
    - C) Alkalinity;
    - D) pH;
    - E) Orthophosphate;
    - F) Silicate;
    - G) Total Dissolved Solids;
    - H) Oxidation-reduction potential (ORP);
    - I) Temperature;
    - J) Chloride;

- K) Sulfate;
  - L) Iron;
  - M) Manganese;
  - N) Chlorine residual (total);
  - O) Chlorine residual (free); and
- 2) a recommendation of the treatment necessary to reduce corrosion in household plumbing.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### SUBPART C: OPERATING PERMITS

##### **Section 602.305 Operating Permit Applications**

- a) All applications for operating permits must be on ~~forms prescribed by the Agency~~ forms and must contain:
- 1) the community water supply's name, address, identification number and project name;
  - 2) the construction permit number, type of construction permit, and date the construction permit was issued;
  - 3) an explanation of the status of the construction project. If the project is only partially completed, the applicant must provide the information set forth in Section 602.320; and
  - 4) any other information required by the Agency for proper consideration of the permit, including the submission of the water sample results under Section 602.310.
- b) If the operating permit application is for the operation of a well, the application ~~the operating permit application~~ must include the following information in addition to the information required by subsection (a):
- 1) final geologic well log;
  - 2) aquifer property data;
  - 3) lateral area of influence, as calculated under 35 Ill. Adm. Code 671.Subpart B;

- 4) delineated ~~well-head~~ well head protection area;
- 5) pump test data:
  - A) the latitude and longitude of the observation well;
  - B) test pump capacity head characteristics;
  - C) static water level;
  - D) depth of pump settings; and
  - E) time of starting and ending each test cycle;
- 6) static water level in the production well and observation wells;
- 7) pumping water level in the production well;
- 8) transmissivity in gallons per day per foot of drawdown (GPD/ft);
- 9) hydraulic conductivity in gallons per day per square feet (GPD/ft<sup>2</sup>) or feet per day (ft/day);
- 10) saturated thickness of the aquifer (ft);
- 11) storage coefficient or specific yield (dimensionless);
- 12) recording and graphic evaluation of the following, at one-hour intervals or less:
  - A) pumping rate;
  - B) pumping water level;
  - C) drawdown;
  - D) water recovery rate and levels; and
  - E) specific capacity, measured in gallons per minute per foot (GPM/ft) of drawdown;
- 13) a determination of the regional groundwater gradient and flow direction:
  - A) if the groundwater gradient and flow direction was estimated, provide the data, and the source of that data;

- B) if the groundwater gradient and flow direction ~~were~~ was not estimated, provide the longitude and latitude of the wells used, well logs, and the water elevations observed in the wells during the pump test;
  - C) provide the compass direction clockwise from north in degrees; and
  - D) provide the gradient;
- 14) geological data:
- A) a driller's log determined from samples collected at 5-foot intervals and at each pronounced change in formation;
  - B) accurate geographical location, such as latitude and longitude or GIS coordinates;
  - C) records of drill hole diameters and depths;
  - D) order of size and length of casing, screens, and liners;
  - E) grouting depths;
  - F) formations penetrated;
  - G) water levels; and
  - H) location of any blast charges; and
- 15) analyses of water samples for the constituents listed in 35 Ill. Adm. Code 620.410(a) and (b).

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 602.310 Projects Requiring Disinfection**

- a) Wells, water storage tanks, water treatment plants, and water mains must be disinfected in accordance with AWWA C651, C652, C653, or C654, incorporated by reference in 35 Ill. Adm. Code 601.115.
- b) Disinfection of a filter with granular activated carbon (GAC) must be completed before ~~prior to~~ adding the GAC. Disinfection of an ion exchange unit must be completed before ~~prior to~~ adding a resin with a low chlorine tolerance. Disinfection of a membrane unit must be completed before ~~prior to~~ adding

membrane material with a low chlorine tolerance. Care should be taken when handling the GAC, resin, or membrane to keep the material as clean as possible.

- c) Except as provided in Section 602.315, the permit applicant must verify disinfection before seeking an operating permit-by-rule under Section 602.235 or the issuance of an operating permit by the Agency for completed construction projects. Disinfection is verified when two consecutive water sample sets collected from the completed project at least 24 hours apart show the absence of coliform bacteria and the presence of a chlorine residual as required by 35 Ill. Adm. Code 604.725. A sample set consists of the following:
- 1) For water mains, representative water samples must be collected from every 1,200 feet of new main along each branch and from the end of the line. The Agency may approve a different sampling plan on a site-specific basis.
  - 2) For water treatment plants, representative water samples must be collected from each aerator, detention tank, filter, ion exchange unit, and clearwell, from all other treatment components other than those not requiring disinfection under Section 602.315, and from the entry point to the distribution system.
- d) Analyses conducted under this Section must be performed by a certified laboratory.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 602.320 Partial Operating Permits**

- a) If all phases of a construction project will not be completed at one time, the Agency must issue a partial operating permit under ~~pursuant to~~ Section 602.105 upon receipt of:
- 1) a cover letter describing which sections of the project are completed;
  - 2) a general layout plan sheet of the project indicating the location of water mains, treatment processes, or storage facilities to be operated;
  - 3) a completed and signed operating permit application; and
  - 4) bacteriological analysis~~analyses~~ results from water samples collected from the completed section of the project verifying satisfactory disinfection in accordance with Section 602.310.
- b) Additional operating permits may be obtained in accordance with this Section as other portions of the project are completed.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_ effective \_\_\_\_\_)

### **Section 602.325 Operating Permit-by-Rule**

- a) ~~This~~ ~~The purpose of this~~ Section implements ~~is to implement~~ the permit-by-rule program provided for in Section 39.12 of the Act for classes of community water supply operating permits. By fulfilling all of the requirements of this Section, a community water supply is considered to have met the requirements for obtaining an operating permit under Section 18(a)(3) of the Act and Section 602.300.
- b) A community water supply is eligible to obtain an operating permit-by-rule if the construction project for which the Agency granted a construction permit is for any of the following projects:
  - 1) Water main extensions; or
  - 2) Projects not requiring disinfection specified in Section 602.315.
- c) A community water supply is not eligible to obtain an operating permit-by-rule if the construction project involves a water main that connects two or more community water supplies.
- d) Upon issuance of a construction permit, the Agency may notify an eligible community water supply that it may not seek a permit-by-rule if the community water supply has failed to submit the information required by Agency or Board rules in the two years preceding the Agency's notification.
- e) For construction projects that contain both permit-by-rule eligible and non-eligible components, a community water supply may obtain a partial operating permit-by-rule for the eligible portions of the project.
- f) A community water supply eligible for a permit-by-rule under subsection (b) that does not elect to obtain a permit-by-rule, must obtain an operating permit issued by the Agency before commencing operations.
- g) Permit-by-Rule Certification. Any community water supply seeking to obtain an operating permit-by-rule must submit a certification, on Agency forms ~~prescribed by the Agency~~, specifying the following:
  - 1) the community water supply's name, address, identification number and project name;
  - 2) the construction permit number, type of construction permit, and date the construction permit was issued;

- 3) an explanation of the status of the construction project and, if the project is only partially completed, the information set forth in Section 602.320;
  - 4) a statement attesting to compliance with Section 602.310, if disinfection is required; and
  - 5) the submission of the water sample results required by Section 602.310.
- h) The community water supply may begin operation of a permit-by-rule eligible construction project immediately after it files the certification required by subsection (g).

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### SUBPART D: ALGICIDE PERMITS

##### Section 602.400 Algicide Permit Requirement

- a) ~~A No person must not shall~~ apply an algicide, copper sulfate, a copper sulfate-based productsulfate-based products, or a copper sulfate chemical aid to any stream, reservoir, lake, pond, or other body of water used as a community water supply source without an Algicide Permit issued by the Agency.
- b) Permits issued under this Subpart D will be valid for community water supply sources only.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_ effective \_\_\_\_\_)

##### Section 602.410 Sampling

- a) The owner or official custodian, or an authorized delegate, must collect water samples for each application of copper sulfate, a copper sulfate-based productsulfate-based products, or a copper sulfate chemical aid. Water samples must be collected at the locations and times established in this subsection (a).
  - 1) From the raw water intake, one sample must be collected before treatment.
  - 2) From the entry point to the distribution system, one sample must be collected:
    - A) ~~One sample must be collected~~ approximately 24 hours following the copper sulfate treatment; and
    - B) ~~One sample must be collected~~ approximately 48 hours following the copper sulfate treatment.

- b) The sample results must demonstrate that concentrations of copper do not pose a high health risk to water consumers in compliance ~~accordance~~ with 35 Ill. Adm. Code 611.350(c)(2).

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### SUBPART E: OTHER AQUATIC PESTICIDE PERMITS

##### **Section 602.500 Other Aquatic Pesticide Permit Requirement**

- a) When the application of the pesticide will have an effect on any community water supply, ~~a no person must not shall~~ apply an aquatic pesticide, other than an algicide, copper sulfate, ~~a copper sulfate-based products~~ a copper sulfate-based products, or a copper sulfate chemical ~~aid~~ aids to any stream, reservoir, lake, pond, or other body of water used as a community water supply source without an Aquatic Pesticide Permit issued by the Agency. Effect ~~means~~ is defined as any measurable concentration of the pesticide in the intake water of the community water supply.
- b) ~~A No person must not shall~~ apply an aquatic pesticide, other than an algicide, copper sulfate, ~~a copper sulfate-based products~~ a copper sulfate-based products, or a copper sulfate chemical ~~aid~~ aids, within 20 miles upstream of a public or food processing water supply intake without an Aquatic Pesticide Permit issued by the Agency. The ~~20-mile~~ 20-mile upstream distance must be measured as follows:
- 1) for streams, the distance must be measured from the water supply intake to the downstream edge of the application area;
  - 2) for impoundments, the distance must be measured as the ~~straight-line~~ straight-line distance over water from the intake to the nearest edge of the application area or, if the shape of the impoundment will not allow a ~~straight-line~~ straight-line measurement over water, the distance must be measured as the shortest distance over water between the intake and the application area; and
  - 3) for streams tributary to impoundments, the distance must be the sum of the stream distance plus the shortest line distance described in subsection (b)(2).

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_ effective \_\_\_\_\_)

##### **Section 602.505 Other Aquatic Pesticide Permit Application Contents**

All applications for Aquatic Pesticide Permits must contain, at a minimum:

- a) The reasons for controlling the aquatic plant or animal nuisance.

## b) Applicant Information

- 1) The applicant must be the official custodian of, or have control over the waters to which the aquatic pesticide is applied.
- 2) The application must contain the name, address, telephone number, and signature of the applicant. If the applicant's signature cannot be obtained, the application must be accompanied by a signed statement that the applicant has requested or approved the use of the aquatic pesticide for the times and locations identified in the application.

## c) Applicator Information

- 1) The name, address, and telephone number of the applicator.
- 2) The applicator's Illinois Department of Agriculture license number.
- 3) A list of the limitations imposed by the applicator's license that restrict the types of pesticides that may be used by the applicator.

## d) General Information

- 1) A description of the aquatic pesticide by trade name, chemical name or name of active ingredients, and names of decomposition products.
- 2) The U.S. Environmental Protection Agency (USEPA) Registration Number for the pesticide.
- 3) A description of the steps to be followed in preparing and applying the pesticide, including, ~~but not limited to,~~ proportions, mixing, and precautions in preparation. A copy or facsimile of the label containing this information may be used to satisfy this requirement.

## e) Time and Location of Treatment

- 1) A depiction of the area or areas to be treated on a U.S. Geological Survey (~~USGS~~) topographic map reproduction or an accurately drawn map of larger scale. The depiction must include the locations and provide the name of the owners of all water intakes for a distance of 20 miles downstream of each area to be treated.
- 2) Ponds under 10 acres to be treated, but that are not used as a water source for public or food processing water supplies, must be described using a map of the pond, its tributaries, and the surrounding area.

- A) Pond locations must be given and described using the quarter section, section number, township, range, county, and township name.
  - B) The name of all public and food processing water supplies for a distance of 20 miles downstream of the pond to be treated must be provided.
- 3) The date and time required for each treatment.
- f) An inventory of the species, size, and population of animals or plants to be controlled.
- g) Contacts with Downstream Water Users
- 1) Written documentation showing that all water supplies described in Section 602.500 have been notified of the proposed treatment and provided details of possible adverse effects.
  - 2) The names of water supply operators who will be notified 24 hours before the aquatic pesticide application.
- h) Application and Precautions
- 1) A description of the method to be used to apply the pesticide.
  - 2) A description of the method to be used to protect humans and animals during the time toxic pesticide concentrations exist in the water.
  - 3) A description of the method to be used to remove dead plants or animals ~~if~~ should these accumulations result in water quality deterioration.
  - 4) A description of the method to be used to retain water in the impoundment while toxic pesticide concentrations exist.
  - 5) A description of the method to be used for detoxification of the water in the event of water supply contamination.
  - 6) A description of the actions to be taken to ~~ensure~~ insure that tributary streams will not reintroduce the aquatic life being controlled following the application of the pesticide. If these actions cannot be taken, the anticipated frequency of retreatment must ~~shall~~ be stated.
  - 7) A copy of the contingency plan to be followed by water plant operators for emergency water plant shut down or emergency operation.

- i) Water Characteristics and Chemistry
  - 1) The expected life of the pesticide's active ingredient and its decomposition products, considering characteristics of the water such as pH, dissolved oxygen, and temperature.
  - 2) A list of the limiting chemical constituents of the water to be treated that can hinder the effectiveness of the pesticide.
  - 3) A list of the ~~short-term~~ ~~short term~~ and chronic effects of the pesticide on people and animals.
  - 4) A description of the weather and stream flow conditions under which the pesticide must be applied.
  - 5) A list of the references used to obtain information required by subsections (i)(1) through (4).
  
- j) Pesticide Dosage and Concentration
  - 1) A description of the pesticide dosage.
  - 2) A description of the concentration of the pesticide in the water immediately after application.
  - 3) A copy of the computations used to determine the concentration.
  
- k) Stream and Impoundment Data
  - 1) Streams
    - A) The stream flow expected during pesticide application.
    - B) When stream flows are not available, data on high, average, and low stream flow conditions.
    - C) The specific quantity of discharge in cubic feet per second and the average stream velocity in feet per second.
  
  - 2) Impoundments
    - A) The surface area, average depth, maximum depth, and volume of the impoundment.
    - B) The flow expected into and out of the impoundment during the time the pesticide will be active, including the flows attributed to

contributing streams, flow over the spillway, and water withdrawn by individual users.

- C) Information pertinent to the segment in question when only part of the impoundment will be treated.
  - D) A depiction of the water flow patterns to the water supply intake on a map of the impoundment.
  - E) An estimate of the minimum time required for the aquatic pesticide to reach the water supply intake.
- 3) A list of the reference sources or the name and qualifications of the person supplying stream flow and impoundment data.
- l) Additional Information and Reports
- 1) Additional information must be provided to the Agency upon request to assure the safety of a community water supply as required by 35 Ill. Adm. Code 302.210. A copy of the applicant's authorization to discharge under an NPDES permit must be submitted if the aquatic pesticide is applied to a water of the United States.
  - 2) A report letter must be filed with the Agency within 30 days ~~after following~~ each application of the aquatic pesticide. The report must include, ~~but is not limited to:~~
    - A) the names and addresses of the applicant and applicator;
    - B) the aquatic pesticide application permit number;
    - C) the date of aquatic pesticide application;
    - D) the name and amount of aquatic pesticide applied; and
    - E) a description of any mishap that endangered a community water supply and a chronology of the steps taken to correct the problem.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_ effective \_\_\_\_\_)

### **Section 602.510 Permits Under Public Health Related Emergencies**

The Agency may issue Aquatic Pesticide Permits by telephone whenever public health is immediately endangered by an aquatic pest such as a disease-carrying organism. Aquatic Pesticide Permits issued by telephone must have special conditions for safeguarding downstream public and food processing water supplies.

- a) The Agency must confirm to the applicant in writing the granting of an emergency Aquatic Pesticide Permit within 10 days after issuance.
- b) A written report containing the same information required for a permit application under Section 602.505 must be submitted ~~made~~ to the Agency within 30 days following pesticide application.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 602.520 Extension of Permit Duration**

The Agency may extend the duration of an Aquatic Pesticide Permit when circumstances beyond the control of the applicant prevent the aquatic pesticide application during the time specified in the permit.

- a) All requests for extensions of permit duration must:
  - 1) be in writing;
  - 2) list the reasons the aquatic pesticide could not be applied on the date permitted;
  - 3) give the new date the aquatic pesticide is to be applied;
  - 4) contain a statement that the aquatic pesticide will be applied in accordance with the conditions listed in the Aquatic Pesticide Permit; and
  - 5) contain the Aquatic Pesticide Permit Number, the name and Illinois Department of Agriculture license number of the applicator, and the signature of the applicant.
- b) Requests for extensions of permit duration may be made by telephone if provided:
  - 1) the information listed in subsection (a) is stated; and
  - 2) the information listed in subsection (a) is transmitted in writing to the Division of Public Water Supplies Permit Section within five days after the date verbal approval for an extension of permit duration is given by the Agency.
- c) Applications for extensions of permit duration ~~must~~ will ~~shall~~ not be granted if more than 60 days have elapsed from the date of aquatic pesticide application listed in the permit.

- d) Extensions of permit duration, if granted by the Agency, must be in writing and must state the time of the extension.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_ effective \_\_\_\_\_)

SUBPART F: SPECIAL EXCEPTION PERMITS

**Section 602.600 Special Exception Permits**

- a) Unless contained in a construction or operating permit, each Agency determination in 35 Ill. Adm. Code 604 and 611 is to be made by way of a written special exception permit (SEP) pursuant to Section 39(a) of the Act.
- b) ~~A No person must not may~~ cause or allow the violation of any condition of a SEP.
- c) The community water supply may appeal the denial of, or the conditions of, a SEP to the Board pursuant to Section 40 of the Act.
- d) A SEP may be initiated in either of the following ways:
  - 1) by a written request from the community water supply; or
  - 2) by the Agency, when authorized by Board ~~rules~~ regulations.

BOARD NOTE: The Board does not intend by any provision of this Part to require that the Agency exercise its discretion and initiate a SEP under subsection (d)(2). Rather, the Board intends to clarify by subsection (d)(2) that the Agency may initiate a SEP without receiving a request from the supplier.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 602.APPENDIX A References to Former Rules (Repealed)**

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

<del>Chapter 6: Public Water Supplies</del>	<del>35 Ill. Adm. Code Part 602</del>
<del>Part II: Permits</del>	<del>Part 602</del>
<del>Rule 201</del>	<del>Section 602.101</del>
<del>Rule 202</del>	<del>Section 602.102</del>
<del>Rule 203</del>	<del>Section 602.103</del>
<del>Rule 204</del>	<del>Section 602.108</del>
	<del>Section 602.109</del>
	<del>Section 602.110</del>

<del>Rule 205</del>	<del>Section 602.107</del>
<del>Rule 206</del>	<del>Section 602.111</del>
	<del>Section 602.112</del>
<del>Rule 207</del>	<del>Section 602.105</del>
<del>Rule 208</del>	<del>Section 602.113</del>
<del>Rule 209</del>	<del>Section 602.116</del>
<del>Rule 210</del>	<del>Section 602.114</del>
<del>Rule 211</del>	<del>Section 602.118</del>
<del>Rule 212</del>	<del>Section 602.115</del>
<del>Rule 213</del>	<del>Section 602.104</del>
<del>Rule 214</del>	<del>Section 602.119</del>
<del>Rule 215</del>	<del>Section 602.120</del>

(Source: Repealed at 47 Ill. Reg. \_\_\_\_\_ effective \_\_\_\_\_)

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

PART 603  
OWNERSHIP AND RESPONSIBLE PERSONNEL

Section	
603.101	Ownership
603.102	Administrative Contact
603.103	Responsible Operator in Charge
603.104	Exempt Community Water Supply
603.105	Notification of Change of Ownership or Responsible Operator in Charge

603.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 and codified at 6 Ill. Reg. 11497, effective September 14, 1982; amended in R96-18 at 21 Ill. Reg. 6558, effective May 8, 1997; amended in R15-22 at 40 Ill. Reg. 6853, effective April 15, 2016; amended in R18-26 at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

**Section 603.101 Ownership**

- a) To assure the continued maintenance and operation of community water supplies, each supply must be under the individual direct supervision of a municipal or private corporation, an individual private ownership, or a regularly organized body governed by a constitution and by-laws requiring the regular election of officers.

- b) The body exercising direct supervision over a community water supply ~~must shall~~ file with the Agency a statement of ownership before ~~starting commencing~~ construction of any community water supply facility.
- c) The body filing a statement of ownership under subsection (b) ~~is will shall be~~ considered to be the owner of the community water supply until such time as a notification of change of ownership is received, in ~~compliance accordance~~ with Section 603.105.
- d) The owner or official custodian and the Responsible Operator in Charge designated ~~under pursuant to~~ Sections 603.103 must be jointly accountable for the proper operation of the community water supply.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 603.103 Responsible Operator in Charge**

- a) Under the Public Water Supply Operations Act, *all portions of a community water supply system must be under the direct supervision of a Responsible Operator in Charge.* [415 ILCS 45/1].
- b) Each community water supply, unless exempted under Section 603.104, must designate:
  - 1) one Responsible Operator in Charge who directly supervises both the treatment and distribution facilities of the community water supply; or
  - 2) one Responsible Operator in Charge who directly supervises the treatment facilities of the community water supply and one Responsible Operator in Charge who directly supervises the distribution facilities of the community water supply.
- c) The Responsible Operator in Charge must be a certified operator, qualified and registered in ~~compliance accordance~~ with the Public Water Supply Operations Act and 35 Ill. Adm. Code 681.
- d) The Responsible Operator in Charge must be on the community water supply's operational staff or be providing services to the community water supply under a contract approved by the Agency ~~under pursuant to~~ 35 Ill. Adm. Code 681.1015.
- e) The owner or official custodian and the Responsible Operator in Charge must file a signed statement identifying the Responsible Operator in Charge on Agency forms ~~provided by the Agency~~.
- f) *Each individual who is a Responsible Operator in Charge for a community water*

*supply is jointly accountable with the owner of the community water supply for the proper operation of the portions of the community water supply over which the individual ~~he or she~~ has been designated as the Responsible Operator in Charge. [415 ILCS 45/1.1(a)]*

- g) *Responsible Operator in Charge must submit to the Agency, in accordance with Board rules, consumer confidence reports, monthly operating reports, and drinking water compliance monitoring results, such as corrosion control reports and monitoring results. [415 ILCS 45/1.1(b)(3)]*

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 603.104 Exempt Community Water Supply**

Under pursuant to Section 9.1 of the Public Water Supply Operations Act, a community water supply is not required to have a Responsible Operator in Charge if it:

- a) *consists only of distribution and storage facilities and does not have any collection and treatment facilities;*
- b) *obtains all of its water from, but is not owned or operated by, a community water supply that is required to employ a Class A, Class B, Class C, or Class D community water supply operator;*
- c) *does not sell water to any person; and*
- d) *is not a carrier that conveys passengers in interstate commerce. [415 ILCS 45/9.19.2]*

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 603.105 Notification of Change of Ownership or Responsible Operator in Charge**

- a) Within 15 days after any change in ownership of a community water supply, the new owner must notify the Agency, on Agency forms supplied by the Agency, of changes in ownership.
- b) Within 15 days after any change in the Responsible Operator in Charge, the owner or official custodian and the new Responsible Operator in Charge must notify the Agency, on Agency forms supplied by the Agency, of the changes in responsible personnel.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

**Section 603.APPENDIX A References to Former Rules (Repealed)**

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

<del>Chapter 6: Public Water Supplies</del>	<del>35 Ill. Adm. Code Part 603</del>
<del>Part III: Operation and Maintenance</del>	
<del>Rule 301</del>	<del>Section 603.101</del>
<del>New</del>	<del>Section 603.102</del>
<del>Rule 302</del>	<del>Section 603.103</del>
<del>New</del>	<del>Section 603.104</del>
<del>Rule 303</del>	<del>Section 603.105</del>

(Source: Repealed at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

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

PART 604  
DESIGN, OPERATION, AND MAINTENANCE CRITERIA

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604.140	Nitrification Action Plan
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604.150	Protection of Community Water Supply Structures
604.155	Electrical Controls and Standby Power
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604.730	Continuous Chlorine Analyzers
604.735	Chlorinator Piping

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604.805	Cation Exchange Process

#### SUBPART I: STABILIZATION

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604.900	General Stabilization Requirements
604.905	Carbon Dioxide Addition
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##### Section

604.1300 General Storage Requirements  
 604.1305 Overflow  
 604.1310 Access to Water Storage Structures  
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604.1460	Water Loading Stations

SUBPART O: CROSS-CONNESTIONS~~CROSS CONNECTIONS~~

Section

604.1500	<u>Cross-Connections</u> <del>Cross Connections</del>
604.1505	<u>Cross-Connections</u> <del>Cross Connections</del> Control Program
604.1510	<u>Cross-Connections</u> <del>Cross Connections</del> Control Device Inspectors
604.1515	Agency Approved <u>Cross-Connections</u> <del>Cross Connections</del> Control Measures
604.1520	COVID-19 Emergency Provisions ( <u>Repealed</u> )

604.TABLE A Steel Pipe

AUTHORITY: Implementing Section 17 and authorized by Section 27 of the Illinois Environmental Protection Act [415 ILCS 5/14-19 and 27].

SOURCE: Adopted in R18-17 at 43 Ill. Reg. 8064, effective July 26, 2019; emergency amendment in R20-20 at 44 Ill. Reg. 7777, effective April 17, 2020, for a maximum of 150 days; amended in R20-21 at 44 Ill. Reg. 14736, effective August 27, 2020; amended in R18-25 at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

SUBPART B: SOURCE DEVELOPMENT

**Section 604.255 Well Pumps, Discharge Piping, and Appurtenances**

- a) Where line shaft pumps are used:
- 1) the casing must be firmly connected to the pump structure or have the casing inserted into a recess extending at least one-half inch into the pump base;
  - 2) the pump foundation and base must be at least six inches above the finished floor elevation; and
  - 3) lubricants must comply with Section 604.105(f).

- b) Where a submersible pump is used:
- 1) the top of the casing must be effectively sealed to prohibit the entrance of water under all conditions of vibration or movement of conductors or cables;
  - 2) the electrical cable must be firmly attached to the riser pipe at 20-foot intervals or less; and
  - 3) mercury seals must not be used when an existing submersible pump is replaced or a new submersible pump is installed.
- c) Discharge Piping
- 1) The discharge piping for each well must:
    - A) be designed to minimize friction loss;
    - B) be equipped with a check valve in or at the well, a shutoff valve, a pressure gauge, and a means of measuring flow;
    - C) be protected from the entrance of contamination;
    - D) have control valves and appurtenances located above the pumphouse floor when an above-ground discharge is provided;
    - E) be equipped with a smooth-nosed~~smooth-nosed~~ sampling tap at least 18 inches~~18 inches~~ above the floor to facilitate sample collection, located at a point where positive pressure is maintained, but before any treatment chemicals are applied;
    - F) when necessary to remove entrapped air from the well, be equipped with an air release-vacuum relief valve located upstream from the check valve, with exhaust/relief piping terminating in a down-turned position at least 18 inches above the floor and covered with a 24 mesh, corrosion-resistant~~corrosion-resistant~~ screen;
    - G) be valved to permit test pumping and control of each well;
    - H) have all exposed piping, valves, and appurtenances protected against physical damage and freezing;
    - I) be anchored to prevent movement and be supported to prevent excessive bending forces;

- J) be protected against surge or water hammer; and
  - K) be constructed so that it can be disconnected from the well or well pump to allow the well pump to be pulled.
- 2) The well must have a means of pumping to waste that is not directly connected to a sewer.
  - 3) The discharge, drop, or column piping inside the well for submersible, submersible jet, and submersible line shaft pumps must:
    - A) be capable of supporting the weight of the submersible pump, piping, water, and appurtenances, and of withstanding the thrust, torque, torque fatigue, and other reaction loads created during pumping; and
    - B) use lubricants, fittings, brackets, tape, or other appurtenances that comply with Section 604.105(f).
- d) Pitless Well Units
- 1) Pitless units must:
    - A) be shop-fabricated from the point of connection with the well casing to the unit cap or cover;
    - B) be threaded or welded to the well casing;
    - C) be of watertight construction throughout;
    - D) be of materials and weight at least equivalent and compatible to the casing;
    - E) have field connection to the lateral discharge from the pitless unit of threaded, flanged, or mechanical joint connection; and
    - F) terminate at least 18 inches above final ground elevation or three feet above the 100-year flood level or the highest known flood elevation, whichever is higher.
  - 2) The design of the pitless unit must make provision for:
    - A) access to disinfect the well;

- B) a properly constructed casing vent meeting the requirements of subsection €;
  - C) facilities to measure water levels in the well, under subsection (f);
  - D) a cover at the upper terminal of the well that will prevent the entrance of contamination;
  - E) a contamination-proof entrance connection for electrical cable;
  - F) an inside diameter as great as that of the well casing to facilitate work and repair on the well, pump, or well screen; and
  - G) at least one check valve within the well casing.
- 3) If the connection to the casing is by field weld, the shop-assembled unit must be designed specifically for field welding to the casing. The only field welding permitted will be that needed to connect a pitless unit to the casing.
- e) Casing Vent
- 1) Well casing must be vented to the atmosphere.
  - 2) The vent must terminate in a downturned position, at or above the top of the casing or pitless unit, no less than 12 inches above grade or floor, in a minimum ~~1 ½-inch~~<sup>1½-inch</sup> diameter opening covered with a 24 mesh, corrosion-resistant~~corrosion-resistant~~ screen.
  - 3) The pipe connecting the casing to the vent must be of adequate size to provide rapid venting of the casing.
  - 4) Where vertical turbine pumps are used, vents may be placed into the side of the casing.
- f) Water Level Measurement
- 1) Each well must be equipped with a means for taking water level measurements.
  - 2) Where pneumatic water level measuring equipment is used, it must be made using corrosion-resistant materials and attached firmly to the drop pipe or pump column to prevent the entrance of foreign materials.
- g) Observation wells must meet the requirements in 77 Ill. Adm. Code 920.170.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### SUBPART C: SOURCE WATER PROTECTION PLAN

#### Section 604.315 Source Water Assessment

- a) The source water assessment must contain the following information:
  - 1) a statement of the importance of the source water;
  - 2) a list of water supplies that obtain water from this community water supply;
  - 3) a delineation of all sources of water used by the community water supply, including:
    - A) for surface water, description of the watershed, map of the watershed, and intake locations;
    - B) for groundwater, the well identification number, well description, well status, and well depth; a description of setback zones; and a description of the aquifer for each well;
  - 4) a report on the quality of the source water for all sources of water delineated in subsection (a)(3), including:
    - A) when and where samples used to determine the quality of the source water were taken. These samples must be tested by a certified laboratory; and
    - B) the certified laboratory's results;
  - 5) a report on the quality of the finished water;
  - 6) an identification of potential sources of contamination to the source water;
  - 7) the analysis of the source water's susceptibility to contamination; and
  - 8) an explanation of the community water supply's efforts to protect its source water.
- b) Upon request, the Agency will provide technical assistance to a community water supply in conducting the source water assessment.
- a) A community water supply may use a Source Water Assessment Program Fact Sheet prepared by the Agency to fulfill the requirements of this Section.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

## SUBPART E: CLARIFICATION

### Section 604.525 Tube or Plate Settlers

- a) Settler units consisting of variously shaped tubes or plates installed in multiple layers and at an angle to the flow may be used for sedimentation, following flocculation.
- b) Tube or plate settlers must meet the following requirements:
  - 1) Inlet and outlet design must maintain velocities suitable for settling in the basin and to minimize short-circuiting;
  - 2) Plate units must be designed to minimize maldistribution across the units;
  - 3) Drain piping from settler units must be sized to facilitate a quick flush of the ~~settlers~~ settlers units and to prevent flooding of other portions of the plant;
  - 4) Outdoor installations must be protected against freezing, including sufficient freeboard above the top of the settlers;
  - 5) Tubes must have a maximum application rate of 2 gpm per square foot of cross-sectional area, unless higher rates are shown through pilot plant or in-plant demonstration studies;
  - 6) Plates must have a maximum application rate of 0.5 gpm per square foot, based on 80 percent of the projected horizontal plate area;
  - 7) Flushing lines must be provided to facilitate maintenance and must be properly protected against backflow or ~~back-siphonage~~ back-siphonage;
  - 8) Inlets and outlets must conform with Section 604.515(b) and (d);
  - 9) The units' support system must be able to carry the weight of the settler units when the basin is drained plus any additional weight to support maintenance; and
  - 10) Settler units must accommodate:
    - A) A water or air jet system for cleaning their tubes or plates; and

- B) Dropping their water level to allow cleaning with the system identified in subsection (b)(10)(A).

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### SUBPART F: FILTRATION

##### Section 604.605 Rapid Rate Gravity Filters

- a) The use of rapid rate gravity filters requires pretreatment.
- b) For community water supplies treating surface water, groundwater under the direct influence of surface water, or using lime soda softening treatment, unless otherwise approved by the Agency under Section 604.145(b), the nominal filtration rates must not exceed 3 gal/min/ft<sup>2</sup> of filter area for single media filters and 5 gal/min/ft<sup>2</sup> for multi-media filters. Filtration rates must be reduced when treated water turbidity exceeds the standards in 35 Ill. Adm. Code 611.
- c) For community water supplies treating groundwater and not using lime soda softening treatment, unless otherwise approved by the Agency under Section 604.145(b), the rate of filtration must not exceed 4 gal/min/ft<sup>2</sup> of filter area.
- d) Number of Filter Units-
- 1) A minimum of two units must be provided. Each unit must be capable of meeting the plant design capacity or the projected maximum daily demand at the approved filtration rate.
  - 2) Where more than two filter units are provided, the filters must be capable of meeting the plant design capacity at the approved filtration rate with one filter removed from service.
  - 3) Where declining rate filtration is provided, the variable aspect of filtration rates and the number of filters must be considered when determining the design capacity for the filters.
- e) Structural Details and Hydraulics. The filter structure must be designed to provide for the following:
- 1) vertical walls within the filter;
  - 2) no protrusion of the filter walls into the filter media;
  - 3) cover by superstructure;
  - 4) head and walking room to permit normal inspection and operation;

- 5) minimum depth of filter box of 8.5 feet;
  - 6) minimum water depth over the surface of the filter media of 3 feet;
  - 7) trapped effluent to prevent backflow of air to the bottom of the filters;
  - 8) prevention of floor drainage to the filter with a minimum 4-inch curb around the filters;
  - 9) prevention of flooding by providing overflow;
  - 10) maximum velocity of treated water in pipe and conduits to filters of 2 ft/sec;
  - 11) cleanouts and straight alignment for influent pipes or conduits where solids loading is heavy, or following lime soda softening;
  - 12) construction to prevent ~~cross-connections~~cross-connections, short-circuiting, or common walls between potable and non-potable water; and
  - 13) wash water drain capacity to carry maximum flow.
- f) Wash water troughs must be constructed such that:
- 1) the bottom elevation is above the maximum level of expanded media during washing;
  - 2) a 2-inch freeboard is provided at the maximum rate of wash;
  - 3) the top edge is level and is all at the same elevation;
  - 4) troughs are spaced so that each trough serves the same number of square feet of filter area; and
  - 5) the maximum horizontal travel of suspended particles to reach the trough does not exceed 3 feet.
- g) The filter media must be composed of clean silica sand or other natural or synthetic media free from detrimental chemical or bacterial contaminants and must meet the following requirements:
- 1) a total depth of not less than 24 inches;
  - 2) a uniformity coefficient of the smallest material not greater than 1.65;

- 3) a minimum of 12 inches of media with an effective size range of 0.45 mm to 0.55 mm;
- 4) filter media specifications:
  - A) Filter anthracite must consist of hard, durable anthracite coal particles of various sizes. Blending of non-anthracite material is not acceptable. Anthracite must have:
    - i) an effective size of 0.45 mm to 0.55 mm with a uniformity coefficient not greater than 1.65 when used alone;
    - ii) an effective size of 0.8 mm to 1.2 mm with a uniformity coefficient not greater than 1.7 when used as a cap;
    - iii) an effective size less than 0.8 mm for anthracite used as a single media on potable groundwater for iron and manganese removal only (effective sizes greater than 0.8 mm may be approved based upon ~~on-site~~ on-site pilot plant studies);
    - iv) a specific gravity greater than 1.4;
    - v) an acid solubility less than 5 percent; and
    - vi) a Moh's scale of hardness greater than 2.7.
  - B) Sand must have:
    - i) an effective size of 0.45 mm to 0.55 mm;
    - ii) a uniformity coefficient of not greater than 1.65;
    - iii) a specific gravity greater than 2.5; and
    - iv) an acid solubility less than 5 percent.
  - C) ~~High-density~~ High-density sand must consist of hard, durable, and dense grain garnet, ilmenite, hematite or magnetite, or associated minerals of those ores that will resist degradation during handling and use, and must:
    - i) contain at least 95 percent of the associated material with a specific gravity of 3.8 or higher;
    - ii) have an effective size of 0.2 to 0.3 mm;

- iii) have a uniformity coefficient of not greater than 1.65; and
  - iv) have an acid solubility less than 5 percent.
- D) Granular activated carbon as a single media may be considered for filtration only after pilot or full-scale testing and with prior approval of the Agency. The design must include the following:
- i) The media must meet the basic specifications for filter media in subsections (g)(1) through (g)(3).
  - ii) There must be provisions for a free chlorine residual and adequate contact time in the water following the filters and prior to distribution.
  - iii) Provisions must be made for frequent replacement or regeneration.
- E) Other media types or characteristics must be approved by the Agency;
- 5) supporting media designed as follows based on the type of filter material:
- A) A three-inch layer of torpedo sand must be used as a supporting media for filter sand ~~when~~where supporting gravel is used, and must have:
- i) an effective size of 0.8 mm to 2.0 mm; and
  - ii) a uniformity coefficient not greater than 1.7.
- B) Gravel
- i) When gravel is used as the supporting media, it must consist of cleaned and washed, hard, durable, rounded silica particles and must not include flat or elongated particles.
  - ii) The coarsest gravel must be 2.5 inches in size when the gravel rests directly on a lateral system, and must extend above the top of the perforated laterals.
  - iii) Not less than four layers of gravel must be provided in accordance with the following size and depth distribution:

<b>Size</b>	<b>Depth</b>
2½ to 1½ inches	5 to 8 inches
1½ to ¾ inches	3 to 5 inches
¾ to ½ inches	3 to 5 inches
½ to 3/16 inches	2 to 3 inches
3/16 to 3/32 inches	2 to 3 inches

- iv) Reduction of gravel depths and other size gradations may be approved by the Agency upon justification for slow sand filtration or when proprietary filter bottoms are specified.

h) Filter Bottoms and Strainer Systems

- 1) Water quality must be reviewed ~~before~~prior to the use of porous plate bottoms to prevent clogging and failure of the underdrain system.
- 2) The design of manifold type collection systems must:
  - A) minimize loss of head in the manifold and laterals;
  - B) ensure even distribution of washwater and even rate of filtration over the entire area of the filter;
  - C) provide the ratio of the area of the strainer systems' final openings to the area of the filter at about 0.003;
  - D) provide the total cross-sectional area of the laterals at about twice the total area of the final openings;
  - E) provide the cross-sectional area of the manifold at 1.5 to 2 times the total area of the laterals; and
  - F) direct lateral perforations without strainers downward.
- 3) The Agency may approve departures from these standards for high-rate~~high rate~~ filters and ~~for~~ propriety bottoms.

i) The following appurtenances must be provided for every filter:

- 1) influent and effluent sampling taps;
- 2) a gauge indicating loss of head;
- 3) a meter indicating the instantaneous rate of flow;

- 4) a pipe for filtering to waste that has a ~~six-inch~~<sup>six-inch</sup> or larger air gap, or other ~~Agency-approved cross-connection~~<sup>Agency approved cross connection</sup> control measure;
  - 5) a continuously recording Nephelometer capable of measuring and recording filter effluent turbidity at maximum 15-minute intervals, and with alarm capability to notify the operator if filtered water turbidity exceeds 0.3 NTU (Nephelometric Units);
  - 6) an ~~adjustable-rate~~<sup>adjustable-rate</sup> valve to allow the operator to gradually control the flow rate increase when placing the filters back into operation; and
  - 7) a hose and storage rack for washing filter walls.
- j) Backwash. Provisions must be made for washing filters as prescribed in this subsection.
- 1) The community water supply must use filtered water provided at the required rate by washwater tanks or a dedicated washwater pump to wash the filters.
  - 2) Backwash rate must meet the following requirements:
    - A) a minimum rate of 15 gal/min/ft<sup>2</sup>, consistent with water temperatures and specific gravity of the filter media;
    - B) a rate sufficient to provide for a 50 percent expansion of the filter bed; and
    - C) a reduced rate of 10 gal/min/ft<sup>2</sup> for full depth anthracite or granular activated carbon filters, upon approval by the Agency.
  - 3) Washwater pumps in duplicate must be provided unless an alternate means of obtaining washwater is available.
  - 4) The main washwater line must have a regulator or valve to obtain the desired rate of filter wash with the washwater valves on the individual filters open wide.
  - 5) The main washwater line or backwash waste line must have a rate of flow indicator, preferably with a totalizer, located so that it can be easily read by the operator during the washing process.
  - 6) Rapid changes in backwash water flow must be prevented.

- 7) Backwash must be completed with an operator in attendance to initiate the backwash cycle and to control the return-to-service procedure to assure that the effluent turbidity is less than 0.3 NTU when the filter is placed back into operation for discharge to the clearwell.
  - 8) Appropriate measures for ~~cross-connection~~cross-connection control must be provided.
- k) Surface or subsurface wash facilities are required except for filters used exclusively for iron, radionuclides, arsenic, or manganese removal. Wash facilities may include a system of fixed nozzles or a revolving-type apparatus. All devices must be designed:
- 1) to provide water pressures of at least 45 psi;
  - 2) ~~if connected to the treated water system,~~ to prevent back-siphonage~~back siphonage~~ by properly installing a vacuum breaker or other approved device, if connected to the treatment water system; and
  - 3) to provide a rate of flow of 2.0 gpm/ft<sup>2</sup> of filter area with fixed nozzles or 0.5 gpm/ft<sup>2</sup> with revolving arms.
- l) Air scouring ~~may~~can be used in place of surface wash if the air scouring meets the following requirements:
- 1) Air flow for air scouring the filter must be 3 to 5 ft<sup>3</sup>/min/ft<sup>2</sup> of filter area when the air is introduced into~~in~~ the underdrain; a lower air rate must be used when the air scour distribution system is placed above the underdrains;
  - 2) A method to avoid filter media loss during backwashing must be provided;
  - 3) Air scouring must be followed by a fluidization wash sufficient to restratify the media;
  - 4) Air must be free from contamination;
  - 5) If air scour distribution systems are placed at the media and supporting bed interface, the air scour nozzles must be designed to prevent media from clogging the nozzles or the air entering the air distribution system;
  - 6) Piping for the air distribution system must not be flexible hose or other soft material;
  - 7) Air delivery piping must not:

- A) pass down through the filter media; and
  - B) have any arrangement in the filter design that would allow short-circuiting between the applied unfiltered water and the filtered water;
- 8) When air scouring is being ~~used~~<sup>utilized</sup>, the backwash rate must be variable and must not exceed 8 gal/min, unless a higher rate is necessary to remove scoured particles from filter media surfaces; and
  - 9) Air scouring piping must not be installed in the underdrain unless the underdrain was designed to accommodate the piping.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### SUBPART G: DISINFECTION

##### Section 604.735 Chlorinator Piping

- a) Cross-Connection~~Cross-Connection~~ Protection:
  - 1) The chlorinator piping must be designed to prevent contamination of the treated water.
  - 2) For all systems required to disinfect under Section 604.700, piping must be arranged to prevent ~~backflow or back-siphonage~~<sup>back flow or back siphonage</sup> between multiple points of chlorine application.
  - 3) The water supply to each eductor must have a separate shutoff valve.
- b) Pipe Material
  - 1) The pipes carrying elemental liquid or dry gaseous chlorine under pressure must be Schedule 80 seamless steel tubing or other materials recommended by The Chlorine Institute in Pamphlet 6, Piping Systems for Dry Chlorine, incorporated by reference in 35 Ill. Adm. Code 601.115. These pipes must not be PVC.
  - 2) Rubber, PVC, polyethylene (PE), or other materials recommended by The Chlorine Institute must be used for chlorine solution piping and fittings.
  - 3) Nylon products are not acceptable for any part of the chlorine solution piping system.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

## SUBPART H: SOFTENING

**Section 604.805 Cation Exchange Process**

- a) Pre-treatment under Section 604.1010(b) or (c) is required when the content of iron, manganese, or a combination of the two is 1 mg/L or more.
- b) Design requirements must provide:
  - 1) automatic regeneration based on the volume of water softened; and
  - 2) a manual override on all automatic controls.
- c) The design capacity for hardness removal must not exceed 20,000 grains per cubic foot when resin is regenerated with 0.3 pounds of salt per 1000 grains of hardness removed.
- d) The depth of the exchange resin must not be less than 3 feet.
- e) Flow Rates
  - 1) The rate of softening must not exceed 7 gal/min/ft<sup>2</sup> of bed area.
  - 2) The backwash rate must be 6 to 8 gal/min/ft<sup>2</sup> of bed area.
  - 3) Rate of flow controllers or the equivalent must be installed.
- f) The freeboard must be calculated based on the size and specific gravity of the resin and the direction of water flow. Unless otherwise approved by the Agency under Section 604.145(b), the washwater collector must be 24 inches above the top of the resin on downflow~~down-flow~~ units.
- g) The bottoms, strainer systems, and support for the exchange resin must conform to the criteria provided for rapid rate gravity filters in Section 604.605(f) and (g).
- h) Brine must be evenly distributed over the entire surface of both upflow and downflow units.
- i) Backwash, rinse, and air relief discharge pipes must be installed to prevent any possibility of back-siphonage~~back-siphonage~~.
- j) Bypass Piping and Equipment
  - 1) Bypass must be provided around softening units to produce a blended water of desirable hardness.

- 2) Totalizing meters must be installed on the bypass line and on each softener unit.
  - 3) The bypass line must have a shutoff valve. An automatic proportioning or regulating device is recommended.
- k) When the applied water contains a chlorine residual, the cation exchange resin must be a type that is not damaged by residual chlorine.
- l) Sampling Taps
- 1) Smooth-nosed sampling taps must be provided for the collection of representative samples.
  - 2) The taps must be located to provide for sampling of the softener influent, effluent, and blended water.
  - 3) The sampling taps for the blended water must be at least 20 feet downstream from the point of blending.
  - 4) Petcocks are not acceptable as sampling taps.
- m) Brine and Salt Storage Tanks:
- 1) Salt dissolving or brine tanks and wet salt storage tanks must be covered and must be corrosion-resistant~~corrosion resistant~~.
  - 2) The make-up water inlet must be protected from back-siphonage~~back siphonage~~. Water for filling the tank must be distributed over the entire surface by pipes above the maximum brine level in the tank. An automatic declining level control system on the make-up water line is recommended.
  - 3) Wet salt storage basins must be equipped with manholes or hatchways for access and for direct dumping of salt from truck or railcar. Openings must be provided with raised curbs and watertight covers having overlapping edges similar to those required for finished water reservoirs.
  - 4) Overflows, where provided, must be protected with corrosion-resistant~~corrosion resistant~~ screens and must terminate with either a turned down bend having a proper free fall discharge or a self-closing flap valve.
  - 5) The salt must be supported on graduated layers of gravel placed over a brine collection system.

- 6) Alternative designs that are conducive to frequent cleaning of the wet salt storage tank may be approved by the Agency.
- 7) Total salt storage must provide for at least 30 days of operation.
- n) Corrosion control must be provided under Subpart I.
- o) Suitable disposal must be provided for brine waste.
- p) Pipes and contact materials must be resistant to the aggressiveness of salt. Plastic and red brass are acceptable piping materials. Steel and concrete must be coated with a non-leaching protective coating that is compatible with salt and brine.
- q) Dry bulk salt storage must be enclosed and separated from other operating areas to prevent damage to equipment.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### SUBPART I: STABILIZATION

##### **Section 604.900 General Stabilization Requirements**

- a) Water distributed by community water supplies must be stable so as to not cause a violation of 35 Ill. Adm. Code 601.101(a).
- a) The following water quality parameters of finished water must be evaluated to ensure that water quality parameters minimize corrosion and minimize deposition of excess calcium carbonate ( $\text{CaCO}_3$ ) scale throughout the distribution system of the community water supply:
  - 1) alkalinity (as  $\text{CaCO}_3$ );
  - 2) total hardness (as  $\text{CaCO}_3$ );
  - 3) calcium hardness (as  $\text{CaCO}_3$ );
  - 4) temperature;
  - 5) pH;
  - 6) chloride;
  - 7) sulfate;
  - 8) total dissolved solids;

- 9) oxidation reduction potential;
  - 10) conductivity;
  - 11) iron;
  - 12) manganese;
  - 13) orthophosphate, if applicable; and
  - 14) silica, if applicable.
- b) The following may be used to determine the corrosivity of water distributed by a community water supply:

1) Lead and Copper

A) Optimal Corrosion Control Treatment Evaluation Technical Recommendations for Primacy Agencies and Public Water Systems, USEPA (March 2016); Office of Water (4606M); EPA 816-B-16-003, incorporated by reference at 35 Ill. Adm. Code 601.115;

B) Chloride Sulfate Mass Ratio (CSMR), calculated as follows:

$$\text{CMSR} = \frac{\text{Cl}^-, \text{ expressed as mg/L}}{\text{SO}_4^-, \text{ expressed as mg/L}}$$

C) Coupon and pipe loop studies.

2) Iron and Steel

Larson-Skold Index (L-SI), calculated as follows:

$$\text{L-SI} = (\text{Cl} + \text{SO}_4) / \text{alkalinity}$$

(All parameters expressed as mg/L of equivalent CaCO<sub>3</sub>)

BOARD NOTE: The following equation provides a simplified procedure for calculating L-SI:

$$\text{LS-I} = \frac{(1.41)(\text{mg/L Cl}^-) + (1.04)(\text{mg/L SO}_4^{2-})}{\text{mg/L alkalinity (as CaCO}_3)}$$

Cl<sup>-</sup> expressed as mg/L chloride  
SO<sub>4</sub><sup>-2</sup> expressed as mg/L sulfate

- 3) Iron Steel and Concrete
  - A) Calcium Carbonate Precipitation Potential (CCPP)<sub>2</sub> as referenced in Method 2330 C Standard Methods for Examination of Water and Wastewater, 22nd edition, incorporated by reference in 35 Ill. Adm. Code 611.102.
  - B) For water containing phosphates:
    - i) The Alkalinity Difference Technique, as described in Method 2330 B.3.b and 2330 C.2.b Standard Methods for Examination of Water and Wastewater, 22nd edition, incorporated by reference in 35 Ill. Adm. Code 611.102. The CCPP is the difference between the initial and equilibrated water's alkalinity (or calcium) values, when expressed as CaCO<sub>3</sub>.
    - ii) The Marble Test, as described in Method 2330 C.2.c Standard Methods for Examination of Water and Wastewater, 22nd edition, incorporated by reference in 35 Ill. Adm. Code 611.102. The Marble Test is similar to the Alkalinity Difference Technique. The CCPP equals the change in alkalinity (or calcium) values during equilibration, when expressed as CaCO<sub>3</sub>.
- c) The following may be used to determine deposition of excess CaCO<sub>3</sub> scale:
  - 1) CCPP, as referenced in Method 2330 B Standard Methods for Examination of Water and Wastewater, 22nd edition, incorporated by reference in 35 Ill. Adm. Code 611.102.
  - 2) For water containing phosphates:
    - A) The Alkalinity Difference Technique, as described in Method 2330 B.3.b and 2330 C.2.b Standard Methods for Examination of Water and Wastewater, 22nd edition, incorporated by reference in Section 611.102. The CCPP is the difference between the initial and equilibrated water's alkalinity (or calcium) values, when expressed as CaCO<sub>3</sub>.
    - B) The Marble Test as described in Method 2330 C.2.c Standard Methods for Examination of Water and Wastewater, 22nd edition, incorporated by reference in Section 611.102. The Marble Test is similar to the Alkalinity Difference Technique. The CCPP equals

the change in alkalinity (or calcium) values during equilibration, when expressed as CaCO<sub>3</sub>.

BOARD NOTE: Calcium Carbonate Precipitation Potential (CCPP) can be calculated using Trussell Technologies software: [www.trusselltech.com/downloads?category=6](http://www.trusselltech.com/downloads?category=6).

CCPP does not apply to protection or corrosion of lead and copper plumbing materials or to water containing phosphates. See "Internal Corrosion and Deposition Control", Water Quality & Treatment, A Handbook on Drinking Water, 6th ed. (2011), American Water Works Association.

BOARD NOTE: Estimating Calcium Carbonate Precipitation Potential (CCPP) using the Alkalinity Difference Technique or the Marble Test, both referenced in Standard Methods for Examination of Water and Wastewater, 22nd edition, incorporated by reference at 35 Ill. Adm. Code 611.102, is described as "Calcium Carbonate Saturation". See Simplified Procedures for Water Examination, Manual of Water Supply Practices M12 (5th ed. 2002), American Water Works Association.

Based on the results of the "Calcium Carbonate Saturation" test, CCPP can be calculated as:

$$\text{CCPP} = \text{Final mg/L alkalinity (as CaCO}_3\text{)} - \text{Initial mg/L alkalinity (as CaCO}_3\text{)}$$

Water is unsaturated with respect to calcium carbonate and may be corrosive if final alkalinity is greater than initial alkalinity, a positive value in the equation above. If there is alkalinity gain in the final alkalinity test, it indicates a tendency to dissolve calcium carbonate scale.

Water is oversaturated with calcium carbonate scale and may deposit calcium carbonate coating in the water mains if final alkalinity is less than initial alkalinity, a negative value in the equation above. If there is alkalinity loss in the final alkalinity test, it indicates a tendency to precipitate calcium carbonate scale. If final and initial alkalinity are the same, the water is stable and in equilibrium with calcium carbonate.

CCPP does not apply ~~is not applicable~~ to protection or corrosion of lead and copper plumbing materials.

Verifying the alkalinity titration endpoint by using a pH meter to verify the pH of the titrated alkalinity sample is recommended, since titration endpoint visual color change may be individually variable. If the pH of the sample is not certain, consider using a pH of 4.50 to represent the endpoint. See "Alkalinity Test", Standard Methods for Examination of Water and Wastewater, 22nd edition, incorporated by reference in 35 Ill. Adm. Code 611.102.

e) Acceptable stability treatments include:

- 1) carbon dioxide addition;
  - 2) acid addition;
  - 3) phosphate addition;
  - 4) split treatment;
  - 5) alkali chemical:
    - A) hydrated lime;
    - B) sodium carbonate;
    - C) sodium bicarbonate;
    - D) sodium hydroxide;
  - 6) carbon dioxide reduced by aeration;
  - 7) calcium hydroxide; and
  - 8) sodium silicate addition.
- f) When chemical addition is used for stabilization, the community water supply must comply with the requirements of Subpart K.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### SUBPART J: OTHER TREATMENT

##### **Section 604.1005 Anion Exchange**

- a) **Pre-treatment Requirements.** Pre-treatment under Section 604.1010 is required when a combination of iron and manganese exceeds 0.5 mg/L.
- b) **Anion Exchange Treatment Design**
  - 1) Automatic regeneration based on volume of water treated must be used unless manual regeneration is justified and is approved by the Agency.
  - 2) If a portion of the water is bypassed around the units and blended with treated water, the following requirements must be met:
    - A) the maximum blend ratio allowable must be determined based on the highest anticipated raw water nitrate level; and

- B) a totalizing meter and a proportioning or regulating device or flow regulating valves must be provided on the bypass line.
- 3) A manual override must be provided on all automatic controls.
  - 4) Adequate freeboard must be provided to accommodate the backwash flow rate of the unit, ensuring the resin will not overflow. The freeboard must be calculated based on the size and specific gravity of the resin.
  - 5) The system must be designed to include an adequate under drain and supporting gravel system and brine distribution equipment.
  - 6) Sampling Taps
    - A) Smooth-nosed sampling taps must be provided for the collection of representative samples.
    - B) The taps must be located to provide for sampling of the softener influent, effluent, and blended water.
    - C) The sampling taps for the blended water must be at least 20 feet downstream from the point of blending.
    - D) Petcocks are not acceptable as sampling taps.
  - 7) Brine and Salt Storage Tanks:
    - A) Salt dissolving or brine tanks and wet salt storage tanks must be covered and must be corrosion-resistant~~corrosion resistant~~.
    - B) The make-up water inlet must be protected from back siphonage. Water for filling the tank must be distributed over the entire surface by pipes above the maximum brine level in the tank. An automatic declining level control system on the make-up water line is recommended.
    - C) Wet salt storage basins must be equipped with manholes or hatchways for access and for direct dumping of salt from truck or railcar. Openings must be provided with raised curbs and watertight covers having overlapping edges similar to those required for finished water reservoirs.
    - D) Overflows, where provided, must be protected with corrosion-resistant~~corrosion resistant~~ screens and must terminate with either

a turned downward bend having a proper free fall discharge or a self-closing flap valve.

- E) The salt must be supported on graduated layers of gravel placed over a brine collection system.
  - F) Alternative designs that are conducive to frequent cleaning of the wet salt storage tank may be approved by the Agency.
  - G) Total salt storage must provide for at least 30 days of operation.
- c) Exchange Capacity. The design capacity for nitrate removal must not exceed 10,000 grains per cubic foot when the resin is regenerated at 15 pounds of salt per cubic foot of resin.
  - d) Number of Units. At least two units must be provided. The treatment capacity must be capable of producing the maximum average daily demand at a level below the nitrate/nitrite MCL, with one exchange unit out of service.
  - e) Type of Media. The anion exchange media must be of the nitrate selective type.
  - f) Flow Rates. Unless otherwise approved by the Agency under Section 604.145(b), the following flow rates apply:
    - 1) The treatment flow rate must not exceed 5 gal/min/ft<sup>2</sup> of bed area.
    - 2) The backwash flow rate must be between 4.0 and 6.0 gal/min/ft<sup>2</sup> of bed area.
    - 3) The regeneration rate must be approximately 1.0 gal/min/ft<sup>2</sup> of bed area with a fast rinse approximately equal to the service flow rate.
  - g) ~~Cross-Connection~~ ~~Cross-Connection~~ Control. Backwash, rinse, and air relief discharge pipes must be installed to prevent any possibility of back-siphonage.
  - h) Construction Materials. Pipes and contact materials must be resistant to the aggressiveness of salt. Plastic and red brass are acceptable materials. Steel and concrete must be coated with a non-leaching protective coating that is compatible with salt and brine.
  - i) Housing. Dry bulk salt storage must be enclosed and separated from other operating areas to prevent damage to equipment.
  - j) Preconditioning of the Media. Prior to startup of the equipment, the media must be regenerated with no less than two bed volumes of water containing sodium chloride followed by an adequate rinse.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### Section 604.1010 Iron and Manganese Control

- a) Except as provided in 35 Ill. Adm. Code 611.300€, treatment is required to meet the iron and manganese MCL as stated in Section 611.300(b).
- b) Removal of Iron and Manganese by Oxidation, Detention, and Filtration
  - 1) Oxidation must be by aeration, as indicated in Subpart D, unless the community water supply demonstrates chemical oxidation provides equivalent results to aeration. Chemicals that may be used for oxidation include chlorine, sodium permanganate, potassium permanganate, ozone, or chlorine dioxide.
  - 2) Detention
    - A) A minimum detention time of 30 minutes must be provided following aeration to ensure that the oxidation reactions are complete prior to filtration. This minimum detention time may be modified only when a pilot plant study indicates completion of oxidation reactions in less time.
    - B) The reaction tank/detention basin must be provided with an overflow, vents, and access hatches~~vent and access hatch~~ in accordance with Subpart M.
  - 3) Filtration. Filters must conform to Subpart F.
- c) Removal by Manganese Greensand or Manganese Coated Media Filtration-
  - 1) Permanganate or chlorine must be added to the water upstream of the filter, per the manufacturer's recommendation.
  - 2) An anthracite media cap of at least six inches must be provided over manganese greensand.
  - 3) Normal backwash rate is 8 gal/min/ft<sup>2</sup> with filters containing manganese greensand and 15 gal/min with manganese coated media.
  - 4) Sample taps must be provided:
    - A) prior to application of permanganate;
    - B) immediately ahead of filtration;

- C) at points between the anthracite media and the manganese greensand;
  - D) halfway down the manganese greensand; and
  - E) at the filter effluent.
- d) Sequestration of Iron ~~and/or~~ Manganese by Polyphosphates
- 1) Sequestration by polyphosphates must not be used when the combination of iron and manganese exceeds 1 mg/L.
  - 2) Phosphate solution must be kept covered and disinfected by carrying approximately 10 mg/L free chlorine residual unless the phosphate is not able to support bacterial growth and the phosphate is being fed from the covered shipping container. Phosphate solutions having a pH of 2.0 or less may also be exempted from this requirement by the Agency.
  - 3) Polyphosphates must not be applied ahead of iron and manganese removal treatment. The point of application must be prior to aeration, oxidation, or disinfection.
  - 4) The phosphate feed point must be located as far ahead of the oxidant feed point as possible.
- e) Sequestration of Iron ~~and/or~~ Manganese by Sodium Silicates:
- 1) Sequestration by sodium silicate must not be used when iron, manganese, or a combination of iron and manganese exceeds 2 mg/L.
  - 2) A full-scale demonstration will be required to determine the suitability of sodium silicate for the particular water and the minimum feed needed.
  - 3) Chlorine or chlorine dioxide addition must accompany the sodium silicate addition.
  - 4) Sodium silicate must not be applied ahead of iron or manganese removal treatment.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

## SUBPART K: CHEMICAL APPLICATION

**Section 604.1105 Feed Equipment and Chemical Storage**

- a) Solution Feed Equipment:
  - 1) ~~Corrosion-resistant~~Corrosion-resistant containers must be provided for solution feeders.
  - 2) Containers must have non-corrodible covers with overhanging edges. Openings must be constructed to prevent contamination.
  - 3) Scales or a volumetric measuring device must be provided for determining the amount of solution fed.
- b) Feeder Redundancy
  - 1) When chemical feed is necessary for the protection of the supply, such as chlorination, coagulation, or other essential processes:
    - A) a minimum of two feeders must be provided with each having adequate capacity to provide the maximum dosage necessary; and
    - B) the standby unit or a combination of units of sufficient size to meet capacity must be provided to replace the largest unit when out of service.
  - 2) A separate feeder must be used for each chemical applied.
  - 3) Each chemical feeder and day tank must be identified with its content.
  - 4) Spare parts must be available on site for all feeders and chemical booster pumps to replace parts that are subject to wear and damage.
- c) Control
  - 1) At automatically operated facilities:
    - A) The automatic controls must be designed to allow override by manual controls.
    - B) Chemical feeders must be electrically interconnected with the well or service pump so that they will not operate if the well or service pump is not operating.

- 2) Chemical feed rates must be proportional to the flow stream to achieve the appropriate dose of chemical application.
  - 3) A means to measure the water flow stream being dosed must be provided to determine chemical feed rates.
  - 4) Provisions must be made for measuring the quantities of chemicals used.
  - 5) Weighing Scales
    - A) Weighing scales must be capable of providing reasonable precision for their relation to average daily dose.
    - B) Unless otherwise approved by the Agency under Section 604.145(b), treatment chemicals in a gaseous state must be weighed;
    - C) Fluoride solution fed from supply drums or carboys must be weighed; and
    - D) Volumetric dry chemical feeders must be weighed unless otherwise approved by the Agency under Section 604.145(b).
- d) Dry chemical feeders must:
- 1) measure chemicals volumetrically or gravimetrically;
  - 2) provide adequate water and agitation of the chemical within the slurry tank; and
  - 3) completely enclose chemicals to prevent the emission of dust to the operating room.
- e) Positive Displacement Solution Pumps
- 1) Positive displacement type solution feed pumps may be used to feed liquid chemicals, but must not be used to feed chemical slurries.
  - 2) Pumps must be capable of operating at the required maximum rate against the maximum head conditions found at the point of injection.
  - 3) Calibration tubes or mass flow monitors that allow for direct physical measurement of actual feed rates must be provided.
- f) To ensure that chemical solutions cannot be siphoned or overfed into the water supply, liquid chemical feeders must:

- 1) assure discharge at a point of positive pressure;
  - 2) provide vacuum relief; or
  - 3) provide a suitable air gap or anti-siphon device.
- g) Cross-connection~~Cross connection~~ control must be provided to assure that:
- 1) the make-up water lines discharging to liquid storage tanks must be properly protected from backflow;
  - 2) no direct connection exists between any sewer and a drain or overflow from a chemical feed system; and
  - 3) all overflows and drains from a chemical field system must have an air gap~~air gap~~ above the sewer or overflow rim of a receiving sump.
- h) Chemical feed equipment location must be readily accessible for servicing, repair, and observation of operation.
- i) Make-up water lines must be:
- 1) obtained from the finished water supply, or from a location sufficiently downstream of any chemical feed point to assure adequate mixing; and
  - 2) ample in quantity and adequate in pressure.
- j) Storage of Chemicals
- 1) Space must be provided for:
    - A) at least 30 days of chemical supply;
    - B) convenient and efficient handling of chemicals;
    - C) dry storage conditions; and
    - D) a minimum storage volume of 1.5 times the gross shipping volume.
  - 2) Offloading areas must be clearly labeled to prevent accidental cross-contamination.
  - 3) Chemicals must not be stored in confined spaces.

- 4) Chemicals must be stored in covered or unopened shipping containers, unless the chemical is transferred into an approved storage unit.
  - 5) Feed equipment and storage chemicals must be stored inside a building unless otherwise approved by the Agency under Section 604.145(b).
  - 6) Liquid chemical storage tanks must have a liquid level indicator.
  - 7) Secondary Containment
    - A) Liquid chemical storage tanks must have secondary containment consisting of an overflow and a receiving basin capable of receiving accidental spills or overflows without uncontrolled discharge.
    - B) A common receiving basin may be provided for each group of compatible chemicals that provides sufficient containment volume to prevent accidental discharge in the event of failure of the largest tank. Groups of compatible chemicals are as follows: acids, bases, salts and polymers, absorption powders, oxidizing powders, and compressed gases.
  - 8) Vents from storage tanks must have a corrosion-resistant ~~corrosion resistant~~ 24 mesh screen.
- k) Bulk Liquid Storage Tanks
- 1) A uniform strength of chemical solution must be maintained. Continuous agitation must be provided to maintain slurries in suspension.
  - 2) A means to assure continuity of chemical supply must be provided.
  - 3) Means must be provided to measure the liquid level in the tank.
  - 4) Liquid storage tanks including any access openings must be kept securely covered.
  - 5) Overflow pipes, when provided, must:
    - A) be turned downward, with the end screened;
    - B) have a free fall discharge; and
    - C) be located where noticeable.

- 6) Liquid storage tanks must be vented, but not through vents in common with other chemicals or day tanks.
  - 7) Each liquid storage tank must be provided with a valved drain in accordance with subsection (g).
  - 8) Solution tanks must be located, and protective curbing provided, so that chemicals from equipment failure, spillage, or accidental drainage do not enter the water in conduits or, treatment or storage basins. Chemicals must be stored as required by subsection (j)(5).
- l) Day Tanks
- 1) Day tanks must be provided where bulk storage of liquid chemical is provided.
  - 2) Day tanks must meet all the requirements of subsection (k), except that shipping containers do not require overflow pipes and subsection drains.
  - 3) Day tanks must be scale-mounted, or have a calibrated gauge painted or, if the liquid level can be observed in a gauge tube or through traslucent sidewalls of the tank, mounted on the side if liquid level can be observed in a gauge tube or through traslucent sidewalls of the tank. ~~in a gauge tube or through traslucent sidewalls of the tank.~~ In opaque tanks, a gauge rod may be used. The ratio of the area of the tank to its height must be such that unit readings are meaningful in relation to the total amount of chemical fed during a day.
  - 4) Except for fluosilicic acid, hand pumps may be provided for transfer from a shipping container. When motor-driven transfer pumps are provided, a liquid level limit switch must be provided.
  - 5) Tanks and tank refilling line entry points must be clearly labeled with the name of the chemical contained.
  - 6) Filling of day tanks must not be automated.
- m) Feed lines must be:
- 1) of durable, corrosion-resistant material;
  - 2) protected against freezing;
  - 3) designed to prevent clogging; and
  - 4) color-coded~~color coded~~ and labeled in accordance with Section 604.120.

- n) Handling. Provision must be made for the proper transfer of dry chemicals from shipping containers to storage bins or hoppers, in such a way as to minimize the quantity of dust that may enter the room.
- o) Housing
  - 1) Floor surfaces must be smooth and impervious, slip-proof, and well-drained~~well drained~~.
  - 2) Vents from feeders, storage facilities, and equipment exhaust must discharge to the outside atmosphere above grade and remote from air intakes.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### SUBPART M: STORAGE

##### **Section 604.1350 Combination Pressure Tanks and Ground Storage**

A combination of ground storage, hydropneumatic storage, and pumps may be considered in water systems for maintaining pressure on the distribution system. Design of such a system must include:

- a) a minimum ground storage volume equivalent to 1.5 times the average daily usage;
- b) a minimum of two pumps, each capable of meeting the peak hourly flow provided in Section 604.115(d). If more than two pumps are proposed, the peak hourly flow must be met when any pump is out of service;
- c) an electric generator with an automatic start capable of providing power to pumps that can produce the peak hourly flow ~~as~~ provided in Section 604.115(d), plus sufficient power to operate all chemical feeders, appurtenances, and equipment essential to plant operation. Consideration must be given to sizing the generator to provide power for at least one well; and
- d) a hydropneumatic tank sized to provide service for a minimum of 10 minutes under the peak hourly flow provided in Section 604.115(d).

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

SUBPART O: CROSS-CONNECTIONS~~CROSS CONNECTIONS~~**Section 604.1510 Cross-Connection~~Cross-Connection~~ Control Device Inspectors**

- a) Except as provided in subsection (c), cross-connection~~cross-connection~~ control devices must be inspected at least annually by a person approved by the Agency or its designee as a cross-connection~~cross-connection~~ control device inspector (CCCDI). The inspection of mechanical devices must include physical testing in accordance with the manufacturer's instructions.
- 1) Records of the annual inspection must be submitted to the community water supply.
  - 2) Each device inspected must have a tag attached listing the date of the most recent test, name of CCCDI, and type and date of repairs.
  - 3) A maintenance log must be maintained at the site of installation and must include:
    - A) make, model, and serial number of the backflow preventer, and its location at the site;
    - B) date of each test;
    - C) name and approval number of the person performing the test;
    - D) type of test kit used and date of its most recent calibration;
    - E) test results and a brief statement indicating whether the results pass or fail the test;
    - F) repairs or servicing required;
    - G) repairs and date completed; and
    - H) servicing performed and date completed.
- b) Requirements for Cross-Connection~~Cross-Connection~~ Control Device Inspector Approval
- 1) Each applicant for CCCDI Approval must:
    - A) be a person authorized to perform plumbing as described in the Illinois Plumbing License Law [225 ILCS 320/3(1)].

- B) complete a training course offered by the Environmental Resources Training Center (see 110 ILCS 530 and <https://www.siue.edu/ertc>) or the Agency's delegate on ~~cross-connection~~ cross-connection control ~~devices~~ device that includes ~~hands-on~~ hands-on practice testing of different types of backflow devices and proper maintenance and repair.
- C) ~~apply~~ complete and submit an application for CCCDI Approval.
- D) successfully complete both written and performance examinations demonstrating competency in the following: the principles of backflow and back-siphonage; the hazard presented to a potable water system; locations that require installation of cross-connection control devices; identifying, locating, inspecting, testing, maintaining and repairing cross-connection control methods and devices in-line, as located throughout each system that connects to a community public water supply. The applicant must successfully complete:
- i) the written examination with a minimum score of 75%; and
  - ii) a performance-based examination by demonstrating competency in testing device procedures on all types of devices at the examination center.
- 2) CCCDIs must renew the CCCDI Approval each year between May 1 and June 30. An application for CCCDI renewal will be sent by the Agency or its designee, and must be completed and returned by June 30 of the renewal year. CCCDIs must complete an eight-hour recertification course every three years from the date of the original issuance of the CCCDI license. The course must be offered by the Environmental Resources Training Center or the Agency's delegate and include a written and practical exam demonstrating competency in backflow prevention testing.
- 3) A CCCDI Approval or admission to an examination for CCCDI Approval must be suspended, revoked, or not issued by the Agency for any one or more of the following causes:
- A) Practice of any fraud or deceit in obtaining or attempting to obtain a CCCDI Approval, including misrepresentation of approval;
  - B) Any repeated, flagrant, or willful negligence or misconduct in the inspection, testing, or maintenance of ~~cross-connection~~ cross-connection control devices;
  - C) Falsification of reports required by this Part;

D) Willful violation of the Environmental Protection Act or any rules adopted under it.

4) Suspension and Revocation Procedures

A) Any person may file with the Agency a written complaint regarding the conduct of a CCCDI approved under this Part. The complaint must state the name and address of the complainant, the name of the CCCDI, and all information that supports the complaint.

B) The Agency may initiate the suspension or revocation procedure ~~based on~~ ~~on the basis of~~ any written complaint or on its own motion. The Agency's decision to institute suspension or revocation proceedings will be based on the seriousness of the violation and its potential deleterious impact ~~on~~ ~~upon~~ public health and safety.

C) When the suspension or revocation procedure is initiated, the Agency must notify the CCCDI by certified mail that suspension or revocation is being sought. The notice must specify the cause upon which suspension or revocation is sought and include the procedures for requesting a hearing before the Agency. A request ~~Request~~ for hearing must be made in writing within 14 days after receipt of the Agency's certified notification. If no hearing is requested, the Agency will suspend or revoke the CCCDI Approval.

D) ~~If a hearing is~~ ~~Should a hearing be~~ requested, the Director must appoint one or more Agency employees to chair the proceedings. The hearing must be conducted according to the hearing requirements of 35 Ill. Adm. Code 168.

E) The Director must make a decision within 30 days after receiving the hearing transcript. The Director must give written notice of that decision and reasons for the decision to the CCCDI by certified mail.

F) Within 30 days after receiving a notice of suspension or revocation from the Agency, the CCCDI may appeal the suspension or revocation to the Pollution Control Board. The suspension or revocation of the CCCDI's Approval must be stayed pending a final decision on the appeal by the Board.

- c) Backflow preventers located in the treatment plant, wellhouse, or booster station of a community public water supply facility must be inspected at least annually by either an approved CCCDI or by a certified water supply operator who has completed the qualifications listed in subsections (b)(1)(B) and (D).
- 1) When the inspection is conducted by a certified water supply operator who has completed the necessary qualifications, records must be kept as required by subsection (a)(3).
  - 2) Each device inspected must have a tag attached listing the date of the most recent test, name of the CCCDI, and type and date of repairs.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 604.1520 COVID-19 Emergency Provisions (Repealed)**

~~Due to the public health emergency related to the COVID-19 outbreak, the CCCDI approval renewal application deadlines for 2020 pursuant to Section 604.1510(b)(2) are extended. For renewal year 2020, CCCDIs must renew their CCCDI Approval between August 31 and October 30. An application for CCCDI renewal will be sent by the Agency or its designee and must be completed and returned by October 30, 2020.~~

(Source: Repealed at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

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

PART 611  
PRIMARY DRINKING WATER STANDARDS

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AUTHORITY: Implementing Sections 7.2, 17, and 17.5 and authorized by Section 27 of the

Environmental Protection Act [415 ILCS 5/7.2, 17, 17.5, and 27].

SOURCE: Adopted in R88-26 at 14 Ill. Reg. 16517, effective September 20, 1990; amended in R90-21 at 14 Ill. Reg. 20448, effective December 11, 1990; amended in R90-13 at 15 Ill. Reg. 1562, effective January 22, 1991; amended in R91-3 at 16 Ill. Reg. 19010, effective December 1, 1992; amended in R92-3 at 17 Ill. Reg. 7796, effective May 18, 1993; amended in R93-1 at 17 Ill. Reg. 12650, effective July 23, 1993; amended in R94-4 at 18 Ill. Reg. 12291, effective July 28, 1994; amended in R94-23 at 19 Ill. Reg. 8613, effective June 20, 1995; amended in R95-17 at 20 Ill. Reg. 14493, effective October 22, 1996; amended in R98-2 at 22 Ill. Reg. 5020, effective March 5, 1998; amended in R99-6 at 23 Ill. Reg. 2756, effective February 17, 1999; amended in R99-12 at 23 Ill. Reg. 10348, effective August 11, 1999; amended in R00-8 at 23 Ill. Reg. 14715, effective December 8, 1999; amended in R00-10 at 24 Ill. Reg. 14226, effective September 11, 2000; amended in R01-7 at 25 Ill. Reg. 1329, effective January 11, 2001; amended in R01-20 at 25 Ill. Reg. 13611, effective October 9, 2001; amended in R02-5 at 26 Ill. Reg. 3522, effective February 22, 2002; amended in R03-4 at 27 Ill. Reg. 1183, effective January 10, 2003; amended in R03-15 at 27 Ill. Reg. 16447, effective October 10, 2003; amended in R04-3 at 28 Ill. Reg. 5269, effective March 10, 2004; amended in R04-13 at 28 Ill. Reg. 12666, effective August 26, 2004; amended in R05-6 at 29 Ill. Reg. 2287, effective January 28, 2005; amended in R06-15 at 30 Ill. Reg. 17004, effective October 13, 2006; amended in R07-2/R07-11 at 31 Ill. Reg. 11757, effective July 27, 2007; amended in R08-7/R08-13 at 33 Ill. Reg. 633, effective December 30, 2008; amended in R10-1/R10-17/R11-6 at 34 Ill. Reg. 19848, effective December 7, 2010; amended in R12-4 at 36 Ill. Reg. 7110, effective April 25, 2012; amended in R13-2 at 37 Ill. Reg. 1978, effective February 4, 2013; amended in R14-8 at 38 Ill. Reg. 3608, effective January 27, 2014; amended in R14-9 at 38 Ill. Reg. 9792, effective April 21, 2014; amended in R15-6 at 39 Ill. Reg. 3713, effective February 24, 2015; amended in R15-23 at 39 Ill. Reg. 15144, effective November 9, 2015; amended in R16-4 at 39 Ill. Reg. 15352, effective November 13, 2015; amended in R17-12 at 42 Ill. Reg. 1140, effective January 4, 2018; amended in R18-9 at 42 Ill. Reg. 9316, effective May 29, 2018; amended in R18-17 at 43 Ill. Reg. 8206, effective July 26, 2019; amended in R19-16 at 44 Ill. Reg. 6996, effective April 17, 2020; amended in R18-\_\_\_\_ at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

## SUBPART A: GENERAL

### Section 611.105 Electronic Reporting

The submission of any document under any provision of this Part as an electronic document in lieu of a paper document is subject to this Section.

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

- A) To USEPA directly under Title 40 of the Code of Federal Regulations; or
  - B) To the Board or the Agency under any provision of 35 Ill. Adm. Code 702 through 705, 720 through 728, 730, 733, 738, or 739.
- 2) Electronic document submission under this Section can occur only as follows:
- A) For submissions of documents to USEPA, submissions may occur only after USEPA has published a notice in the Federal Register announcing that USEPA is prepared to receive, in an electronic format, documents required or permitted by the identified part or subpart of Title 40 of the Code of Federal Regulations; or
  - B) For submissions of documents to the State, submissions may occur only under the following circumstances: the Board or the Agency may use any electronic document receiving system for which USEPA has granted approval under 40 CFR 3.1000, so long as the system complies with 40 CFR 3.2000, incorporated by reference in Section 611.102(c), and USEPA has not withdrawn its approval of the system in writing.
- 3) This Section does not apply to any of the following documents, whether or not the document is a document submitted to satisfy the requirements cited in subsection (a)(1):
- A) Any document submitted via facsimile;
  - B) Any document submitted via magnetic or optical media, such as a diskette, compact disc, digital video disc, or tape; or
  - C) Any data transfer between USEPA, any state, or any local government and either the Board or the Agency as part of administrative arrangements between the parties to the transfer to share data.
- 4) Upon USEPA conferring written approval for the submission of any types of documents as electronic documents in lieu of paper documents, as described in subsection (a)(2)(B)(~~iii~~), the Agency or the Board, as appropriate, must publish a Notice of Public Information in the Illinois Register that describes the documents approved for submission as electronic documents, the electronic document receiving system approved to receive them, the acceptable formats and procedures for their submission, and, as applicable, the date on which the Board or the Agency

will begin to receive those submissions. In the event of written cessation of USEPA approval for receiving any type of document as an electronic document in lieu of a paper document, the Board or the Agency must similarly cause publication of a Notice of Public Information in the Illinois Register.

BOARD NOTE: Subsection (a) is derived from 40 CFR 3.1, 3.2, 3.10, 3.20, and 3.1000.

- b) Definitions. For the purposes of this Section, terms ~~will~~ have the meaning attributed to them in 40 CFR 3.3, incorporated by reference in 35 Ill. Adm. Code 611.102(c).
- c) Procedures for Submitting Electronic Documents to USEPA in Lieu of Paper Documents. Except as provided in subsection (a)(3), any person who is required under Title 40 of the Code of Federal Regulations to create and submit or otherwise provide a document to USEPA may satisfy this requirement with an electronic document, in lieu of a paper document, ~~if provided~~ the following conditions are met:
  - 1) The person satisfies the requirements of 40 CFR 3.10, incorporated by reference in Section 611.102(c); and
  - 2) USEPA has first published a notice in the Federal Register as described in subsection (a)(2)(A).

BOARD NOTE: Subsection (c) is derived from 40 CFR 3.2(a) and subpart B of 40 CFR 3.

- d) Procedures for Submitting Electronic Documents to the Board or the Agency in Lieu of Paper Documents:
  - 1) The Board or the Agency may, but is not required to, establish procedural rules for the electronic submission of documents. The Board or the Agency must establish any such procedural rules under the Administrative Procedure Act [5 ILCS 100/5].
  - 2) The Board or the Agency may accept electronic documents under this Section only as provided in subsection (a)(2)(B).

BOARD NOTE: Subsection (d) is derived from 40 CFR 3.2(b) and subpart D of 40 CFR 3.

- e) Effects of Submitting an Electronic Document in Lieu of a Paper Document

- 1) If a person who submits a document as an electronic document fails to comply with the requirements of this Section, that person is subject to the penalties prescribed for failure to comply with the requirement that the electronic document was intended to satisfy.
- 2) If a document submitted as an electronic document to satisfy a reporting requirement bears an electronic signature, the electronic signature legally binds, obligates, and makes the signer responsible to the same extent as the signer's handwritten signature would on a paper document submitted to satisfy the same reporting requirement.
- 3) Proof that a particular signature device was used to create an electronic signature will suffice to establish that the individual uniquely entitled to use the device did so with the intent to sign the electronic document and give it effect.
- 4) Nothing in this Section limits the use of electronic documents or information derived from electronic documents as evidence in enforcement or other proceedings.

BOARD NOTE: Subsection (e) is derived from 40 CFR 3.4 and 3.2000(c).

- f) Public Document Subject to State Laws. Any electronic document filed with the Board is a public document. The document, its submission, its retention by the Board, and its availability for public inspection and copying are subject to various State laws, including, ~~but not limited to,~~ the following:
  - 1) The Administrative Procedure Act [5 ILCS 100];
  - 2) The Freedom of Information Act [5 ILCS 140];
  - 3) The State Records Act [5 ILCS 160];
  - 4) The Electronic Commerce Security Act [5 ILCS 175];
  - 5) The Environmental Protection Act;
  - 6) Regulations relating to public access to Board records (2 Ill. Adm. Code 2175); and
  - 7) Board procedural rules relating to protection of trade secrets and confidential information (35 Ill. Adm. Code 130).
- g) Nothing in this Section or in any provisions adopted under subsection (d)(1) will create any right or privilege to submit any document as an electronic document.

BOARD NOTE: Subsection (g) is derived from 40 CFR 3.2(c).

BOARD NOTE: Derived from 40 CFR 3 and 142.10(g).

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

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

This Section is intended to describe how the Board grants State relief equivalent to that available from USEPA under section 1415(a)(1)(A) and (a)(1)(B) of the SDWA (42 U.S.C. 300g-4(a)(1)(A) and (a)(1)(B)). SDWA section 1415 variances do not require ultimate compliance within five years in every situation. Variances under Sections 35 through ~~38~~ 37 of the Act do require compliance within five years in every case. Consequently, a PWS may have the option of seeking State regulatory relief equivalent to a SDWA section 1415 variance through one of three procedural mechanisms: a variance under Sections 35 through ~~38~~ 37 of the Act and Subpart B of 35 Ill. Adm. Code 104; a site-specific rule under Sections 27 and 28 of the Act and 35 Ill. Adm. Code 102; or an adjusted standard under Section 28.1 of the Act and Subpart D of 35 Ill. Adm. Code 104.

- a) The Board will grant a PWS a variance, a site-specific rule, or an adjusted standard from an MCL or a treatment technique under this Section.
  - 1) The PWS must file a petition under 35 Ill. Adm. Code 102 or 104, as applicable.
  - 2) If a State requirement does not have a federal counterpart, the Board may grant relief from the State requirements without following this Section.
  
- b) Relief from an MCL
  - 1) As part of the justification for relief from an MCL under this Section, the PWS must demonstrate the following:
    - A) Because of the characteristics of the raw water sources and alternative sources that are reasonably available to the system, the PWS cannot meet the MCL;
    - B) The PWS will install or has installed the best available technology (BAT) (as identified in Subpart F), treatment technique, or other means that the Agency finds available. BAT may vary depending on the following:
      - i) The number of persons served by the system;
      - ii) Physical conditions related to engineering feasibility; and

- iii) Costs of compliance; and
  - C) The variance will not result in an unreasonable risk to health.
- 2) In any order granting relief under this subsection (b), the Board will prescribe a schedule for the following:
  - A) Compliance, including increments of progress, by the PWS, with each MCL ~~for with respect to~~ which the relief was granted; and
  - B) Implementation by the PWS of each additional control measure for each MCL ~~for with respect to~~ which the relief is granted, during the period ending on the date compliance with such requirement is required.
- 3) Schedule of Compliance for Relief from an MCL
  - A) A schedule of compliance will require compliance with each MCL ~~for with respect to~~ which the relief was granted as expeditiously as practicable.
  - B) If the Board prescribes a schedule requiring compliance with an MCL for which the relief is granted later than five years from the date of issuance of the relief, the Board will do the following:
    - i) Document its rationale for the extended compliance schedule;
    - ii) Discuss the rationale for the extended compliance schedule in the required public notice and opportunity for public hearing; and
    - iii) Provide the shortest practicable ~~time~~ schedule feasible under the circumstances.
- c) Relief from a Treatment Technique Requirement
  - 1) As part of the justification for relief from a treatment technique requirement under this Section, the PWS must demonstrate that the treatment technique is not necessary to protect the health ~~theof~~ persons served because of the nature of the raw water source.
  - 2) The Board may prescribe monitoring and other requirements as a condition for relief from a treatment technique requirement.

- d) The Board will hold at least one public hearing. In addition, the Board will accept comments as appropriate under 35 Ill. Adm. Code 102 or 104.
- e) The Board will not grant relief from any of the following:
  - 1) From the MCLs for total coliforms and E. coli. The Board can no longer grant relief from the total coliform MCL.  
  
BOARD NOTE: As provided in Section 611.131(c)(1) and 40 CFR 142.304(a), a small system variance is not available for rules that address microbial contaminants, which include Subparts B, R, S, X, Z, and AA.
  - 2) From any of the treatment technique requirements of Subpart B.
  - 3) From the residual disinfectant concentration (RDC) requirements of Sections 611.241(c) and 611.242(b).
- f) The Agency must promptly send USEPA the opinion and order of the Board granting relief under this Section. The Board may reconsider and modify a grant of relief, or relief conditions, if USEPA notifies the Board of a finding under section 1415 of the SDWA (42 U.S.C. ~~USE~~ 300g-4).
- g) In addition to the requirements of this Section, the provisions of Section 611.130 or 611.131 may apply to relief granted under this Section.

BOARD NOTE: Derived from 40 CFR 141.4, from section 1415(a)(1)(A) and (a)(1)(B) of the SDWA (42 U.S.C. ~~USE~~ 300g-4(a)(1)(A) and (a)(1)(B)) and from the Guidance Manual for Filtration and Disinfection (91), incorporated by reference in Section 611.102 and available from USEPA, NSCEP. USEPA has established a procedure at 40 CFR 142.23 to review and potentially modify or nullify state determinations granting relief from NPDWRs if USEPA finds that the state has abused its discretion or failed to prescribe required schedules for compliance in a substantial number of instances.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

## SUBPART B: FILTRATION AND DISINFECTION

### Section 611.276 Recycle Provisions

- a) **Applicability.** A Subpart B system supplier that employs conventional filtration or direct filtration treatment and that recycles spent filter backwash water, thickener supernatant, or liquids from dewatering processes must meet the requirements in subsections (b) through (d).
- b) **Reporting.** A supplier must notify the Agency in writing if the supplier recycles spent filter backwash water, thickener supernatant, or liquids from dewatering

processes. This notification must include, at a minimum, the information specified in subsections (b)(1) and (b)(2), as follows:

- 1) A plant schematic showing the origin of all flows that are recycled (including, ~~but not limited to,~~ spent filter backwash water, thickener supernatant, and liquids from dewatering processes), the hydraulic conveyance used to transport them, and the location where they are re-introduced back into the treatment plant.
  - 2) Typical recycle flow in gallons per minute (gpm), the highest observed plant flow experienced in the previous year (gpm), design flow for the treatment plant (gpm), and Agency-approved operating capacity for the plant if the Agency has made such a determination.
- c) Treatment Technique Requirement. Any supplier that recycles spent filter backwash water, thickener supernatant, or liquids from dewatering processes must return these flows through the processes of the supplier's existing conventional or direct filtration system, as defined in Section 611.101, or at an alternative location approved by a permit issued by the Agency.
- d) Recordkeeping. The supplier must collect and retain on file recycle flow information specified in subsections (d)(1) through (d)(6) for review and evaluation by the Agency, as follows:
- 1) A copy of the recycle notification and information submitted to the State under subsection (b).
  - 2) A list of all recycle flows and the frequency with which they are returned.
  - 3) The average and maximum backwash flow rate through the filters and the average and maximum duration of the filter backwash process in minutes.
  - 4) The typical filter run length and a written summary of how filter run length is determined.
  - 5) The type of treatment provided for the recycle flow.
  - 6) Data on the physical dimensions of the equalization or treatment units, typical and maximum hydraulic loading rates, type of treatment chemicals used and average dose and frequency of use, and frequency at which solids are removed, if applicable.

BOARD NOTE: Derived from 40 CFR 141.76.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 611.591 Violation of a State MCL (Repealed)**

~~This Section applies to old MCLs that are marked as “additional State requirements” at Section 611.300, and for which no specific monitoring, reporting, or public notice requirements are specified below. If the result of analysis under this Part indicates that the level of any contaminant exceeds the old MCL, the CWS supplier shall do the following:~~

- ~~a) Report to the Agency within seven days, and initiate three additional analyses at the same sampling point within one month;~~
- ~~b) Notify the Agency and give public notice as specified in Subpart T of this Part, when the average of four analyses, rounded to the same number of significant figures as the old MCL for the contaminant in question, exceeds the old MCL; and~~
- ~~c) Monitor, after public notification, at a frequency designated by the Agency, and continue monitoring until the old MCL has not been exceeded in two consecutive samples, or until a monitoring schedule as a condition of a variance or enforcement action becomes effective.~~

~~BOARD NOTE: This is an additional State requirement.~~

~~(Source: Repealed at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)~~

### **Section 611.805 Reporting and Recordkeeping for GWS Suppliers**

- a) Reporting. In addition to the requirements of Section 611.840, a GWS supplier regulated under this Subpart S must provide the following information to the Agency:
  - 1) A GWS supplier conducting compliance monitoring under Section 611.803(b) must notify the Agency any time the supplier fails to meet any Agency-specified requirements including, ~~but not limited to~~, minimum residual disinfectant concentration, membrane operating criteria or membrane integrity, and alternative treatment operating criteria, if operation in accordance with the criteria or requirements is not restored within four hours. The GWS supplier must notify the Agency as soon as possible, but in no case later than the end of the next business day.
  - 2) After completing any corrective action under Section 611.803(a), a GWS supplier must notify the Agency within 30 days after completion of the corrective action.
  - 3) If a GWS supplier subject to the requirements of Section 611.802(a) does not conduct source water monitoring under Section 611.802(a)(5)(B), the

supplier must provide documentation to the Agency within 30 days after the total coliform-positive sample that it met the Agency criteria.

- b) Recordkeeping. In addition to the requirements of Section 611.860, a GWS supplier regulated under this Subpart S must maintain the following information in its records:
- 1) Documentation of corrective actions. Documentation must be kept for at least a period of not less than ten years.
  - 2) Documentation of notice to the public as required under Section 611.803(a)(7). Documentation must be kept for at least a period of not less than three years.
  - 3) Records of decisions under Section 611.802(a)(5)(B) and records of invalidation of fecal indicator-positive groundwater source samples under Section 611.802(d). Documentation must be kept for at least a period of not less than five years.
  - 4) For a consecutive system supplier, documentation of notification to the wholesale systems of total coliform-positive samples that are not invalidated under Section 611.1053. Documentation must be kept for a period of not less than five years.
  - 5) For a supplier, including a wholesale system supplier, that is required to perform compliance monitoring under Section 611.803(b), the following information:
    - A) Records of the supplier-specified, Agency-approved minimum disinfectant residual. Documentation must be kept for at least a period of not less than ten years;
    - B) Records of the lowest daily residual disinfectant concentration and records of the date and duration of any failure to maintain the Agency-prescribed minimum residual disinfectant concentration for a period of more than four hours. Documentation must be kept for at least a period of not less than five years; and
    - C) Records of supplier-specified, Agency-approved compliance requirements for membrane filtration and of parameters specified by the supplier for Agency-approved alternative treatment and records of the date and duration of any failure to meet the membrane operating, membrane integrity, or alternative treatment operating requirements for more than four hours. Documentation must be kept for at least a period of not less than five years.

BOARD NOTE: Derived from 40 CFR 141.405.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

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

PART 615

EXISTING ACTIVITIES IN A SETBACK ZONE OR REGULATED RECHARGE AREA

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**AUTHORITY:** Implementing and authorized by Sections 5, 14.4, 21, 22, and 27 of the Environmental Protection Act [415 ILCS 5/5, 14.4, 21, 22, and 27].

**SOURCE:** Adopted in R89-5 at 16 Ill. Reg. 1538, effective January 10, 1992; amended in R92-20 at 17 Ill. Reg. 1871, effective January 28, 1993; amended in R96-18 at 21 Ill. Reg., 6503, effective May 8, 1997; amended in R18-26 at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

#### SUBPART A: GENERAL

##### **Section 615.101 Purpose**

This Part ~~prescribes~~ specifies the requirements and standards for the protection of groundwater for certain types of existing facilities or units located wholly or partially within a setback zone regulated by the Act or within a regulated recharge area ~~as delineated under pursuant to~~ Section 17.4 of the Act and 35 Ill. Adm. Code 617.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### Section 615.102 Definitions

Except as stated in this Section, and unless a different meaning of a word or term is clear from the context, the definitions of words or terms in this Part ~~are shall be~~ the same as those used in the Act or the Illinois Groundwater Protection Act [415 ILCS 55]:

"Above-ground storage tank" means a storage tank that is not an underground storage tank.

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

"Agency" means the Illinois Environmental Protection Agency.

"Board" means the Illinois Pollution Control Board.

"Certification" means a statement of professional opinion based upon knowledge and belief.

"Community water supply" means a public water supply which serves or is intended to serve at least 15 service connections used by residents or regularly serves at least 25 residents. [415 ILCS 5/3.145] ~~"COMMUNITY WATER SUPPLY" MEANS A PUBLIC SUPPLY WHICH SERVES OR IS INTENDED TO SERVE AT LEAST 15 SERVICE CONNECTIONS USED BY RESIDENTS OR REGULARLY SERVES AT LEAST 25 RESIDENTS. (Section 3.05 of the Act)~~

"Compliance point" means any point in groundwater designated at 35 Ill. Adm. Code 620.Subpart B as a Class I through III groundwater at which a contaminant released from the unit could pass underneath the unit boundary. There may be more than one compliance point for a particular unit.

"Commencement of construction" means that *all necessary federal, State and local approvals have been obtained, and work at the site has been initiated and proceeds in a reasonably continuous manner to completion.* [415 ILCS 5/3.350]. ~~ALL NECESSARY FEDERAL, STATE, AND LOCAL APPROVALS HAVE BEEN OBTAINED, AND WORK AT THE SITE HAS BEEN INITIATED AND PROCEEDS IN A REASONABLY CONTINUOUS MANNER TO COMPLETION. (Section 3.58 of the Act)~~

"Container" means any portable device (including, ~~but not limited to,~~ 55-gallon drums) in which material is stored, treated, disposed of, or otherwise handled. The term "container" does not include a vehicle used to transport material.

"Containerized" means being in a container.

"Contaminant" means any solid, liquid, or gaseous matter, any odor, or any form of energy, from whatever source. [415 ILCS 5/3.165]. ~~CONTAMINANT" IS ANY SOLID, LIQUID, OR GASEOUS MATTER, ANY ODOR, OR ANY FORM OF ENERGY, FROM WHATEVER SOURCE. (Section 3.06 of the Act)~~

"Contamination" or "contaminate", when used in connection with groundwater, means water pollution of such groundwater. [415 ILCS 5/3.170] ~~"CONTAMINATION" OR "CONTAMINATE", WHEN USED IN CONNECTION WITH GROUNDWATER, MEANS WATER POLLUTION OF SUCH GROUNDWATER. (Section 3.63 of the Act)~~

"Date of first applicability" means January 10, 1992~~the effective date of this Part~~ for any unit located within a minimum setback zone, except that:

If a unit is first incorporated into any setback zone by an ordinance or regulation that establishes a maximum setback zone, the date of first applicability is January 10, 1992~~the effective date of this Part~~ or the effective date of the ordinance or regulation that establishes the maximum setback zone, whichever is later; or

If a unit is located in a part of a regulated recharge area that was not previously part of a setback zone, the date of first applicability is the effective date of the regulation that establishes the regulated recharge area.

"De-Icing agent" means a chemical used for de-icing, including ~~but not limited to~~ sodium chloride and calcium chloride. Sand, ashes, or other abrasive materials that do not alter the freezing point of water are not de-icing agents.

"Detection" means the identification of a contaminant in a sample at a value equal to or greater than the:

"Method Detection Limit" or "MDL", ~~which~~ means the minimum measured concentration of a substance that can be ~~measured~~ as reported with 99 percent confidence that the measured concentration is distinguishable from the method blank result~~true value is greater than zero~~ under 40 CFR 136, Appendix B, pursuant to ~~56 Fed. Reg. 3526-3597~~; incorporated by reference at Section 615.103; or

"Method Quantitation Limit" or "MQL", which means the minimum concentration of a substance that can be measured and reported pursuant to "Test Methods for Evaluating Solid Wastes, Physical/ Chemical Methods", incorporated by reference at Section 615.103.

"Dike" means an embankment or ridge of either natural or manmade materials used to prevent the movement of liquids, sludges, solids, or other materials.

"Discharge" means the accidental or intentional spilling, leaking, pumping, pouring, emitting, emptying, or dumping of any material onto or on any land or water.

"Disposal" means the discharge, deposit, injection, dumping, spilling, leaking, or placing of any waste or hazardous waste into or on any land or water or into any well so that such waste or hazardous waste or any constituent thereof may enter the environment or be emitted into the air or discharged into any waters, including ground waters. [415 ILCS 5/3.185]~~"DISPOSAL" MEANS THE DISCHARGE, DEPOSIT, INJECTION, DUMPING, SPILLAGE, LEAKING OR PLACING OF ANY WASTE OR HAZARDOUS WASTE INTO OR ON ANY LAND OR WATER OR INTO ANY WELL SO THAT SUCH WASTE OR HAZARDOUS WASTE OR ANY CONSTITUENT THEREOF MAY ENTER THE ENVIRONMENT OR BE EMITTED INTO THE AIR OR DISCHARGED INTO ANY WATERS, INCLUDING GROUNDWATERS. (Section 3.08 of the Act)~~

"Existing unit" means a unit that was in operation or for which there is commencement of construction on or before the date of first applicability, except that a unit is not an existing unit if the unit:

Expands laterally beyond the currently permitted boundary, or the unit boundary if the unit is not permitted, in existence after the date of first applicability; or

Is part of a facility that undergoes major reconstruction after the date of first applicability; or

Reopens at any time after having submitted a certification of closure to the Agency.

"Facility" means all contiguous land and structures, other appurtenances, and improvements on the land used for the treating, storing, handling, or disposal of any material which causes that unit to be regulated under this Part. A facility may consist of one or more units.

"Freeboard" means the vertical distance between the top of a tank or dike and the surface of the material contained therein.

"Free liquids" means liquids ~~that~~<sup>which</sup> readily separate from the solid portion of a waste under ambient temperature and pressure. To demonstrate the absence or presence of free liquids in either a containerized or a bulk waste, the following test must be used: Method 9095 (Paint Filter Liquids Test) as described in "Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods" (EPA Publication No. SW-846), incorporated by reference at Section 615.103.

"Groundwater" means underground water which occurs within the saturated zone and geologic materials where the fluid pressure in the pore space is equal to or greater than atmospheric pressure. [415 ILCS 5/3.210]~~"GROUNDWATER" MEANS UNDERGROUND WATER WHICH OCCURS WITHIN THE SATURATED ZONE AND GEOLOGIC MATERIALS WHERE THE FLUID PRESSURE IN THE PORE SPACE IS EQUAL TO OR GREATER THAN ATMOSPHERIC PRESSURE. (Section 3.64 of the Act)~~

"Groundwater standards" means the water quality standards for groundwater adopted by the Board under Section 8 of the Illinois Groundwater Protection Act [415 ILCS 55] and found at 35 Ill. Adm. Code 620.

"Hazardous waste" means a waste, or combination of wastes, which because of its quantity, concentration, or physical, chemical, or infectious characteristics may cause or significantly contribute to an increase in mortality or an increase in serious, irreversible, or incapacitating reversible, illness; or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed, and which has been identified, by characteristics or listing, as hazardous pursuant to Section 3001 of the Resource Conservation and Recovery Act of 1976, P.L. 94-580, or pursuant to Board regulations.[415 ILCS 5/3.220]"HAZARDOUS WASTE" MEANS A WASTE, OR COMBINATION OF WASTES, WHICH BECAUSE OF ITS QUANTITY, CONCENTRATION, OR PHYSICAL, CHEMICAL, OR INFECTIOUS CHARACTERISTICS MAY CAUSE OR SIGNIFICANTLY CONTRIBUTE TO AN INCREASE IN MORTALITY OR AN INCREASE IN SERIOUS, IRREVERSIBLE, OR INCAPACITATING REVERSIBLE, ILLNESS; OR POSE A SUBSTANTIAL PRESENT OR POTENTIAL HAZARD TO HUMAN HEALTH OR THE ENVIRONMENT WHEN IMPROPERLY TREATED, STORED, TRANSPORTED, OR DISPOSED OF, OR OTHERWISE MANAGED, AND WHICH HAS BEEN IDENTIFIED, BY CHARACTERISTICS OR LISTING, AS HAZARDOUS PURSUANT 35 Ill. Adm. Code 721. (Section 3.15 of the Act)

"Incompatible material" means a material which may:

Cause corrosion or decay of containment materials (e.g., container inner liners or tank walls); or

When commingled with another material, produces heat or pressure, fire, explosion, violent reaction, toxic dusts, mists, fumes or gases, or flammable fumes or gases.

"Landfill" means a unit or part of a facility in or on which waste is placed and accumulated over time for disposal, and which is not a land application unit, a surface impoundment, or an underground injection well.

"Landscape waste" means all accumulations of grass or shrubbery cuttings, leaves, tree limbs, and other materials accumulated as the result of the care of lawns, shrubbery, vines, and trees. [415 ILCS 5/3.270]"LANDSCAPE WASTE" MEANS ALL ACCUMULATIONS OF GRASS OR SHRUBBERY CUTTINGS, LEAVES, TREE LIMBS AND OTHER MATERIALS ACCUMULATED AS THE RESULT OF THE CARE OF LAWNS, SHRUBBERY, VINES AND TREES. (Section 3.20 of the Act)

"Land application unit" means an area where wastes are agronomically spread over or disked into land or otherwise applied so as to become incorporated into the soil surface.

"Land treatment" means the application of waste onto or incorporation of waste into the soil surface. For the purposes of this Part, a land application unit is a land treatment unit.

"Leachate" means any liquid, including suspended components in the liquid, that has percolated through or drained from a material.

"Licensed water well contractor" means a person licensed under the Water Well and Pump Installation Contractor's License Act [225 ILCS 345].

"Liner" means a continuous layer of natural or manmade materials beneath or on the side of a surface impoundment, landfill, landfill cell, waste pile, or storage pile ~~that which~~ restricts the downward or lateral escape of waste, waste constituents, leachate, or stored materials.

"Major reconstruction" means commencement of construction at a facility where the fixed capital cost of the new components constructed within ~~two years~~ a 2-year period exceeds 50% of the fixed capital cost of a comparable entirely new facility. New components do not include any new components necessary for compliance with this Part.

"New unit" means a unit that is not an existing unit.

"Non-community water supply" means a public water supply that is not a community water supply. [415 ILCS 5/3.145]  
~~"NON-COMMUNITY WATER SUPPLY" MEANS A PUBLIC WATER SUPPLY THAT IS NOT A COMMUNITY WATER SUPPLY. (Section 3.05 of the Act)~~

"Non-special waste" means a waste that is not a special waste.

"Off-site" means not on-site.

"On-site", "on the site", or "on the same site" means the same or geographically contiguous property which may be divided by public or private right of way ~~if, provided~~ the entrance and exit between the properties is at a crossroads intersection and access is by crossing as opposed to going along the right of way. Noncontiguous properties owned by the same person but connected by a right of way controlled by that person ~~which he controls~~ and to which the public does not have access are also considered on site property.

"Operator" means the person responsible for the operation of a site, facility, or unit.

"Owner" means the person who owns a site, facility, or unit or part of a site, facility, or unit, or who owns the land on which the site, facility, or unit is located.

"Pesticide" means any substance or mixture of substances intended for preventing, destroying, repelling, or mitigating any pest or any substance or mixture of substances intended for use as a plant regulator, defoliant, or desiccant. [415 ILCS 5/3.320]  
~~"PESTICIDE" MEANS ANY SUBSTANCE OR MIXTURE OF SUBSTANCES INTENDED FOR PREVENTING, DESTROYING, REPELLING, OR MITIGATING~~

~~ANY PEST OR ANY SUBSTANCE OR MIXTURE OF SUBSTANCES INTENDED FOR USE AS A PLANT REGULATOR, DEFOLIANT OR DESICCANT. (Section 3.71 of the Act)~~

"Pile" means any noncontainerized accumulation of solid, non-flowing material that is used for treatment, storage, or disposal.

*"Potable" means generally fit for human consumption in accordance with accepted water supply principles and practices. [415 ILCS 5/3.340]*  
~~"POTABLE" MEANS GENERALLY FIT FOR HUMAN CONSUMPTION IN ACCORDANCE WITH ACCEPTED WATER SUPPLY PRINCIPLES AND PRACTICES. (Section 3.65 of the Act)~~

"Practical Quantitation Limit" or "PQL" means the lowest concentration or level that can be reliably measured within specified limits of precision and accuracy during routine laboratory operating conditions in compliance ~~accordance~~ with "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," EPA Publication SW-846, incorporated by reference at Section 615.103.

*"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. A public water supply is either a "community water supply" or a "non-community water supply". [415 ILCS 5/3.365]*  
~~"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. A PUBLIC WATER SUPPLY IS EITHER A "COMMUNITY WATER SUPPLY" OR A "NON COMMUNITY WATER SUPPLY". (Section 3.28 of the Act)~~

"Reactive material" means a material ~~that~~which meets one or more of the following criteria:

It is normally unstable and readily undergoes violent change without detonating;

It reacts violently with water;

It forms potentially explosive mixtures with water;

When mixed with water, it generates toxic gases, vapors, or fumes in a quantity sufficient to present a danger to human health or the environment;

It is capable of detonation or explosive reaction if it is subject to a strong initiating source, or if heated under confinement;

It is readily capable of detonation or explosive decomposition or reaction at standard temperature and pressure; or

It is a forbidden explosive as defined in 49 CFR 173 incorporated by reference at Section 615.103, or a Class A explosive as defined in 49 CFR 173.53, or a Class B explosive as defined in 49 CFR 173.88.

"Registered land surveyor" means a person registered under the Illinois Professional Land Surveyors Act of 1989 [225 ILCS 330].

"Registered professional engineer" means a person registered under the Professional Engineering Practice Act of 1989 [225 ILCS 325].

"Regulated recharge area" means a compact geographic area, as determined by the Board, the geology of which renders a potable resource groundwater particularly susceptible to contamination. [415 ILCS 5/3.390]"REGULATED RECHARGE AREA" MEANS A COMPACT GEOGRAPHIC AREA, AS DETERMINED BY THE BOARD pursuant to Section 17.4 of the Act, THE GEOLOGY OF WHICH RENDERS A POTABLE RESOURCE GROUNDWATER PARTICULARLY SUSCEPTIBLE TO CONTAMINATION. (Section 3.67 of the Act)

"Road oil" means slow-curing asphaltic oils ~~that~~<sup>which</sup> show no separation on standing and ~~that~~<sup>which</sup> are used for road construction, maintenance, or repair.

"Runoff" means any rainwater, leachate, or other liquid that drains over land from any part of a facility.

"Run-on" means any rainwater, leachate, or other liquid that drains over land onto any part of a facility.

"Secondary containment structure" means any structure or basin intended to contain spills and prevent runoff or leaching from piles, containers, or tanks and related piping.

"Setback zone" means a geographic area, designated pursuant to this Act, containing a potable water supply well or a potential source or potential route, having a continuous boundary, and within which certain prohibitions or regulations are applicable in order to protect groundwaters. [415 ILCS 5/3.450] "SETBACK ZONE" MEANS A GEOGRAPHIC AREA, DESIGNATED PURSUANT TO THIS ACT, CONTAINING A POTABLE WATER SUPPLY WELL OR A POTENTIAL SOURCE OR POTENTIAL ROUTE HAVING A CONTINUOUS BOUNDARY, AND WITHIN WHICH CERTAIN

~~PROHIBITIONS OR REGULATIONS ARE APPLICABLE IN ORDER TO PROTECT GROUNDWATERS. (Section 3.61 of the Act)~~

"Site" means any location, place, tract of land, and facilities, including but not limited to buildings, and improvements used for purposes subject to regulation or control by this Act or regulations thereunder. [415 ILCS 5/3.460. "SITE" MEANS ANY LOCATION, PLACE, TRACT OF LAND, AND FACILITIES, INCLUDING BUT NOT LIMITED TO BUILDINGS, AND IMPROVEMENTS USED FOR PURPOSES SUBJECT TO REGULATION OR CONTROL BY THIS ACT OR REGULATIONS THEREUNDER. (Section 3.43 of the Act)

"Sludge" means any solid, semi-solid, or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility or any other such waste having similar characteristics and effects. [415 ILCS 5/3.465] "SLUDGE" MEANS ANY SOLID, SEMI-SOLID, OR LIQUID WASTE GENERATED FROM A MUNICIPAL, COMMERCIAL, OR INDUSTRIAL WASTEWATER TREATMENT PLANT, WATER SUPPLY TREATMENT PLANT, OR AIR POLLUTION CONTROL FACILITY OR ANY OTHER SUCH WASTE HAVING SIMILAR CHARACTERISTICS AND EFFECTS. (Section 3.44 of the Act)

"Special waste" means any industrial process waste, pollution control waste or hazardous waste except as determined pursuant to Section 22.9 of the Act "SPECIAL WASTE" MEANS ANY INDUSTRIAL PROCESS WASTE, POLLUTION CONTROL WASTE OR HAZARDOUS WASTE, EXCEPT AS DETERMINED PURSUANT TO SECTION 22.9 OF the Act and 35 Ill. Adm. Code 808. (Section 3.45 of the Act)

"Storage" "STORAGE" means the holding or containment of a material, either temporarily or for on a temporary basis or for a period of years, in asuch manner as not to constitute disposal of thesuch material.

"Surface impoundment" means a natural topographical depression, man made excavation, or diked area that is designed to hold liquid wastes or wastes containing free liquids.

"Surface water" means all waters that are open to the atmosphere.

"Tank" means a stationary device, designed to contain an accumulation of material ~~thatwhich~~ is constructed of non-earthen materials (e.g., wood, concrete, steel, plastic) ~~thatwhich~~ provide structural support. The term "tank" does not include areas used to accumulate materials ~~beforeprior to~~ pumping to tanks or containers (e.g.i.e., sump pits) or associated piping. The term "tank" does not include vehicles used to transport material.

"Treatment" means any method, technique, or process, including neutralization, designed to change the physical, chemical, or biological character or composition of any material so as to neutralize such material, or so as to recover energy or material resources from the material or so as to render such material nonhazardous or less hazardous, safer to transport, store or dispose of, or amenable for recovery, amenable for storage or reduced in volume.

"Underground storage tank" means a storage tank as defined at 35 Ill. Adm. Code 731.101(f).

"Unit" means any device, mechanism, equipment, or area (exclusive of land utilized only for agricultural production). This term includes secondary containment structures and their contents at agrichemical facilities. [415 ILCS 5/3.465] "UNIT" MEANS ANY DEVICE, MECHANISM, EQUIPMENT, OR AREA (EXCLUSIVE OF LAND UTILIZED ONLY FOR AGRICULTURAL PRODUCTION). (Section 3.62 of the Act)

"Unit boundary" means a line at the land's surface circumscribing the area on which, above which, or below which waste, pesticides, fertilizers, road oils, or de-icing agents will be placed during the active life of the facility. The space taken up by any liner, dike, or other barrier designed to contain waste, pesticides, fertilizers, road oils, or de-icing agents falls within the unit boundary.

"Waste" means any garbage, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility or other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include: [415 ILCS 5/3.535]

Industrial dischargers with NPDES permits issued pursuant to 35 Ill. Adm. Code 309;

Source, spent nuclear or by-product materials as defined by the atomic energy act of 1954;

Any solid or dissolved material from any material subject to 62 Ill. Adm. Code 1700 through 1850.

~~"WASTE" MEANS ANY GARBAGE, SLUDGE FROM A WASTE TREATMENT PLANT, WATER SUPPLY TREATMENT PLANT, OR AIR POLLUTION CONTROL FACILITY OR OTHER DISCARDED MATERIAL, INCLUDING SOLID, LIQUID, SEMI-SOLID, OR CONTAINED GASEOUS MATERIAL RESULTING FROM INDUSTRIAL, COMMERCIAL, MINING AND AGRICULTURAL OPERATIONS, AND FROM COMMUNITY ACTIVITIES, BUT DOES NOT INCLUDE:~~

~~INDUSTRIAL DISCHARGES WITH NPDES PERMITS ISSUED PURSUANT TO 35 ILL. ADM. CODE 309;~~

~~SOURCE, SPENT NUCLEAR, OR BY-PRODUCT MATERIALS AS DEFINED BY THE ATOMIC ENERGY ACT OF 1954 (42 U.S.C. 2014);~~

~~ANY SOLID OR DISSOLVED MATERIAL FROM ANY MATERIAL SUBJECT TO 62 ILL. ADM. CODE 1700 THROUGH 1850. (Section 3.53 of the Act)~~

"Waste pile" means a pile consisting of waste that has a total volume greater than 10 cubic yards or within which the waste remains for more than 90 days.

"Waters" means all accumulations of water, surface and underground, natural, and artificial, public and private, or parts thereof, which are wholly or partially within, flow through, or border upon this State. [415 ILCS 5/3.550] "WATERS" MEANS ALL ACCUMULATIONS OF WATER, SURFACE AND UNDERGROUND, NATURAL AND ARTIFICIAL, PUBLIC AND PRIVATE, OR PARTS THEREOF, WHICH ARE WHOLLY OR PARTLY WITHIN, FLOW THROUGH, OR BORDER UPON THIS STATE. (Section 3.56 of the Act)

"Well" means a bored, drilled, or driven shaft, or dug hole, the depth of which is greater than the largest surface dimension. [415 ILCS 5/3.555] "WELL" MEANS A BORED, DRILLED OR DRIVEN SHAFT, OR DUG HOLE, THE DEPTH OF WHICH IS GREATER THAN THE LARGEST SURFACE DIMENSION. (Section 3.57 of the Act)

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### Section 615.103 Incorporations by Reference

- a) The Board incorporates the following material by reference:

CFR (Code of Federal Regulations). Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, (202) - 783-3238.GPO. Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20401, (202)783-3238:

Method Detection Limit Definition, appendix B to Part 136, 40 CFR 136 (2017).

49 CFR 173 (2017).

National Primary Drinking Water Regulations, Final Rule, 56 Fed. Reg. 3526-3597 (January 30, 1991). Shippers General Requirements for Shipments and Packagings, 49 CFR 173 (1990)

NTIS. National Technical Information Service, 5301 Shawnee Road, Alexandria VA 223125285 Port Royal Road, Springfield VA 22161, (703) 605-6000(703)487-4600

"Test Methods for Evaluating Solid Wastes, Physical/Chemical Methods", EPA Publication No. SW-846, as amended by Updates I, II, IIA, IIB, III, IIIA, and IIIB I, (Doc. No. 55-001-00000-1) (available online on line).PB 89-148076).

- b) This Section incorporates no later amendments or editions.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### Section 615.104 Prohibitions

~~A~~ ~~No~~ person ~~must not shall~~ cause or allow the construction or operation of any facility or unit in violation of the Act or regulations adopted by the Board thereunder, including ~~but not limited to~~ this Part.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### Section 615.105 General Exceptions

- a) This Part does not apply to any facility or unit, or to the owner or operator of any facility or unit:

- 1) For which the owner or operator obtains certification of minimal hazard ~~under pursuant to~~ Section 14.5 of the Act; or
- 2) For which alternate requirements are imposed in an adjusted standard proceeding or as part of a site-specific rulemaking, ~~under pursuant to~~ Title VII of the Act; or
- 3) For which alternate requirements are imposed in a regulated recharge area proceeding ~~under pursuant to~~ Section 17.4 of the Act; or
- 4) That is *located on the same site as a non-community water system well and for which the owner is the same for both the* ~~LOCATED ON THE SAME SITE AS A NON-COMMUNITY WATER SYSTEM WELL AND FOR WHICH THE OWNER IS THE SAME FOR BOTH THE~~ facility or unit *and the well* ~~AND THE WELL~~. (Section 14.4(b) of the Act); or
- 5) That is located *within a regulated recharge area as delineated* ~~WITHIN A REGULATED RECHARGE AREA AS DELINEATED~~ in 35 Ill. Adm. Code 617 ~~if, provided that~~ ~~PROVIDED THAT~~:
  - A) *The boundary of the lateral area of influence of a community water supply well located within the regulated recharge area* ~~THE BOUNDARY OF THE LATERAL AREA OF INFLUENCE OF A COMMUNITY WATER SUPPLY WELL LOCATED WITHIN THE REGULATED RECHARGE AREA~~ does not include such ~~INCLUDE SUCH~~ facility or unit *therein* ~~THEREIN~~;

- B) *The distance from the wellhead of the community water supply to the*~~THE DISTANCE FROM THE WELLHEAD OF THE COMMUNITY WATER SUPPLY TO THE~~ facility or unit *exceeds 2500 feet; and*
- C) *The community water supply well was*~~THE COMMUNITY WATER SUPPLY WELL WAS~~ not *in existence prior to January 1, 1988*~~N EXISTENCE PRIOR TO JANUARY 1, 1988.~~ [415 ILCS 5/14.4(b)] (Section 14.4(b) of the Act); or

- 6) For which the owner or operator of the facility for storage and related handling of pesticides or fertilizers for the purpose of commercial application or at a central location for the purpose of distribution to retail sales outlets that has filed a written notice of intent ~~under pursuant to~~ Section 14.6 of the Act *with the Department of Agriculture by January 1, 1993, or within 6 months after the date on which a maximum setback zone is established or a regulated recharge area regulation is adopted that affects such a facility*~~WITH THE DEPARTMENT OF AGRICULTURE BY JANUARY 1, 1993, OR WITHIN 6 MONTHS AFTER THE DATE ON WHICH A MAXIMUM SETBACK ZONE IS ESTABLISHED OR A REGULATED RECHARGE AREA REGULATION IS ADOPTED THAT AFFECTS SUCH A FACILITY~~; or has filed a written certification of intent ~~under pursuant to~~ Section 14.6 of the Act *on the appropriate license or renewal application form submitted to the Department of Agriculture or other appropriate agency*~~ON THE APPROPRIATE LICENSE OR RENEWAL APPLICATION FORM SUBMITTED TO THE DEPARTMENT OF AGRICULTURE OR OTHER APPROPRIATE AGENCY~~ [415 ILCS 5/14.6(a)]~~(Section 14.6(a) of the Act)~~. This exception ~~does shall~~ not apply to those facilities that are not in compliance with the program requirements of subsections 14.6(b) and 14.6(c) of the Act.

- b) Nothing in this Section ~~will shall~~ limit the authority of the Board to impose requirements on any facility or unit within any portion of any setback zone or regulated recharge area ~~under pursuant to~~ the Act.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

## SUBPART B: GROUNDWATER MONITORING REQUIREMENTS

### Section 615.202 Compliance Period

The compliance period is the active life of the unit, including closure and post-closure care periods.

- a) The active life begins when the unit first begins operation or one year after the date of first applicability, whichever occurs later, and ends when the post-closure care period ends.
- b) The post-closure care period for units other than pesticide storage and handling units subject to Subpart I and fertilizer storage and handling units subject to Subpart J is five years after closure, except as provided ~~in~~ subsection (d) or Section 615.211(e).
- c) The post-closure care period for pesticide storage and handling units subject to Subpart I and for fertilizer storage and handling units subject to Subpart J is three years after closure, except as provided ~~in~~ Section 615.211(e).
- d) ~~Despite subsections~~ Subsections (a), (b), and (c) ~~notwithstanding~~, no post-closure care period is required if all waste, waste residues, contaminated containment system components, and contaminated subsoils are removed or decontaminated at closure, and no ongoing corrective action is required ~~under pursuant to~~ Section 615.211.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 615.203 Compliance with Groundwater Standards**

The owner or operator ~~must shall~~ comply with the groundwater standards.

- a) The term of compliance is the compliance period.
- b) Compliance ~~must shall~~ be measured at the compliance point, or compliance points if more than one such point exists.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 615.204 Groundwater Monitoring System**

- a) Except as provided otherwise in subsection (b) ~~of this Section~~, the groundwater monitoring system must consist of a sufficient number of wells, installed at appropriate locations and depths to yield groundwater samples, that:
  - 1) Represent the quality of background water that has not been affected by contamination from the facility or unit; and
  - 2) Represent the quality of groundwater at the compliance point or points.
- b) If a potable water well or other water well can be used as a monitoring well ~~pursuant to~~ under this subsection, no additional monitoring wells are required under this

Section. A potable water well or other water well may be used as a monitoring well if:

- 1) For a potable water well other than a community water supply well, a construction report has been filed with the Illinois Department of Public Health for such well, or such well has been located and constructed (or reconstructed) to meet the Illinois Water Well Construction Code [415 ILCS 30] and 35 Ill. Adm. Code 920;
  - 2) For a potable water supply well that was constructed before ~~prior to~~ August 20, 1965, the enactment of the Illinois Water Well Construction Code [415 ILCS 30], and meets all of the following criteria:
    - A) Construction must be done in a manner that will enable the collection of groundwater samples that represent in situ groundwater conditions;
    - B) Casings and screens must be made from durable material resistant to expected chemical or physical degradation that ~~does~~ not interfere with the quality of groundwater samples being collected; and
    - C) The annular space opposite the screened section of the well (i.e., the space between the bore hole and well screen) must be filled with gravel or sand if necessary to collect groundwater samples. The annular space above and below the well screen must be sealed to prevent migration of water from adjacent formations and the surface to the sampled depth.
  - 32) For a water well other than a potable water well (e.g., a livestock watering well or an irrigation well), the owner or operator of the unit seeking to use the well as a monitoring well certifies to the Agency that a construction report has been filed with the Illinois Department of Public Health or the Illinois Department of Mines and Minerals for such well, or that such well has been located and constructed (or reconstructed) to meet the Illinois Water Well Construction Code [415 ILCS 30] and 35 Ill. Adm. Code 920; and
  - 43) The unit contains solely non-special waste if the unit is a surface impoundment.
- c) When~~If~~ a facility contains more than one unit, separate groundwater monitoring systems are not required for each unit ~~if, provided~~ that provisions for sampling the groundwater will enable detection and measurement of contaminants that have entered the groundwater from all units.
- d) All monitoring wells must meet the following requirements:

- 1) Construction must be done in a manner that will enable the collection of groundwater samples;
- 2) Casings and screens must be made from durable material that is resistant to expected chemical or physical degradation and that does not interfere with the quality of groundwater samples being collected; and
- 3) The annular space opposite the screened section of the well (i.e., the space between the bore hole and well screen) must be filled with gravel or sand if necessary to collect groundwater samples. The annular space above and below the well screen must be sealed to prevent migration of water from overlying adjacent formations and the surface to the sampled depth.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 615.205 Groundwater Monitoring Program**

The owner or operator ~~shall~~ must develop a groundwater monitoring program that consists of:

- a) Consistent sampling and analysis procedures that are designed to ensure monitoring results that provide a reliable indication of groundwater quality below the unit. At a minimum, the program must include procedures and techniques for:
  - 1) Sample collection;
  - 2) Sample preservation and shipment;
  - 3) Analytical procedures; and
  - 4) Chain of custody control.
- b) Sampling and analytical methods that are appropriate for groundwater monitoring and that allow for detection and quantification of contaminants specified in this Subpart, and that are consistent with the sampling and analytical methods specified in 35 Ill. Adm. Code 620.
- c) A determination of the groundwater head elevation each time groundwater is sampled. A determination of the groundwater head elevation is not required for samples taken from a potable well used as a monitoring well under pursuant to Section 615.204(b).
- d) A determination at least annually of the groundwater flow rate and direction.
- e) If the owner or operator determines that the groundwater monitoring program no longer satisfies the requirements of this Section, the owner or operator ~~shall~~ must,

within 90 days, make appropriate changes to the program and ~~must~~ shall notify the Agency of ~~the such~~ changes when submitting the groundwater monitoring reports under Section 615.208.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 615.206 Contaminants to be Monitored**

- a) The owner or operator ~~must~~ shall monitor for all ~~constituents~~ parameters that meet the following criteria, except as provided in subsections (b) and (c):
  - 1) Material containing ~~the constituents are such~~ parameter is stored, disposed of, or otherwise handled at the site; and
  - 2) There is a groundwater standard for ~~the constituents~~ such parameter.
- b) The owner or operator of a unit subject to Subpart I for the storage and handling of pesticides ~~must~~ shall monitor for five specific pesticides or five groups of chemically-similar pesticides stored or handled at the unit that are the most likely to enter into the groundwater from the unit and that are the most toxic. The owner or operator ~~must~~ shall choose the five specific pesticides or five groups based upon the following criteria:
  - 1) The volume of material stored or handled at the unit;
  - 2) The leachability characteristics of the pesticides stored or handled at the unit;
  - 3) The toxicity characteristics of the pesticides stored or handled at the unit;
  - 4) The history of spillage of the pesticides stored or handled at the unit; and
  - 5) Any groundwater standards for the pesticides stored or handled at the unit.
- c) The owner or operator of a unit subject to Subpart J for the storage and handling of fertilizers ~~must~~ shall monitor for pH, specific conductance, total organic carbon, nitrates as nitrogen, and ammonia nitrogen.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 615.207 Sampling Frequency**

- a) The owner or operator ~~must~~ shall determine whether groundwater standards have been exceeded at each monitoring well at least quarterly during the compliance period, except as provided otherwise in ~~subsections~~ subsections (b) ~~or~~; (c) or Section 615.209(b).

- b) The owner or operator of a unit subject to Subpart I for the storage and handling of pesticides or Subpart J for the storage and handling of fertilizer may substitute the quarterly determination of subsection (a) with a determination at least semi-annually if provided that all of the following conditions are met:
- 1) The unit is in compliance with the containment requirements of 8 Ill. Adm. Code 255;
  - 2) There have been no detections within the preceding two years in any of the monitoring wells of any contaminant stored or handled at the facility or of any contaminant attributable to operation of the unit; and
  - 3) No reportable agrichemical spills, as defined in pursuant to 8 Ill. Adm. Code 255, have occurred at the facility within the previous two years.
- c) The owner or operator of a unit subject to Subpart K for the storage and handling of road oils or Subpart L for the storage and handling of de-icing agents must shall determine whether groundwater standards have been exceeded at each monitoring well at least annually during the compliance period, except as provided at Section 615.209(b).

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 615.208 Reporting**

The owner or operator must shall submit results of all monitoring required under pursuant to this Subpart to the Agency within 60 days after completion of sampling.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 615.209 Non-Compliance Response Program**

If monitoring results collected under pursuant to Sections 615.206 and 615.207 show that a groundwater standard has been exceeded, the owner or operator must shall:

- a) Notify the Agency of this finding when submitting the groundwater monitoring results required under pursuant to Section 615.208. The notification must indicate which groundwater standards have been exceeded.
- b) Resample the groundwater within 3 days in all monitoring wells where a groundwater standard has been exceeded and redetermine the presence and concentration of each parameter required under pursuant to Section 615.206, except that:

- 1) If the unit is subject to Subpart I for the storage and related handling of pesticides, resample the groundwater within 3 days in all monitoring wells where a groundwater standard has been exceeded and determine the presence and concentration in each such sample of each pesticide previously and presently stored or handled at the unit.
  - 2) If the unit is subject to Subpart J for the storage and related handling of fertilizers, monitor monthly for the parameters set forth in Section 615.206(c) until the groundwater standard is no longer exceeded.
- c) Submit the results of sampling required under subsection (b) when submitting the groundwater results required ~~under pursuant to~~ Section 615.208.
- d) Prepare an engineering feasibility plan for a corrective action program designed to achieve the requirements of Section 615.211. This plan ~~must shall~~ be submitted to the Agency in writing within 120 days after the date on which the sample results are submitted to the Agency ~~under pursuant to~~ subsection (c), unless:
- 1) None of the parameters identified under subsection (b) exceed the groundwater standards; or
  - 2) The owner or operator makes a demonstration ~~under pursuant to~~ Section 615.210.
- e) Begin the corrective action program specified in subsection (d) within 120 days after the date on which the sample results are submitted to the Agency ~~under pursuant to~~ subsection (c), unless:
- 1) None of the parameters identified under subsection (b) exceed the groundwater standards; or
  - 2) The owner or operator makes a demonstration ~~under pursuant to~~ Section 615.210.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 615.210 Alternate Non-Compliance Response Program**

If the groundwater sampling required ~~under pursuant to~~ Section 615.207 shows that a groundwater standard has been exceeded, it is presumed that contamination from the facility or unit that is being monitored is responsible for the standard being exceeded. An owner or operator may overcome that presumption by making a demonstration that a source other than the facility or unit that is being monitored caused the ~~exceedance exceedence~~ or that the ~~exceedance exceedence~~ resulted from error in sampling, analysis, or evaluation. In making ~~the such~~ demonstration, the owner or operator ~~must shall~~:

- a) Notify the Agency that the owner or operator intends to make a demonstration under this Section when submitting the groundwater monitoring results required ~~under pursuant to~~ Section 615.208.
- b) Submit a report to the Agency that demonstrates that a source other than a facility or unit owned or operated by ~~for which he is~~ the owner or operator caused the groundwater standard to be exceeded, or that the groundwater standard was exceeded due to an error in sampling, analysis or evaluation. Such report must be included with the next submission of groundwater monitoring results required ~~under pursuant to~~ Section 615.208; and
- c) Continue to monitor in compliance ~~accordance~~ with the groundwater monitoring program established ~~under pursuant to~~ Sections 615.205, 615.206, and 615.207.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 615.211 Corrective Action Program**

An owner or operator required to conduct a corrective action program ~~under pursuant to~~ this Subpart must shall:

- a) Begin corrective action within 120 days after the date on which the sample results are submitted to the Agency ~~under pursuant to~~ Section 615.209(c).
- b) Take corrective action that results in compliance with the groundwater standards at the compliance point or points.
- c) Establish and implement a groundwater monitoring program to demonstrate the effectiveness of the corrective action program.
- d) Take corrective action that maintains compliance with the groundwater standards:
  - 1) At all compliance points; and
  - 2) Beyond the unit boundary, where necessary to protect human health and the environment, unless the owner or operator demonstrates to the Agency that, despite the owner's or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action. The owner or operator is not relieved of responsibility to clean up a release that has migrated beyond the unit boundary where off-site access is denied.
- e) Continue corrective action measures during the compliance period to the extent necessary to ensure that the groundwater standard is not exceeded at the compliance point or points. If the owner or operator is still conducting corrective action at the end of the compliance period, the owner or operator must shall

continue that corrective action for as long as necessary to achieve compliance with the groundwater standards. The owner or operator may terminate corrective action measures taken beyond the compliance period if the owner or operator can demonstrate, based on data from the groundwater monitoring program under subsection (c), that the groundwater standards have not been exceeded for a period of three consecutive years.

- f) Report in writing to the Agency on the effectiveness of the corrective action program. The owner or operator must ~~shall~~ submit these reports semi-annually.
- g) If the owner or operator determines that the corrective action program no longer satisfies the requirements of this Section, the owner or operator must ~~shall~~, within 90 days, make any appropriate changes to the program.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### SUBPART C: GENERAL CLOSURE AND POST-CLOSURE REQUIREMENTS

##### **Section 615.302 Closure Performance Standard**

The owner or operator must ~~shall~~ close the unit in a manner that:

- a) Controls, minimizes, or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of waste, waste constituents, leachate, contaminated runoff, or waste decomposition products to soils, groundwaters, surface waters, and the atmosphere;
- b) Minimizes the need for maintenance during and beyond the post-closure care period; and
- c) Complies with the closure requirements of 35 Ill. Adm. Code: Subtitles C and G.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

##### **Section 615.303 Certification of Closure**

Within 60 days after ~~completion of the closure is complete~~, the owner or operator must ~~shall~~ submit to the Agency, by registered or certified mail, a certification that the unit has been closed in compliance ~~accordance~~ with the closure requirements. The certification must be signed by the owner or operator and by an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the Agency upon request.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### Section 615.304 Survey Plat

- a) ~~Before No later than~~ the submission of the certification of closure of each unit, the owner or operator ~~must shall~~ record with land titles and submit to the Agency and any local zoning authority, or authority with jurisdiction over local land use, and to the Agency, and record with land titles, a survey plat indicating the location and dimensions of any waste disposal units; and any pesticide or fertilizer storage and handling units; with respect to permanently surveyed benchmarks. This plat must be prepared and certified by a registered land surveyor.
- b) For pesticide storage and handling units or ~~for~~ fertilizer storage and handling units, records or reports required under any other ~~Statestate~~ or ~~federalFederal~~ regulatory program and ~~that which~~ contain the information required above may be used to satisfy this reporting requirement.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### Section 615.305 Post-Closure Notice for Waste Disposal Units

~~Within No later than~~ 60 days after certification of closure of the unit, the owner or operator of a unit subject to Subpart D or F ~~must shall~~ submit to the Agency, ~~to the County Recorder,~~ and ~~to~~ any local zoning authority, or authority with jurisdiction over local land use, a record of the type, location and quantity of wastes disposed of within each cell or other area of the unit.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### Section 615.306 Certification of Completion of Post-Closure Care

~~Within No later than~~ 60 days after completion of the established post-closure care period, the owner or operator ~~must shall~~ submit to the Agency, by registered or certified mail, a certification that the post-closure care period for the unit was performed in compliance accordance with the specifications in the approved post-closure plan. The certification must be signed by the owner or operator and an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the Agency upon request.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

## SUBPART D: ON-SITE LANDFILLS

### Section 615.401 Applicability

This Subpart applies to existing landfill units that are located wholly or partially within a setback zone or regulated recharge area and that contain special waste or other waste generated on-site, except that this Subpart does not apply to any existing landfill unit that:

- a) Contains solely one or more of the following: hazardous waste, livestock waste, landscape waste, or construction and demolition debris; or
- b) Is exempt from this Part ~~under pursuant to~~ Section 615.105.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### **Section 615.402 Required Closure of Units Located Within Minimum Setback Zones**

~~A No person must not shall~~ cause or allow the operation within a minimum setback zone of any landfill unit ~~after January 10, 1994 commencing two years after the effective date of this Part.~~ Closure ~~of a landfill unit must be completed within three years shall be completed three years after the effective date of this Part.~~

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### **Section 615.403 Required Closure of Units Located Within Maximum Setback Zones**

~~Starting two years after the effective date of the ordinance or regulation that establishes a maximum setback zone, a No person must not shall~~ cause or allow the operation within ~~the a~~ maximum setback zone of any landfill unit at which special waste is disposed ~~of, commencing two years after the effective date of the ordinance or regulation that establishes the maximum setback zone.~~ Closure ~~must shall~~ be completed within three years after the effective date of the ordinance or regulation that establishes the maximum setback zone.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### **Section 615.404 Required Closure of Units Located Within Regulated Recharge Areas**

~~A No person must not shall~~ cause or allow the operation within a regulated recharge area of any landfill unit that contains special waste and for which the distance from the wellhead of the community water supply well to any part of the landfill unit is 2500 feet or less. This provision becomes effective four years after the date on which the Board establishes the regulated recharge area. Closure ~~must shall~~ be completed within five years after the date on which the Board establishes the regulated recharge area.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **SUBPART E: ON-SITE LAND TREATMENT UNITS**

#### **Section 615.421 Applicability**

This Subpart applies to existing land treatment units that are located wholly or partially within a setback zone or regulated recharge area and that treat or dispose of special waste or other waste generated on-site, except that this Subpart does not apply to any existing land treatment unit that:

- a) Contains solely one or more of the following: hazardous waste, livestock waste, landscape waste, or construction and demolition debris; or
- b) Is exempt from this Part ~~under~~ pursuant to Section 615.105.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### **Section 615.422 Required Closure of Units Located Within Minimum Setback Zones**

~~A No person must not shall~~ cause or allow the operation within a minimum setback zone of any land treatment unit ~~after January 10, 1994~~ ~~commencing two years after the effective date of this Part.~~ Closure ~~must shall~~ be completed ~~by January 10, 1995~~ within three years after the effective date of this Part.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### **Section 615.423 Required Closure of Units Located Within Maximum Setback Zones**

~~Starting two years after the effective date of the ordinance or regulation that establishes a maximum setback zone, a~~ ~~No person must not shall~~ cause or allow the operation within ~~the a~~ maximum setback zone of any land treatment unit at which special waste is treated or disposed ~~of, commencing two years after the effective date of the ordinance or regulation that establishes the maximum setback zone.~~ Closure ~~must shall~~ be completed within three years after the effective date of the ordinance or regulation that establishes the maximum setback zone.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### **Section 615.424 Land Treatment of Sludges in Maximum Setback Zones**

Nothing in this Subpart ~~prohibits shall prohibit~~ land treatment within a maximum setback zone of sludge resulting from the treatment of domestic wastewater or of sludge resulting from the treatment of water to produce potable water, if such activities are conducted in compliance ~~accordance~~ with the Act and 35 Ill. Adm. Code: Subtitle C.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### **Section 615.425 Closure and Post-Closure Care**

The owner or operator ~~must shall~~ comply with the requirements of Sections 615.302 and 615.303.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

## SUBPART F: ON-SITE SURFACE IMPOUNDMENTS

### Section 615.441 Applicability

This Subpart applies to existing surface impoundment units that are located wholly or partially within a setback zone or regulated recharge area and that contain special waste or other waste generated on-site, except that this Subpart does not apply to any existing surface impoundment unit that:

- a) Contains solely one or more of the following: hazardous waste, livestock waste, landscape waste, or construction and demolition debris; or
- b) Is exempt from this Part ~~under pursuant to~~ Section 615.105.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### Section 615.442 Required Closure of Units Located Within Minimum Setback Zones

~~A No person must not shall~~ cause or allow the operation within a minimum setback zone of any surface impoundment unit commencing two years after the effective date of this Part. Closure ~~must shall~~ be completed within three years after the effective date of this Part.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### Section 615.443 Required Closure of Units Located Within Maximum Setback Zones

~~A No person must not shall~~ cause or allow the operation within a maximum setback zone of any surface impoundment unit at which special waste is stored, treated or disposed, commencing two years after the effective date of the ordinance or regulation that establishes the maximum setback zone. Closure ~~must shall~~ be completed within three years after the effective date of the ordinance or regulation that establishes the maximum setback zone.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### Section 615.444 Groundwater Monitoring

The owner or operator ~~of an existing on-site surface impoundment must shall~~ comply with the requirements of Subpart B.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### Section 615.445 Inspection Requirements

~~During operation, While~~ a surface impoundment ~~is in operation, it~~ must be inspected weekly and after storms to detect evidence of any of the following:

- a) Deterioration, malfunctions or improper operation of overtopping control systems;
- b) Sudden drops in the level of the impoundment's contents;
- c) Severe erosion or other signs of deterioration in dikes or other containment devices; or
- d) A leaking dike.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 615.446 Operating Requirements**

- a) ~~A~~ No person must not shall cause or allow incompatible materials to be placed in the same surface impoundment unit.
- b) A surface impoundment unit must be removed from service in compliance ~~accordance~~ with subsection (c) when:
  - 1) The level of liquids in the unit suddenly drops and the drop is not known to be caused by changes in the flows into or out of the unit; or
  - 2) The dike leaks.
- c) When a surface impoundment unit must be removed from service as required by subsection (b), the owner or operator must shall:
  - 1) Shut off the flow or stop the addition of wastes into the impoundment unit;
  - 2) Contain any surface leakage that has occurred or is occurring;
  - 3) Stop the leak;
  - 4) Take any other necessary steps to stop or prevent catastrophic failure;
  - 5) If a leak cannot be stopped by any other means, empty the impoundment unit; and
  - 6) Notify the Agency of the removal from service and corrective actions that were taken, such notice to be given within 10 days after the removal from service.
- d) No surface impoundment unit that has been removed from service in compliance ~~accordance~~ with the requirements of this Section may be restored to service unless the portion of the unit that failed has been repaired.

- e) A surface impoundment unit that has been removed from service in compliance ~~accordance~~ with the requirements of this Section and that is not being repaired must be closed in compliance ~~accordance~~ with the provisions of Section 615.447.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### **Subpart 615.447 Closure and Post-Closure Care**

- a) If closure is to be by removal, the owner or operator must ~~shall~~ remove all waste, all waste residues, contaminated containment system components (e.g., liners)~~(liners, etc.)~~, contaminated subsoils and structures, and equipment contaminated with waste and leachate; and, if disposed of in the State of Illinois, dispose of them at a disposal site permitted by the Agency under the Act.
- b) If closure is not to be by removal, the owner or operator must~~shall~~ comply with the requirements of Subpart C and must~~shall~~:
- 1) Eliminate free liquids by removing liquid wastes or solidifying the remaining wastes and waste residues.
  - 2) Stabilize remaining wastes to a bearing capacity sufficient to support final cover.
  - 3) Cover the surface impoundment unit with a final cover consisting of at least a 2-foot-thick~~2-foot thick~~ layer of compacted clay with a permeability of no more than  $1 \times 10^{-7}$  centimeters per second and designed and constructed to:
    - A) Provide long-term minimization of the migration of liquids through the closed impoundment unit;
    - B) Function with minimum maintenance;
    - C) Promote drainage and minimize erosion or abrasion of the final cover; and
    - D) Accommodate settling and subsidence so that the cover's integrity is maintained.
- c) If some waste residues or contaminated materials are left in place at final closure, the owner or operator must ~~shall~~ comply with the requirements of Subpart C and must ~~shall~~:

- 1) Maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;
- 2) Maintain and monitor the groundwater monitoring system; and
- 3) Prevent run-on and run-off from eroding or otherwise damaging the final cover.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### SUBPART G: ON-SITE WASTE PILES

##### **Section 615.461 Applicability**

This Subpart applies to existing waste piles that are located wholly or partially within a setback zone or regulated recharge area and that contain special waste or other waste generated on-site, except that this Subpart does not apply to any existing waste pile that:

- a) Contains solely one or more of the following: hazardous waste, livestock waste, landscape waste, or construction and demolition debris;
- b) Consists of sludge resulting from the treatment of wastewater from a Publicly Owned Treatment Works (POTW) and the sludge pile is situated on an underdrained pavement and operated in compliance ~~accordance~~ with the Act, 35 Ill. Adm. Code: Subtitle C and 35 Ill. Adm. Code: Subtitle G; or
- c) Is exempt from this Part under ~~pursuant to~~ Section 615.105.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

##### **Section 615.462 Required Closure**

A waste pile is considered ~~deemed~~ to be a landfill and thereby subject to the closure requirements of Subpart D unless the operator can demonstrate to the Agency that the wastes are not accumulated over time for disposal. At the minimum, such demonstration must ~~shall~~ include photographs, records, or other observable or discernable information, maintained on a yearly basis, that show that within the preceding year the waste has been removed for utilization or disposed of elsewhere.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

##### **Section 615.463 Design and Operating Requirements**

This section applies six months after the date of first applicability to ~~For~~ a waste pile not subject to Section 615.462,

- a) The owner or operator ~~must shall~~ not cause or allow:
- 1) Disposal or storage in the waste pile of liquids or materials containing free liquids; or
  - 2) Migration and runoff of leachate into adjacent soil, surface water, or groundwater.
- b) The waste pile must comply with the following standards:
- 1) The waste pile must be under an impermeable membrane or cover that provides protection from precipitation;
  - 2) The waste pile must be protected from surface water run-on; and
  - 3) The waste pile must be designed and operated to control wind dispersal of waste by a means other than wetting.
- e) ~~This Section becomes applicable six months after the date of first applicability.~~

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 615.464 Closure**

The owner or operator ~~must shall~~ accomplish closure by removing and disposing of all wastes and containment system components (e.g., ~~liners~~liners, etc). If disposed of in the State of Illinois, the waste and containment system components must be disposed of at a disposal site permitted by the Agency under the Act.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

## SUBPART H: UNDERGROUND STORAGE TANKS

### **Section 615.501 Applicability**

This Subpart applies to existing underground storage tanks that are located wholly or partially within a setback zone or regulated recharge area and that contain special waste, except that this Subpart does not apply to any existing underground storage tank that:

- a) ~~Under pursuant to~~ 35 Ill. Adm. Code 731.110(a) must meet the requirements set forth in 35 Ill. Adm. Code 731, unless ~~the such a~~ tank is excluded from those requirements ~~under pursuant to~~ 35 Ill. Adm. Code 731.110(b); or
- b) ~~Has Must have~~ interim status or a RCRA permit under 35 Ill. Adm. Code: Subtitle G; or

- c) Is exempt from this Part ~~under pursuant to~~ Section 615.105.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 615.502 Design and Operating Requirements**

Owners and operators of existing underground storage tanks that store special waste ~~must shall~~ meet the requirements ~~set forth~~ in 35 Ill. Adm. Code 731. Such requirements must be met even if the tanks are excluded from coverage under 35 Ill. Adm. Code 731 by 35 Ill. Adm. Code 731.110(b). The exclusions ~~set forth~~ in 35 Ill. Adm. Code 731.110(b) do not apply to any underground storage tank which stores special waste.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

## **SUBPART I: PESTICIDE STORAGE AND HANDLING UNITS**

### **Section 615.601 Applicability**

This Subpart applies to any existing unit for the storage and handling of pesticides that is located wholly or partially within a setback zone or regulated recharge area and that:

- a) Is operated for the purpose of commercial application; or
- b) Stores or accumulates pesticides prior to distribution to retail sales outlets, including ~~but not limited to~~ a unit that is a warehouse or bulk terminal.
- c) ~~Despite subsections~~ Subsections (a) and (b) ~~notwithstanding~~, this Subpart does not apply to any unit exempt ~~under pursuant to~~ Section 615.105.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 615.602 Groundwater Monitoring**

The owner or operator ~~must shall~~ comply with the requirements of Subpart B.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 615.603 Design and Operating Requirements**

The owner or operator ~~must shall~~:

- a) Maintain a written record inventorying all pesticides stored or handled at the unit.
- b) At least weekly when pesticides are being stored, inspect storage containers, tanks, vents, valves, and appurtenances for leaks or deterioration caused by

corrosion or other factors. If a leak or deterioration is found in any of these devices, the owner or operator must immediately repair or replace the device. The owner or operator ~~must~~ shall maintain a written record of all inspections conducted under this Section and of all maintenance relating to leaks and deterioration of these devices.

- c) Store all containers containing pesticides within a pesticide secondary containment structure; if ~~these~~ such containers are stored outside of a roofed structure or enclosed warehouse. For the purpose of this subsection, a pesticide secondary containment structure is a structure that complies with the design standards set forth in 8 Ill. Adm. Code 255.
- d) Maintain all written records required under this Section at the site. The owner or operator ~~must~~ shall provide any such record to the Agency upon request.

(Board Note: Owners or operators of facilities or units subject to this Part may also be subject to regulations under 8 Ill. Adm. Code 255.).

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### **Section 615.604 Closure and Post-Closure Care**

The owner or operator ~~must~~ shall comply with the requirements of Subpart C.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **SUBPART J: FERTILIZER STORAGE AND HANDLING UNITS**

#### **Section 615.621 Applicability**

This Subpart applies to any existing unit for the storage and handling of fertilizers that is located wholly or partially within a setback zone or regulated recharge area and that:

- a) Is operated for the purpose of commercial application; or
- b) Stores or accumulates fertilizers prior to distribution to retail sales outlets, including ~~but not limited to~~ a unit that is a warehouse or bulk terminal.
- c) Despite subsections ~~Subsections~~ (a) and (b) ~~notwithstanding~~, this Subpart does not apply to any unit exempt under ~~pursuant to~~ Section 615.105.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### **Section 615.622 Groundwater Monitoring**

The owner or operator ~~must~~ shall comply with the requirements of Subpart B.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 615.623 Design and Operating Requirements**

The owner or operator must ~~shall~~:

- a) Maintain a written record inventorying all fertilizers stored or handled at the unit.
- b) At least weekly when fertilizers are being stored, inspect storage containers, tanks, vents, valves, and appurtenances for leaks or deterioration caused by corrosion or other factors. If a leak or deterioration is found in any of these devices, the owner or operator must ~~shall~~ immediately repair or replace the device. The owner or operator must ~~shall~~ maintain a written record of all inspections conducted under this Section and of all maintenance relating to leaks and deterioration of these devices.
- c) Store all containers containing fertilizers (except anhydrous ammonia) within a fertilizer secondary containment structure, if such containers are stored outside of a roofed structure or enclosed warehouse. For the purpose of this subsection, a fertilizer secondary containment structure is a structure that complies with the design standards set forth in 8 Ill. Adm. Code 255.
- d) Maintain all written records required under this Section at the site. The owner or operator must ~~shall~~ provide any such record to the Agency upon request.

(Board Note: Owners or operators of facilities or units subject to this Part may also be subject to regulations under 8 Ill. Adm. Code 255)

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 615.624 Closure and Post-Closure Care**

The owner or operator must ~~shall~~ comply with the requirements of Subpart C.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

## **SUBPART K: ROAD OIL STORAGE AND HANDLING UNITS**

### **Section 615.702 Required Closure of Units Located Within Minimum Setback Zones**

- a) A No person ~~must not~~ shall cause or allow the operation within a minimum setback zone of any road oil storage and handling unit after January 10, 1994. Closure of a road oil storage handling unit must be completed within three years.

- b) ~~Subsection (a) is effective two years after the effective date of this Part. Closure must be completed within three years after the effective date of this Part.~~

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 615.703 Groundwater Monitoring**

The owner or operator ~~must~~ shall comply with the requirements of Subpart B.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 615.704 Design and Operating Requirements for Above-Ground Storage Tanks**

- a) The owner or operator ~~must~~ shall not cause or allow:
- 1) Materials to be placed in a tank if such materials could cause the tank to rupture, leak, corrode, or otherwise fail.
  - 2) Uncovered tanks to be placed or operated so as to maintain less than 60 centimeters (2 feet) of freeboard unless:
    - A) The tank is equipped with a containment structure (e.g., dike or trench), a drainage control system, or a diversion structure (e.g., standby tank); and
    - B) Such containment structure, drainage control system, or diversion structure has a capacity that equals or exceeds the volume of the top 60 centimeters (2 feet) of the tank.
  - 3) Material to be continuously fed into a tank, unless the tank is equipped with a means to stop this inflow (e.g., a feed cutoff system or a bypass system to a standby tank).
  - 4) Incompatible materials to be placed in the same tank.
  - 5) Material to be placed in a tank that previously held an incompatible material unless the incompatible material has been washed from the tank.
  - 6) Ignitable or reactive material to be placed in a tank unless:
    - A) The material is stored or treated in such a way that it is protected from any material or conditions that may cause it to ignite or react; or
    - B) The tank is used solely for emergencies.

- b) The owner or operator must ~~shall~~ provide and maintain primary containment for the tank such that:
- 1) The tank has a minimum shell thickness that ensures that the tank will not fail (e.g., collapse or rupture)~~(i.e., collapse, rupture, etc.)~~.
  - 2) The tank is compatible with the material to be placed in the tank or the tank is lined with a substance that is compatible with the material to be placed in the tank.
- c) The owner or operator must ~~shall~~ provide and maintain secondary containment for the tank that:
- 1) Is capable of containing the volume of the largest tank or 10% of the total volume for all tanks, whichever is greater;
  - 2) Is constructed of material capable of containing a spill until cleanup occurs (e.g., concrete or clay). The base of the secondary containment area must be capable of minimizing vertical migration of a spill until cleanup occurs (e.g., concrete or clay);
  - 3) Has cover (e.g., crushed rock or vegetative growth) on earthen embankments sufficient to prevent erosion; and
  - 4) Isolates the tank from storm water drains and from combined storm water drains and sewer drains.
- d) If incompatible materials are handled at the site, the owner or operator must provide secondary containment sufficient to isolate the units containing the incompatible materials~~must be provided~~.
- e) The owner or operator of a tank must ~~shall also~~:
- 1) Test above-ground tanks and associated piping every five years for structural integrity.
  - 2) Remove uncontaminated storm water runoff from the secondary containment area immediately after a precipitation event.
  - 3) Handle contaminated storm water runoff in compliance ~~accordance~~ with 35 Ill. Adm. Code 302.Subpart A.
  - 4) Provide a method for obtaining a sample from each tank.
  - 5) Install, maintain, and operate a material level indicator on each tank.

- 6) When not in use, lock all devices (gauges and valves) that are used to inspect levels in the tank. All such devices must be located within the containment structure.
- f) This Section becomes applicable two years after the date of first applicability.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

#### SUBPART L: DE-ICING AGENT STORAGE AND HANDLING UNITS

##### **Section 615.722 Groundwater Monitoring**

The owner or operator must ~~shall~~ comply with the requirements of Subpart B.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

##### **Section 615.723 Design and Operating Requirements**

- a) Indoor facilities must comply with the following standards beginning two years after the date of first applicability:
  - 1) The base of the facility must be constructed of materials capable of containing de-icing agents (e.g.i.e., bituminous or concrete pad).
  - 2) The roof and walls of the facility must be constructed of materials capable of protecting the storage pile from precipitation and capable of preventing dissolved de-icing agents from entering into the adjacent soil, surface water, or groundwater. The walls of the facility must be constructed of materials compatible with the de-icing agents to be placed in the facility. Run-off from the roof must be diverted away from the loading pad.
  - 3) All areas surrounding the storage pile, including ~~but not limited to~~ the loading pad, must be routinely inspected to determine whether any release of de-icing agents has occurred. Such areas must ~~shall~~ be cleaned as necessary. Spilled de-icing agents must be placed back under the protective covering of the indoor storage pile. The storage pile must be reshaped as often as necessary to prevent leaching.
  - 4) The integrity of the facility and loading pad must be maintained.
  - 5) All areas surrounding the storage facility must be inspected daily to determine whether any release of de-icing agents has occurred. Spilled de-icing agents must be placed back into the storage facility.
- b) Outdoor facilities or units must comply with the following standards beginning two years after the date of first applicability:

- 1) An impermeable membrane or cover must be placed over all storage piles to protect the piles from precipitation and surface water run-on. The membrane or cover must prevent run-off and leachate from being generated by the outdoor storage piles. The piles must be formed in a conical shape, covered, and stored on a paved pad capable of preventing leachate from entering adjacent soil, surface water, or groundwater.
- 2) Surface drainage must be directed to prevent flow through the base of the storage piles. De-icing agents must not be stored where drainage may enter into water supplies, farm lands, or streams.
- 3) All areas surrounding the storage piles must be cleaned and must be inspected daily to determine whether any release of de-icing agents has occurred. Spilled de-icing agents must be placed back under the protective covering of the outdoor storage piles. The storage piles must be reshaped as often as necessary to prevent leaching.
- 4) The storage piles must be designed and operated to control wind dispersal of the product by means other than wetting.

(Source: Amended at 47 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

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

PART 616

NEW ACTIVITIES IN A SETBACK ZONE OR REGULATED RECHARGE AREA

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AUTHORITY: Implementing Sections 5, 14.4, 21, and 22, and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/5, 14.4, 21, 22, 27].

SOURCE: Adopted in R89-5 at 16 Ill. Reg. 1592, effective January 10, 1992; amended in R89-14(C) at 16 Ill. Reg. 14676, effective September 11, 1992; amended in R92-20 at 17 Ill. Reg. 1878, effective January 28, 1993; amended in R96-18 at 21 Ill. Reg. 6543, effective May 8, 1997; amended in R18-26 at 46 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

#### SUBPART A: GENERAL

##### Section 616.101 Purpose

This Part ~~specifies the prescribes~~ requirements and standards for the protection of groundwater for certain types of new facilities or units located wholly or partially within a setback zone regulated by the Illinois Environmental Protection Act (Act) [415 ILCS 5]~~Act~~ or within a regulated recharge area ~~as delineated under pursuant to~~ Section 17.4 of the Act Illinois Environmental Protection Act (Act) [415 ILCS 5/17.4].

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

##### Section 616.102 Definitions

Except as stated in this Section, and unless a different meaning of a word or term is clear from the context, the definitions of words or terms in this Part ~~are will~~ shall be the same as those used in 35 Ill. Adm. Code 615.102, the Act, or the Illinois Groundwater Protection Act [415 ILCS 55].

~~NEW POTENTIAL PRIMARY SOURCE" MEANS:~~

~~A POTENTIAL PRIMARY SOURCE WHICH IS NOT IN EXISTENCE OR FOR WHICH CONSTRUCTION HAS NOT COMMENCED AT ITS LOCATION AS OF JANUARY 1, 1988; OR~~

~~A POTENTIAL PRIMARY SOURCE WHICH EXPANDS LATERALLY BEYOND THE CURRENTLY PERMITTED BOUNDARY OR, IF THE PRIMARY SOURCE IS NOT PERMITTED, THE BOUNDARY IN EXISTENCE AS OF JANUARY 1, 1988; OR~~

~~A POTENTIAL PRIMARY SOURCE WHICH IS PART OF A FACILITY THAT UNDERGOES MAJOR RECONSTRUCTION. SUCH RECONSTRUCTION SHALL BE DEEMED TO HAVE TAKEN PLACE WHERE THE FIXED CAPITAL COST OF THE NEW COMPONENTS CONSTRUCTED WITHIN A 2-YEAR PERIOD~~

~~EXCEED 50% OF THE FIXED CAPITAL COST OF A COMPARABLE ENTIRELY NEW FACILITY.~~

~~(Section 3.59 of the Act)~~

~~"NEW POTENTIAL ROUTE" MEANS:~~

~~A POTENTIAL ROUTE WHICH IS NOT IN EXISTENCE OR FOR WHICH CONSTRUCTION HAS NOT COMMENCED AT ITS LOCATION AS OF JANUARY 1, 1988; OR~~

~~A POTENTIAL ROUTE WHICH EXPANDS Laterally BEYOND THE CURRENTLY PERMITTED BOUNDARY OR, IF THE POTENTIAL ROUTE IS NOT PERMITTED, THE BOUNDARY IN EXISTENCE AS OF JANUARY 1, 1988.~~

~~(Section 3.58 of the Act)~~

~~"NEW POTENTIAL SECONDARY SOURCE" MEANS:~~

~~A POTENTIAL SECONDARY SOURCE WHICH IS NOT IN EXISTENCE OR FOR WHICH CONSTRUCTION HAS NOT COMMENCED AT ITS LOCATION AS OF JULY 1, 1988; OR~~

~~A POTENTIAL SECONDARY SOURCE WHICH EXPANDS Laterally BEYOND THE CURRENTLY PERMITTED BOUNDARY OR, IF THE SECONDARY SOURCE IS NOT PERMITTED, THE BOUNDARY IN EXISTENCE AS OF JULY 1, 1988, OTHER THAN AN EXPANSION FOR HANDLING OF LIVESTOCK WASTE OR FOR TREATING DOMESTIC WASTEWATERS; OR~~

~~A POTENTIAL SECONDARY SOURCE WHICH IS PART OF A FACILITY THAT UNDERGOES MAJOR RECONSTRUCTION. SUCH RECONSTRUCTION SHALL BE DEEMED TO HAVE TAKEN PLACE WHERE THE FIXED CAPITAL COST OF THE NEW COMPONENTS CONSTRUCTED WITHIN A 2-YEAR PERIOD EXCEED 50% OF THE FIXED CAPITAL COST OF A COMPARABLE ENTIRELY NEW FACILITY.~~

~~(Section 3.60 of the Act)~~

~~"POTENTIAL PRIMARY SOURCE" MEANS ANY UNIT AT A FACILITY OR SITE NOT CURRENTLY SUBJECT TO A REMOVAL OR REMEDIAL ACTION WHICH:~~

~~IS UTILIZED FOR THE TREATMENT, STORAGE, OR DISPOSAL OF ANY HAZARDOUS OR SPECIAL WASTE NOT GENERATED AT THE SITE; OR~~

~~IS UTILIZED FOR THE DISPOSAL OF MUNICIPAL WASTE NOT GENERATED AT THE SITE, OTHER THAN LANDSCAPE WASTE AND CONSTRUCTION AND DEMOLITION DEBRIS; OR~~

~~IS UTILIZED FOR THE LANDFILLING, LAND TREATING, SURFACE IMPOUNDING OR PILING OF ANY HAZARDOUS OR SPECIAL WASTE THAT IS GENERATED ON THE SITE OR AT OTHER SITES OWNED, CONTROLLED OR OPERATED BY THE SAME PERSON; OR~~

~~STORES OR ACCUMULATES AT ANY TIME MORE THAN 75,000 POUNDS ABOVE GROUND, OR MORE THAN 7,500 POUNDS BELOW GROUND, OF ANY HAZARDOUS SUBSTANCES.~~

~~(Section 3.59 of the Act)~~

~~"POTENTIAL ROUTE" MEANS ABANDONED AND IMPROPERLY PLUGGED WELLS OF ALL KINDS, DRAINAGE WELLS, ALL INJECTION WELLS, INCLUDING CLOSED LOOP HEAT PUMP WELLS, AND ANY EXCAVATION FOR THE DISCOVERY, DEVELOPMENT OR PRODUCTION OF STONE, SAND OR GRAVEL.~~

~~(Section 3.58 of the Act)~~

~~"POTENTIAL SECONDARY SOURCE" MEANS ANY UNIT AT A FACILITY OR A SITE NOT CURRENTLY SUBJECT TO A REMOVAL OR REMEDIAL ACTION, OTHER THAN A POTENTIAL PRIMARY SOURCE, WHICH:~~

~~IS UTILIZED FOR THE LANDFILLING, LAND TREATING, OR SURFACE IMPOUNDING OF WASTE THAT IS GENERATED ON THE SITE OR AT OTHER SITES OWNED, CONTROLLED OR OPERATED BY THE SAME PERSON, OTHER THAN LIVESTOCK AND LANDSCAPE WASTE, AND CONSTRUCTION AND DEMOLITION DEBRIS; OR~~

~~STORES OR ACCUMULATES AT ANY TIME MORE THAN 25,000 BUT NOT MORE THAN 75,000 POUNDS ABOVE GROUND, OR MORE THAN 2,500 BUT NOT MORE THAN 7,500 POUNDS BELOW GROUND, OF ANY HAZARDOUS SUBSTANCES; OR~~

~~STORES OR ACCUMULATES AT ANY TIME MORE THAN 25,000 GALLONS ABOVE GROUND, OR MORE THAN 500 GALLONS BELOW GROUND, OF PETROLEUM, INCLUDING CRUDE OIL OR ANY FRACTION THEREOF WHICH IS NOT OTHERWISE SPECIFICALLY LISTED OR DESIGNATED AS A HAZARDOUS SUBSTANCE; OR~~

~~STORES OR ACCUMULATES PESTICIDES, FERTILIZERS, OR ROAD OILS FOR PURPOSES OF COMMERCIAL APPLICATION OR FOR DISTRIBUTION TO RETAIL SALES OUTLETS; OR~~

~~STORES OR ACCUMULATES AT ANY TIME MORE THAN 50,000 POUNDS OF ANY DE-ICING AGENT; OR~~

~~IS UTILIZED FOR HANDLING LIVESTOCK WASTE OR FOR TREATING DOMESTIC WASTEWATERS OTHER THAN PRIVATE SEWAGE DISPOSAL SYSTEMS AS DEFINED IN THE PRIVATE SEWAGE DISPOSAL LICENSING ACT [225 ILCS 225]~~

~~(Section 3.60 of the Act)~~

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

### **Section 616.104 Exceptions to Prohibitions**

Section 14.2 of the Act sets forth the process to obtain a waiver or exception from the setback requirements Sections 616.402(a), 616.422(a), 616.442, 616.462(a), 616.602, 616.622, 616.702 or 616.722(a).

- a) ~~THE OWNER OF A NEW POTENTIAL PRIMARY SOURCE OR A POTENTIAL SECONDARY SOURCE MAY SECURE A WAIVER FROM THE prohibitions specified in Sections 616.402(a), 616.422(a), 616.442, 616.462(a), 616.602, 616.622, 616.702 or 616.722(a) against construction or operation within the setback zone FOR A POTABLE WATER SUPPLY WELL OTHER THAN A COMMUNITY WATER SUPPLY. A WRITTEN REQUEST FOR A WAIVER SHALL BE MADE TO THE OWNER OF THE WATER WELL AND THE AGENCY. SUCH REQUEST SHALL IDENTIFY THE NEW OR PROPOSED POTENTIAL SOURCE, SHALL GENERALLY DESCRIBE THE POSSIBLE EFFECT OF SUCH POTENTIAL SOURCE UPON THE WATER WELL AND ANY APPLICABLE TECHNOLOGY-BASED CONTROL WHICH WILL BE UTILIZED TO MINIMIZE THE POTENTIAL FOR CONTAMINATION, AND SHALL STATE WHETHER, AND UNDER WHAT CONDITIONS, THE REQUESTOR WILL PROVIDE AN ALTERNATIVE POTABLE WATER SUPPLY. WAIVER MAY BE GRANTED BY THE OWNER OF THE WATER WELL NO LESS THAN 90 DAYS AFTER RECEIPT UNLESS PRIOR TO SUCH TIME THE AGENCY~~

~~NOTIFIES THE WELL OWNER THAT IT DOES NOT CONCUR WITH THE REQUEST. (Section 14.2(b) of the Act)~~

- ~~b) THE AGENCY SHALL NOT CONCUR WITH ANY SUCH REQUEST WHICH FAILS TO ACCURATELY DESCRIBE REASONABLY FORESEEABLE EFFECTS OF THE POTENTIAL SOURCE OR POTENTIAL ROUTE UPON THE WATER WELL OR ANY APPLICABLE TECHNOLOGY BASED CONTROLS. SUCH NOTIFICATION BY THE AGENCY SHALL BE IN WRITING, AND SHALL INCLUDE A STATEMENT OF REASONS FOR THE NONCONCURRENCE. WAIVER OF THE MINIMUM SETBACK ZONE SHALL EXTINGUISH THE WATER WELL OWNER'S RIGHTS UNDER SECTION 6b OF THE ILLINOIS WATER WELL CONSTRUCTION CODE BUT SHALL NOT PRECLUDE ENFORCEMENT OF ANY LAW REGARDING WATER POLLUTION. IF THE OWNER OF THE WATER WELL HAS NOT GRANTED A WAIVER WITHIN 120 DAYS AFTER RECEIPT OF THE REQUEST OR THE AGENCY HAS NOTIFIED THE OWNER THAT IT DOES NOT CONCUR WITH THE REQUEST, THE OWNER OF A POTENTIAL SOURCE OR POTENTIAL ROUTE MAY FILE A PETITION FOR AN EXCEPTION WITH THE BOARD AND THE AGENCY PURSUANT TO subsection (b) of this section OF THIS SECTION. (Section 14.2(b) of the Act)~~
- ~~e) NO WAIVER UNDER THIS SECTION IS REQUIRED WHERE THE POTABLE WATER SUPPLY WELL IS PART OF A PRIVATE WATER SYSTEM AS DEFINED IN THE ILLINOIS GROUNDWATER PROTECTION ACT, AND THE OWNER OF SUCH WELL WILL ALSO BE THE OWNER OF A NEW POTENTIAL SECONDARY SOURCE OR A POTENTIAL ROUTE. IN SUCH INSTANCES, A PROHIBITION OF 75 FEET SHALL APPLY AND THE OWNER SHALL NOTIFY THE AGENCY OF THE INTENDED ACTION SO THAT THE AGENCY MAY PROVIDE INFORMATION REGARDING THE POTENTIAL HAZARDS ASSOCIATED WITH LOCATION OF A POTENTIAL SECONDARY SOURCE OR POTENTIAL ROUTE IN CLOSE PROXIMITY TO A POTABLE WATER SUPPLY WELL. (Section 14.2(b) of the Act)~~
- ~~d) THE BOARD MAY GRANT AN EXCEPTION FROM THE SETBACK REQUIREMENTS OF THIS SECTION AND SECTION 14.3 TO THE OWNER OF A NEW POTENTIAL PRIMARY SOURCE OTHER THAN LANDFILLING OR LAND TREATING, OR A NEW POTENTIAL SECONDARY SOURCE. THE OWNER SEEKING AN EXCEPTION WITH RESPECT TO A COMMUNITY WATER SUPPLY WELL SHALL FILE A PETITION WITH THE BOARD AND THE AGENCY. THE OWNER SEEKING AN EXCEPTION WITH RESPECT TO A POTABLE WATER SUPPLY WELL SHALL FILE A PETITION WITH THE BOARD AND THE AGENCY, AND SET FORTH THEREIN THE CIRCUMSTANCES UNDER WHICH A WAIVER HAS BEEN SOUGHT BUT NOT OBTAINED~~

~~PURSUANT TO subsection (a) OF THIS SECTION. A PETITION SHALL BE ACCOMPANIED BY PROOF THAT THE OWNER OF EACH POTABLE WATER SUPPLY WELL FOR WHICH SETBACK REQUIREMENTS WOULD BE AFFECTED BY THE REQUESTED EXCEPTION HAS BEEN NOTIFIED AND BEEN PROVIDED WITH A COPY OF THE PETITION. A PETITION SHALL SET FORTH SUCH FACTS AS MAY BE REQUIRED TO SUPPORT AN EXCEPTION, INCLUDING A GENERAL DESCRIPTION OF THE POTENTIAL IMPACTS OF SUCH POTENTIAL SOURCE OR POTENTIAL ROUTE UPON GROUNDWATERS AND THE AFFECTED WATER WELL, AND AN EXPLANATION OF THE APPLICABLE TECHNOLOGY-BASED CONTROLS WHICH WILL BE UTILIZED TO MINIMIZE THE POTENTIAL FOR CONTAMINATION OF THE POTABLE WATER SUPPLY WELL. (Section 14.2(c) of the Act)~~

~~e) THE BOARD SHALL GRANT AN EXCEPTION, WHENEVER IT IS FOUND UPON PRESENTATION OF ADEQUATE PROOF, THAT COMPLIANCE WITH THE SETBACK REQUIREMENTS OF THIS SECTION WOULD POSE AN ARBITRARY AND UNREASONABLE HARDSHIP UPON THE PETITIONER, THAT THE PETITIONER WILL UTILIZE THE BEST AVAILABLE TECHNOLOGY CONTROLS ECONOMICALLY ACHIEVABLE TO MINIMIZE THE LIKELIHOOD OF CONTAMINATION OF THE POTABLE WATER SUPPLY WELL, THAT THE MAXIMUM FEASIBLE ALTERNATIVE SETBACK WILL BE UTILIZED, AND THAT THE LOCATION OF SUCH POTENTIAL SOURCE OR POTENTIAL ROUTE WILL NOT CONSTITUTE A SIGNIFICANT HAZARD TO THE POTABLE WATER SUPPLY WELL. (Section 14.2(c) of the Act)~~

~~f) A DECISION MADE BY THE BOARD PURSUANT TO THIS SUBSECTION SHALL CONSTITUTE A FINAL DETERMINATION. (Section 14.2(c) of the Act)~~

~~g) THE GRANTING OF AN EXCEPTION BY THE BOARD SHALL NOT EXTINGUISH THE WATER WELL OWNER'S RIGHTS UNDER SECTION 6b OF THE ILLINOIS WATER WELL CONSTRUCTION CODE IN INSTANCES WHERE THE OWNER HAS ELECTED NOT TO PROVIDE A WAIVER PURSUANT TO subsection (a) *of this section*. (Section 14.2(c) of the Act)~~

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

### **Section 616.105 General Exceptions**

a) This Part does not apply to any facility or unit, or to the owner or operator of any facility or unit, for which:

- 1) The owner or operator obtains certification of minimal hazard under ~~pursuant to~~ Section 14.5 of the Act; or
  - 2) Alternate requirements are imposed in an adjusted standard proceeding or ~~in a site-specific rulemaking; under pursuant to~~ Title VII of the Act; or
  - 3) Alternate requirements are imposed in a regulated recharge area proceeding under ~~pursuant to~~ Section 17.4 of the Act; or
  - 4) The owner or operator of the facility for storage and related handling of pesticides or fertilizers for ~~the purpose of~~ commercial application or at a central location for ~~the purpose of~~ distribution to retail sales outlets that has filed a written notice of intent under ~~pursuant to~~ Section 14.6 of the Act with the Department of Agriculture by January 1, 1993, *or within 6 months after the date on which a maximum setback zone is established or a regulated recharge area regulation is adopted that affects such a facility* ~~OR WITHIN 6 MONTHS AFTER THE DATE ON WHICH A MAXIMUM SETBACK ZONE IS ESTABLISHED OR A REGULATED RECHARGE AREA REGULATION IS ADOPTED THAT AFFECTS SUCH A FACILITY~~; or has filed a written certification of intent under ~~pursuant to~~ Section 14.6 of the Act *on the appropriate license or renewal application form submitted to the Department of Agriculture or other appropriate agency. [415 ILCS 5/14.6]* ~~ON THE APPROPRIATE LICENSE OR RENEWAL APPLICATION FORM SUBMITTED TO THE DEPARTMENT OF AGRICULTURE OR OTHER APPROPRIATE AGENCY (Section 14.6(a) of the Act)~~. This exception ~~does will~~ shall not apply to those facilities that are not in compliance with the program requirements of Sections ~~subsections~~ 14.6(b) and 14.6(c) of the Act.
- b) Nothing in this Section ~~limits shall limit~~ the authority of the Board to impose requirements on any facility or unit within any portion of any setback zone or regulated recharge area in any adjusted standard proceeding, site-specific rulemaking, or a regulatory proceeding establishing the regulated recharge area.

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

## SUBPART B: GROUNDWATER MONITORING REQUIREMENTS

### Section 616.202 Compliance Period

The compliance period is the active life of the unit, including closure and post-closure care periods.

- a) The active life begins when the unit first begins operation or one year after the date of first applicability, whichever occurs later, and ends when the post-closure care period ends.

- b) The post-closure care period for units other than pesticide storage and handling units subject to Subpart I and fertilizer storage and handling units subject to Subpart J is five years after closure, except as provided ~~in~~ Section 616.211(e).
- c) The post-closure care period for pesticide storage and handling units subject to Subpart I and for fertilizer storage and handling units subject to Subpart J is three years after closure, except as provided ~~in~~ Section 616.211(e).
- d) ~~Despite subsections~~ Subsections (a), (b), and (c) ~~notwithstanding~~, no post-closure care period is required if all waste, waste residues, contaminated containment system components, and contaminated subsoils are removed or decontaminated at closure, and no ongoing corrective action is required ~~under~~ pursuant to Section 616.211.

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

### **Section 616.203 Compliance With Groundwater Standards**

The owner or operator ~~must~~ ~~shall~~ comply with the groundwater standards.

- a) The term of compliance is the compliance period.
- b) Compliance ~~must~~ ~~shall~~ be measured at the compliance point, or compliance points if more than one such point exists.

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

### **Section 616.205 Groundwater Monitoring Program**

The owner or operator ~~must~~ ~~shall~~ develop a groundwater monitoring program that consists of:

- a) Consistent sampling and analysis procedures that are designed to ensure monitoring results that provide a reliable indication of groundwater quality below the unit. At a minimum, the program must include procedures and techniques for:
  - 1) Sample collection;
  - 2) Sample preservation and shipment;
  - 3) Analytical procedures; and
  - 4) Chain of custody control.
- b) Sampling and analytical methods that are appropriate for groundwater monitoring and that allow for detection and quantification of contaminants specified in this

Subpart, and that are consistent with the sampling and analytical methods specified in 35 Ill. Adm. Code 620.

- c) ~~Determining A determination~~ of the groundwater head elevation each time groundwater is sampled.
- d) ~~Determining A determination~~ at least annually of the groundwater flow rate and direction.
- e) If the owner or operator determines that the groundwater monitoring program no longer satisfies the requirements of this Section, the owner or operator ~~must~~ shall, within 90 days, make appropriate changes to the program. Conditions under which a groundwater monitoring program no longer satisfies the requirements of this Section include, ~~but are not limited to:~~
  - 1) A Maximum Allowable Result (MAR) is exceeded in any monitoring well that is being used as a background monitoring well or that the owner or operator has previously determined to be hydraulically upgradient from the facility; or
  - 2) A redetermination of groundwater flow rate and direction conducted under pursuant to subsection (d) shows that the existing monitoring system is not capable of assessing groundwater quality at the compliance points or points.

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

### **Section 616.206 Reporting**

The owner or operator ~~must~~ shall submit the results of all monitoring required under pursuant to this Subpart to the Agency within 60 days after ~~completion of sampling is completed~~.

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

### **Section 616.207 Determining Background Values and Maximum Allowable Results ("MARs")**

- a) The owner or operator ~~must~~ shall, by the start beginning no later than the beginning of operation of the unit and continuing for ~~a period of~~ at least one year, sample each monitoring well at least every two months and analyze each ~~such~~ sample according to the following program:
  - 1) For a unit subject to Subpart E (land treatment units), Subpart F (surface impoundments), Subpart K (road oil storage and handling units), or Subpart L (de-icing agent storage and handling units), samples analysis must shall be analyzed for pH, specific conductance, total organic carbon,

total organic halogen, and any other parameter that meets the following criteria:

- A) Material containing the such parameter is stored, treated or disposed of at the unit; and
  - B) There is a groundwater standard for such parameter.
- 2) For a unit subject to Subpart I for the storage and handling of pesticides, analysis ~~must shall~~ be for each pesticide stored or handled at the unit.
  - 3) For a unit subject to Subpart J for the storage and handling of fertilizer, ~~samples analysis must shall~~ be analyzed for pH, specific conductance, total organic carbon, nitrates as nitrogen, ammonia nitrogen, and ~~for~~ any other parameter that meets the following criteria:
    - A) Material containing the such parameter is stored or handled at the unit; and
    - B) There is a groundwater standard for the such parameter.
- b) The results obtained under subsection (a) ~~must shall~~ be used to calculate the background mean, background standard deviation, and the Maximum Allowable Result ("MAR" ~~hereinafter referred to as "MAR"~~) for each parameter using the following procedures:
- 1) Results from all samples collected during the year must be used in the calculations unless the owner or operator demonstrates to the Agency that one or more of the results was due to error in sampling, analysis, or evaluation.
  - 2) All calculations must be based on ~~a minimum of~~ at least six sample measurements per parameter per well.
  - 3) If any measured value is equal to or greater than its PQL, or if any measured value is greater than its corresponding groundwater standard, the actual measured value must be used to calculate ~~calculating~~ the mean and standard deviation.
  - 4) If any measured value is less than its PQL and less than its corresponding groundwater standard, the PQL rather than the measured value ~~must is to~~ be used in calculating the mean and standard deviation.
  - 5) Except for pH, the MAR is the quantity equal to the measured mean value of the contaminant plus the product of the contaminant's standard deviation times the following constant:

Sample Size	Constant
6	2.10
7	2.03
8	1.97
9	1.93
10	1.90
11	1.88
12	1.85
13	1.84
14	1.82

- 6) For pH, the upper limit for the MAR is the quantity equal to the measured background mean pH plus the product of the calculated background standard deviation of the samples times the constant tabulated in subsection (b)(a)(5).
- 7) For pH, the lower limit of the MAR is the quantity equal to the measured background mean pH minus the product of the calculated background standard deviation of the samples times the constant tabulated in subsection (b)(a)(5).

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

### Section 616.208 Continued Sampling

Upon completion of the background sampling required ~~under pursuant to~~ Section 616.207, the owner or operator ~~must shall~~ sample each monitoring well for the duration of the compliance period and analyze each sample, except as provided in Section 616.209, according to the following program:

- a) For a unit subject to Subpart E (land treatment units) or Subpart F (surface impoundments), ~~samples sampling must shall~~ be collected at least quarterly and ~~analyzed analysis must shall be~~ for pH, specific conductance, total organic carbon, total organic halogen, and any other parameter that meets the following criteria:
  - 1) Material containing ~~the such~~ parameter is stored, treated, or disposed of at the unit; and
  - 2) The Board has adopted a groundwater standard for ~~the such~~ parameter.
- b) For a unit subject to Subpart I for the storage and handling of pesticides, ~~samples sampling must shall~~ be collected at least quarterly, except as provided in subsection (d), and ~~analyzed analysis must shall be~~ for the five specific pesticides or five groups of chemically similar ~~chemically similar~~ pesticides stored or

handled at the unit that are the most likely to enter into the groundwater from the unit and that are the most toxic. The owner or operator must shall choose the five specific pesticides or five groups based upon the following criteria:

- 1) The volume of the pesticides stored or handled at the unit;
  - 2) The leachability characteristics of the pesticides stored or handled at the unit;
  - 3) The toxicity characteristics of the pesticides stored or handled at the unit;
  - 4) The history of spillage of the pesticides stored or handled at the unit; and
  - 5) Any groundwater standards for the pesticides stored or handled at the unit.
- c) For a unit subject to Subpart J for the storage and handling of fertilizer, samples sampling must shall be collected at least quarterly, except as provided in subsection (d), and analyzed analysis must shall be for pH, total organic carbon, nitrates as nitrogen, ammonia nitrogen, and specific conductance.
- d) Despite subsections Subsections (b) and (c) notwithstanding, for a unit subject to Subpart I for the storage and handling of pesticides or for a unit subject to Subpart J for the storage and handling of fertilizers, samples sampling must shall be collected at least semi-annually if provided that all of the following conditions are met:
- 1) The unit is in compliance with the containment requirements of 8 Ill. Adm. Code 255; and
  - 2) There have been no detections within the preceding two years in any of the monitoring wells of any contaminant stored or handled at the facility or of any contaminant attributable to the operation of the unit; and
- e) For a unit subject to Subpart K for the storage and handling of road oils or subject to Subpart L for the storage and handling of de-icing agents, samples sampling must shall be collected annually and analyzed analysis must shall be for pH, specific conductance, total organic carbon, and total organic halogen.

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

### **Section 616.209 Preventive Notification and Preventive Response**

- a) Preventive notification is required for each well in which:
  - 1) A MAR is ~~found to be~~ exceeded (except for pH);; or

- 2) There is a detection of any contaminant:
  - A) Required to be monitored under Section 616.207(a);
  - B) Listed under 35 Ill. Adm. Code 620.310(a)(3)(A) (except due to natural causes and except for pH);
  - C) Denoted as a carcinogen under 35 Ill. Adm. Code 620.410(b); or
  - D) Subject to a standard under 35 Ill. Adm. Code 620.430 (except due to natural causes).
  
- b) Whenever preventive notification is required under subsection (a), the owner or operator of the unit ~~must shall~~ confirm the detection by resampling the monitoring well or wells. This resampling ~~must shall~~ be analyzed for each parameter found to be present in the first sample and be performed within 30 days after the date on which the first sample analyses are received. The owner or operator must provide preventative notification of the results of the resampling analyses within 30 days after the date on which those analyses are received, but no later than 90 days after the results of the first sample are received.
  
- c) If preventive notification is provided under subsection ~~(a)~~ (b) by the owner or operator and the applicable standard has not been exceeded, the Agency ~~must shall~~ determine whether the levels for each parameter as set forth in 35 Ill. Adm. Code 620.310(a)(3)(A) are exceeded. If an exceedence is determined, the Agency ~~must shall~~ notify the owner or operator in writing regarding ~~the such~~ finding.
  
- d) Within 60 days after receiving a notification from the Agency of its~~under subsection (c). Upon receipt of a finding that an exceedence has occurred,~~ the owner or operator ~~must shall~~ submit to the Agency ~~within 60 days~~ a report that ~~includes, at a minimum, shall include~~ the degree and extent of contamination and the measures that are being taken to minimize or eliminate ~~the this~~ contamination, in ~~compliance accordance~~ with a prescribed schedule. The owner or operator may also provide a demonstration that:
  - 1) The contamination is the result of contaminants remaining in groundwater from a prior release for which appropriate action was taken in ~~compliance accordance~~ with the laws and regulations in existence at the time of the release;
  - 2) The source of contamination is not due to the on-site release of contaminants; or
  - 3) The detection resulted from error in sampling analysis or evaluation.

- e) Based upon the report in subsection (d) as well as any other relevant information available to the Agency, the Agency ~~must~~ shall provide a written response to the owner or operator that specifies either:
- 1) Concurrence with the preventive response being undertaken; or
  - 2) Non-concurrence with the preventive response being undertaken and a description of the inadequacies of such action.
- f) An owner or operator who receives a written response of concurrence ~~under pursuant to~~ subsection (e) must ~~shall~~ provide periodic program reports to the Agency regarding the implementation of the preventive response.
- g) An owner or operator who receives a written response of non-concurrence ~~under pursuant to~~ subsection (e) must, shall have ~~within 30 days after receiving the response, to~~ correct the inadequacies and ~~to~~ resubmit the report to the Agency or ~~to~~ request a conference with the Agency. Within 30 days after receiving of ~~Upon receipt of~~ a written request for such a conference, the Agency must ~~shall~~ schedule and hold the conference ~~within 30 days~~. Following the ~~a~~ conference, the Agency must ~~shall~~ provide the owner or operator with a final determination regarding the adequacy of the preventive response.
- h) An owner or operator ~~is~~ must ~~shall be~~ responsible for implementing adequate preventive response as determined under ~~pursuant to~~ this Section.
- i) After completion of preventive response, the concentration of a contaminant ~~contamination~~ listed in 35 Ill. Adm. Code 620.310(a)(3)(A) in groundwater may exceed 50 percent of the applicable numerical standard in 35 Ill. Adm. Code 620.Subpart D only if the following conditions are met:
- 1) The exceedence has been minimized to the extent practicable;
  - 2) Beneficial use, as appropriate for the class of groundwater, has been assured; and
  - 3) Any threat to public health or the environment has been minimized.
- j) Nothing in this Section limits ~~shall in any way limit~~ the authority of the State or the United States to require or perform any corrective action process.

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

### **Section 616.210 Corrective Action Program**

Whenever any applicable groundwater standard under 35 Ill. Adm. Code 620.Subpart D is exceeded, an owner or operator ~~must shall be required to~~ undertake the following corrective action:

- a) Notify the Agency of the need to undertake a corrective action program when submitting the groundwater monitoring results required ~~under pursuant to~~ Section 616.206. The notification must indicate in which wells and for which parameters a groundwater standard was exceeded.
- b) Continue to sample and analyze according to ~~the provisions of~~ Section 616.208(a), except that:
  - 1) For a ~~unit all units~~ subject to Subpart I for the storage and handling of pesticides, ~~the frequency of all such samples sampling must shall~~ be collected quarterly until no measured values above the groundwater standard have been recorded for any parameter for two consecutive quarters.
  - 2) For a unit subject to Subpart J for the storage and handling of fertilizers, ~~samples sampling must shall~~ be collected quarterly for the parameters specified set forth in Section 616.207(a)(3) that are stored or handled at the unit until no measured values above the groundwater standard have been recorded for two consecutive quarters.
- c) If sample values above any groundwater standard are confirmed ~~under pursuant to~~ Section 616.209(b), the owner or operator ~~must shall~~:
  - 1) Submit to the Agency an engineering feasibility plan for a corrective action program designed to achieve the requirements of subsections subsection (e) through (i)(j).
    - A) ~~The Such~~ feasibility plan ~~must shall~~ be submitted to the Agency within 180 days after the date of the sample in which a groundwater standard was initially exceeded.
    - B) ~~The This~~ requirement under subsection (c) is waived if no groundwater standard is exceeded in any sample taken under pursuant to subsection (b) for two consecutive quarters.
- d) Except as provided in subsection (c)(1)(B), the Agency ~~must shall~~ provide a written response to the owner or operator based upon the engineering feasibility plan and any other relevant information that specifies either:
  - 1) Concurrence with the feasibility plan for corrective action; or

- 2) Non-concurrence with the feasibility plan for corrective action and a description of the inadequacies of the such plan.
- e) An owner or operator who receives a written response of concurrence under pursuant to subsection (d) must shall provide periodic progress reports to the Agency regarding implementationthe implementing of the corrective action preventive response.
- f) An owner or operator who receives a written response of non-concurrence under pursuant to subsection (d) must, shall have within 30 days after of receiving the response, ~~to~~ correct the inadequacies and ~~to~~ resubmit the report to the Agency or ~~to~~ request a conference with the Agency. Within 30 days after receiving ~~Upon receipt of~~ a written request for ~~such~~ a conference, the Agency must shall schedule and hold the conference ~~within 30 days~~. Following the a conference, the Agency must shall provide the owner or operator with a final determination regarding the adequacy of the corrective action.
- g) An owner or operator ~~is shall be~~ responsible for implementing adequate corrective action preventive response as determined under pursuant to this Section.
- h) Except as provided in subsection (c)(1)(B), the owner or operator must shall:
- 1) Begin the corrective action program specified in the engineering feasibility plan by no later than the date of receipt of concurrence from the Agency.
  - 2) Establish and implement a groundwater monitoring program to demonstrate the effectiveness of the corrective action program.
  - 3) Take corrective action that results in compliance with the groundwater standards:
    - A) At all compliance points; and
    - B) Beyond the unit boundary, if where necessary to protect human health and the environment, unless the owner or operator demonstrates to the Agency that, despite the owner's or operator's best efforts, the owner or operator was unable to obtain the necessary permission to undertake such action. The owner or operator is not relieved of any responsibility to clean up a release that has migrated beyond the unit boundary where off-site access is denied.
  - 4) Continue corrective action measures to the extent necessary to ensure that no groundwater standard is exceeded at the compliance point or points.

- 5) The owner or operator may terminate corrective action measures taken beyond the compliance period as identified ~~in~~ Section 616.202 if the owner or operator can demonstrate, based on data from the post-closure groundwater monitoring program under subsection (h)(2), that no groundwater standard has been exceeded for a ~~period of~~ three consecutive years.
  - 6) Report in writing to the Agency on the effectiveness of the corrective action program. The owner or operator must ~~shall~~ submit these reports semi-annually.
  - 7) If the owner or operator determines that the corrective action program no longer satisfies the requirements of this Section, the owner or operator must ~~shall~~, within 90 days, make any appropriate changes to the program.
- i) Subsections (b), (c), and (f) do not apply if the owner or operator makes an alternative corrective action demonstration under ~~pursuant to~~ Section 616.211.

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

### **Section 616.211 Alternative Corrective Action Demonstration**

If a corrective action program is required under ~~pursuant to~~ Section 616.210, it is presumed that contamination from the facility or unit that is being monitored is responsible for the groundwater standard being exceeded. An owner or operator may overcome that presumption by making a demonstration that a source other than the facility or unit that is being monitored caused the groundwater standard to be exceeded, or that the cause of the groundwater standard being exceeded is due to error in sampling, analysis or evaluation.

- a) In making the ~~such~~ demonstration, the owner or operator must ~~shall~~:
  - 1) Notify the Agency that the owner or operator intends to make a demonstration under this Section when submitting the groundwater monitoring results under ~~pursuant to~~ Section 616.206; and
  - 2) Submit a report to the Agency that demonstrates that a source other than a facility or unit owned or operated by ~~for which he is~~ the owner or operator caused the groundwater standard to be exceeded, or that the groundwater standard was exceeded due to an error in sampling, analysis or evaluation. This ~~Such~~ report must be included with the next submission of groundwater monitoring results required under ~~pursuant to~~ Section 616.206; ~~and~~
- b) The Agency must ~~shall~~ provide a written response to the owner or operator, based upon the written demonstration and any other relevant information, that specifies either:

- 1) Concurrence with the written demonstration for alternative corrective action with requirements to continue to monitor in compliance accordance with the groundwater monitoring program established under pursuant to Sections 616.205 and 616.210; or
  - 2) Non-concurrence with the written demonstration for alternative corrective action and a description of the inadequacies of such demonstration.
- c) An owner or operator who receives a written response of non-concurrence under pursuant to subsection (b) must, within (e) shall have 30 days after of receiving the response, to so respond to the Agency in writing or to request a conference with the Agency. Within 30 days after receiving Upon receipt of a written request for such a conference, the Agency must shall schedule and hold the conference within 30 days. Following the a-conference, the Agency must shall provide the owner or operator with a final determination regarding the adequacy of the alternative corrective action.
- d) The owner or operator must shall begin the corrective action program in compliance accordance with the requirements of Section 616.210(~~f~~).

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

#### SUBPART C: GENERAL CLOSURE AND POST-CLOSURE REQUIREMENTS

##### **Section 616.302 Closure Performance Standard**

The owner or operator must shall close the unit in a manner that:

- a) Controls, minimizes, or eliminates, to the extent necessary to protect human health and the environment, post-closure escape of waste, waste constituents, leachate, contaminated runoff, or waste decomposition products to soils, groundwaters, surface waters, or the atmosphere;
- b) Minimizes the need for maintenance during and beyond the post-closure care period; and
- c) Complies with the closure requirements of 35 Ill. Adm. Code: Subtitles C and G.

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

##### **Section 616.303 Certification of Closure**

Within 60 days after ~~completion of the~~ closure of each unit is completed, the owner or operator must shall submit to the Agency, by registered or certified mail, a certification that the unit has been closed in compliance accordance with the closure requirements. The certification must be

signed by the owner or operator and by an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the Agency upon request.

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

#### **Section 616.304 Survey Plat**

- a) ~~Before~~ ~~No later than~~ the submission of the certification of closure of each unit, the owner or operator must record with land titles and shall submit to the Agency and any local zoning authority, or authority with jurisdiction over local land use; ~~and to the Agency, and record with land titles,~~ a survey plat indicating the location and dimensions of any waste disposal units, and any pesticide or fertilizer storage and handling units, with respect to permanently surveyed benchmarks. This plat must be prepared and certified by a registered land surveyor.
- b) For pesticide storage and handling units or ~~for~~ fertilizer storage and handling units, records or reports required under any other State state or federal Federal regulatory program and which contain the information required under subsection (a) above may be used to satisfy that this reporting requirement.

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

#### **Section 616.305 Post-Closure Notice for Waste Disposal Units**

Within ~~No later than~~ 60 days after certification of closure of the unit, the owner or operator of a unit subject to Subpart ~~Subparts~~ D, E, or F must shall submit to the Agency, ~~to the County Recorder,~~ and ~~to~~ any local zoning authority, or authority with jurisdiction over local land use; a record of the type, location and quantity of wastes disposed of within each cell or other area of the unit.

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

#### **Section 616.306 Certification of Completion of Post-closure Care**

Within ~~No later than~~ 60 days after completion of the established post-closure care period, the owner or operator must shall submit to the Agency, by registered or certified mail, a certification that the post-closure care period for the unit was performed in compliance accordance with the specifications in the approved post-closure plan. The certification must be signed by the owner or operator and an independent registered professional engineer. Documentation supporting the independent registered professional engineer's certification must be furnished to the Agency upon request.

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

## SUBPART D: ON-SITE LANDFILLS

**Section 616.401 Applicability**

This Subpart applies to new landfill units which are located wholly or partially within a setback zone or regulated recharge area and that contain special waste or other waste generated on-site, except that this Subpart does not apply to any new landfill unit that:

- a) Contains solely one or more of the following: hazardous waste, livestock waste, landscape waste, or construction and demolition debris; or
- b) Is exempt from this Part ~~under pursuant to~~ Section 616.105.

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

**Section 616.402 Prohibitions**

- a) ~~Under pursuant to~~ Sections 14.2(a), 14.2(c), and 14.3(e) of the Act, a person must not no person shall cause or allow the construction or operation of any landfill unit that is:
  - 1) Located wholly or partially within a minimum setback zone and that is either a new potential primary source or a new potential secondary source, except as specified in Sections 616.104~~(a) and (b)~~; or
  - 2) Located wholly or partially within a maximum setback zone and that is a new potential primary source, except as specified in Section 616.104~~(b)~~.
- b) A person must not ~~No person shall~~ cause or allow the disposal of special waste in a new on-site landfill unit within a regulated recharge area if the distance from the wellhead of the community water supply well to the landfill unit is 2500 feet or less, except as provided in at Section 616.105.

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

## SUBPART E: ON-SITE LAND TREATMENT UNITS

**Section 616.421 Applicability**

This Subpart applies to new land treatment units that are located wholly or partially within a setback zone or regulated recharge area and that treat or dispose of special waste or other waste generated on-site, except that this Subpart does not apply to any new land treatment unit that:

- a) Contains solely one or more of the following: hazardous waste, livestock waste, landscape waste, or construction and demolition debris; or

- b) Is exempt from this Part ~~under pursuant to~~ Section 616.105.

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

### **Section 616.422 Prohibitions**

- a) ~~Under pursuant to~~ Sections 14.2(a), 14.2(c), and 14.3(e) of the Act, a person must not ~~no person shall~~ cause or allow the construction or operation of any land treatment unit that is:
- 1) Located wholly or partially within a minimum setback zone and that is either a new potential primary source or a new potential secondary source, except as specified in Sections 616.104~~(a) and (b)~~; or
  - 2) Located wholly or partially within a maximum setback zone and that is a new potential primary source, except as specified in Section 616.104~~(b)~~.
- b) Nothing in this Section prohibits, ~~shall prohibit land treatment~~ within a maximum setback zone regulated by the Act, land treatment of sludge resulting from the treatment of domestic wastewater or ~~of sludge resulting from~~ the treatment of water to produce potable water; if the land treatment is ~~such activities are~~ conducted in compliance ~~accordance~~ with the Act and 35 Ill. Adm. Code: Subtitle C.

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

### **Section 616.423 Groundwater Monitoring**

The owner or operator must ~~shall~~ comply with the requirements of Subpart B.

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

### **Section 616.424 Design and Operating Requirements**

The owner or operator must ~~shall~~ design and operate the land treatment site in compliance ~~accordance~~ with 35 Ill. Adm. Code: Subtitle C and 35 Ill. Adm. Code: Subtitle G.

(Source: Amended at 44 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_)

### **Section 616.425 Closure and Post-Closure Care**

The owner or operator must ~~shall~~ comply with the requirements of Subpart C.

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

## **SUBPART F: ON-SITE SURFACE IMPOUNDMENTS**

### Section 616.441 Applicability

This Subpart applies to new surface impoundment units that are located wholly or partially within a setback zone or regulated recharge area and that contain special waste or other waste generated on-site, except that this Subpart does not apply to any new surface impoundment unit that:

- a) Contains solely one or more of the following: hazardous waste, livestock waste, landscape waste, or construction and demolition debris; or
- b) Is exempt from this Part ~~under pursuant to~~ Section 616.105.

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

### Section 616.442 Prohibitions

~~Under pursuant to~~ Sections 14.2(a), 14.2(c), and 14.3(e) of the Act, a person must not ~~no person shall~~ cause or allow the construction or operation of any surface impoundment unit that is:

- a) Located wholly or partially within a minimum setback zone and that is either a new potential primary source or a new potential secondary source, except as specified in Sections 616.104~~(a) and (b)~~; or
- b) Located wholly or partially within a maximum setback zone and that is a new potential primary source, except as specified in Section 616.104~~(b)~~.

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

### Section 616.443 Groundwater Monitoring

The owner or operator must ~~shall~~ comply with the requirements of Subpart B.

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

### Section 616.444 Design Requirements

- a) The owner or operator of a surface impoundment must ~~shall~~ install two or more liners and a leachate collection system between the such liners. This requirement to install~~The requirement for the installation of two or more liners in this subsection~~ may be satisfied by installing~~the installation of~~ a top liner designed, operated, and constructed of materials to prevent the migration of any constituent into the such liner during the period the such facility remains in operation (including any post-closure monitoring period), and a lower liner designed, operated, and constructed of materials to prevent the migration of any constituent through the such liner during that such period. For ~~the purpose of~~ the preceding

sentence, a lower liner satisfies is considered shall be deemed to satisfy the construction such requirement if it is constructed of at least a 5-foot thick layer of recompacted clay or other natural material with a permeability of no more than  $1 \times 10^{(-7)}$  (~~7~~) centimeter per second.

- b) A surface impoundment must be designed, constructed, maintained, and operated to prevent overtopping resulting from normal or abnormal operations; overfilling; wind and wave action; rainfall; run-on; malfunctions of level controllers, alarms, and other equipment; and human error.
- c) A surface impoundment must have dikes that are designed, constructed, and maintained with sufficient structural integrity to prevent massive failure of the dikes. In ensuring structural integrity, it must not be presumed that the liner system will function without leakage during the active life of the surface impoundment.
- d) The owner or operator must shall maintain the following items:
  - 1) Records describing the contents of the impoundment; and
  - 2) A map showing the exact location and dimensions of the impoundment, including depth with respect to permanently surveyed benchmarks.

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

### **Section 616.445 Inspection Requirements**

- a) During construction and installation, liners must be inspected for uniformity, damage, and imperfections (e.g., holes, cracks, thin spots, or foreign materials). Immediately after construction or installation:
  - 1) Synthetic liners and covers must be inspected to ensure tight seams and joints and the absence of tears, punctures, and blisters; and
  - 2) Soil-based and admixed liners and covers must be inspected for imperfections including lenses, cracks, channels, root holes, or other structural non-uniformities that may cause an increase in the permeability of that liner or cover.
- b) During operation. ~~While a surface impoundment is in operation,~~ it must be inspected weekly and after storms to detect evidence of any of the following:
  - 1) Deterioration, malfunctions, or improper operation of overtopping control systems;
  - 2) Sudden drops in the level of the impoundment's contents;

- 3) Severe erosion or other signs of deterioration in dikes or other containment devices; or
- 4) A leaking dike.

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

### **Section 616.446 Operating Requirements**

- a) A person must not ~~No person shall~~ cause or allow incompatible materials to be placed in the same surface impoundment unit.
- b) A surface impoundment unit must be removed from service in compliance ~~accordance~~ with subsection (c) when:
  - 1) The level of liquids in the unit suddenly drops and the drop is not known to be caused by changes in the flows into or out of the unit; or
  - 2) The dike leaks.
- c) When a surface impoundment unit ~~is~~ must be removed from service as required by subsection (b), the owner or operator must ~~shall~~:
  - 1) Shut off the flow or stop the addition of wastes into the impoundment unit;
  - 2) Contain any surface leakage that has occurred or is occurring;
  - 3) Stop the leak;
  - 4) Take any other necessary steps to stop or prevent catastrophic failure;
  - 5) If a leak cannot be stopped by any other means, empty the impoundment unit; and
  - 6) Notify the Agency of the removal from service and corrective actions that were taken, ~~such notice to be given~~ within 10 days after the removal from service.
- d) A ~~No~~ surface impoundment unit that has been removed from service in compliance ~~accordance~~ with the requirements of this Section may be restored to service only if ~~unless~~ the portion of the unit that failed has been repaired.
- e) A surface impoundment unit that has been removed from service in compliance ~~accordance~~ with the requirements of this Section and that is not being repaired must be closed in compliance ~~accordance~~ with the provisions of Section 616.447.

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

### Section 616.447 Closure and Post-Closure Care

- a) If closure is to be by removal, the owner or operator must ~~shall~~ remove all waste, all waste residues, contaminated containment system components (e.g., liners~~liners, etc.~~), contaminated subsoils and structures and equipment contaminated with waste and leachate; and, if disposed of in the State of Illinois, dispose of them at a disposal site permitted by the Agency under the Act.
- b) If closure is not to be by removal, the owner or operator must ~~shall~~ comply with the requirements of Subpart C and must ~~shall~~:
  - 1) Eliminate free liquids by removing liquid wastes or solidifying the remaining wastes and waste residues.
  - 2) Stabilize remaining wastes to a bearing capacity sufficient to support final cover.
  - 3) Cover the surface impoundment unit with a final cover designed and constructed to:
    - A) Provide long-term minimization of the migration of liquids through the closed impoundment unit;
    - B) Function with minimum maintenance;
    - C) Promote drainage and minimize erosion or abrasion of the final cover;
    - D) Accommodate settling and subsidence so that the cover's integrity is maintained; and
    - E) Have a permeability less than or equal to the permeability of any bottom liner system.
- c) If some waste residues or contaminated materials are left in place at final closure, the owner or operator must ~~shall~~ comply with the requirements of Subpart C ~~and shall for a period of five 5 years after closure~~ and must:
  - 1) Maintain the integrity and effectiveness of the final cover, including making repairs to the cap as necessary to correct the effects of settling, subsidence, erosion, or other events;
  - 2) Maintain and monitor the groundwater monitoring system; and

- 3) Prevent run-on and run-off from eroding or otherwise damaging the final cover.

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

#### SUBPART G: ON-SITE WASTE PILES

##### **Section 616.461 Applicability**

This Subpart applies to new waste piles that are located wholly or partially within a setback zone or regulated recharge area and that contain special waste or other waste generated on-site, except that this Subpart does not apply to any new waste pile that:

- a) Contains solely one or more of the following: hazardous waste, livestock waste, landscape waste, or construction and demolition debris; or
- b) Consists of sludge resulting from the treatment of domestic wastewater from a POTW and the sludge pile is situated on an underdrained pavement and operated in ~~compliance accordance~~ with the Act, 35 Ill. Adm. Code: Subtitle C and 35 Ill. Adm. Code: Subtitle G; or
- c) Is exempt from this Part ~~under pursuant to~~ Section 616.105.

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

##### **Section 616.462 Prohibitions**

- a) ~~Under Pursuant to~~ Sections 14.2(a), 14.2(c), and 14.3(e) of the Act, a person must not ~~no person shall~~ cause or allow the construction or operation of any waste pile that is:
  - 1) Located wholly or partially within a minimum setback zone and that is either a new potential primary source or a new potential secondary source, except as specified in Sections 616.104(a) ~~and (b)~~; or
  - 2) Located wholly or partially within a maximum setback zone and that is a new potential primary source, except as specified in Section 616.104(b).
- b) A person must not ~~No person shall~~ cause or allow the disposal of special waste in a new waste pile within a regulated recharge area if the distance from the wellhead of the community water supply well to the waste pile is 2500 feet or less, except as provided ~~in at~~ Section 616.105
- c) Nothing in this Section ~~prohibits shall prohibit~~ a waste pile, within a maximum setback zone regulated by the Act, of sludge resulting from the treatment of

domestic wastewater or of sludge resulting from the treatment of water to produce potable water, if such activities are conducted in compliance ~~accordance~~ with the Act, 35 Ill. Adm. Code: Subtitle C, Subtitle F, and Subtitle G.

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

### **Section 616.463 Design and Operating Requirements**

- a) A person must not ~~No person shall~~ cause or allow:
- 1) Disposal or storage in the waste pile of liquids or materials containing free liquids; or
  - 2) Migration and runoff of leachate into adjacent soil, surface water, or groundwater.
- b) A waste pile must comply with the following standards:
- 1) The waste pile must be under an impermeable membrane or cover that provides protection from precipitation;
  - 2) The waste pile must be protected from surface water run-on; and
  - 3) The waste pile must be designed and operated to control wind dispersal of waste by a means other than wetting.

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

### **Section 616.464 Closure**

The owner or operator must complete ~~shall accomplish~~ closure by removing and disposing of all wastes and containment system components (e.g., ~~liners~~ ~~liners,~~ etc). If disposed of in the State of Illinois, the waste and containment system components must be disposed of at a disposal site permitted by the Agency under the Act.

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

## SUBPART H: UNDERGROUND STORAGE TANKS

### **Section 616.501 Applicability**

This Subpart applies to new underground storage tanks that are located wholly or partially within a setback zone or regulated recharge area and that contain special waste, except that this Subpart does not apply to any new underground storage tank that:

- a) ~~Under Pursuant to~~ 35 Ill. Adm. Code 731.110(a) must meet the requirements set forth in 35 Ill. Adm. Code 731, unless such a tank is excluded from those requirements under pursuant to 35 Ill. Adm. Code 731.110(b); ~~or~~
- b) Has ~~Must have~~ interim status or a RCRA permit under 35 Ill. Adm. Code: Subtitle G; or
- c) Is exempt from this Part under pursuant to Section 616.105.

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

### **Section 616.502 Design and Operating Requirements**

Owners and operators of new underground storage tanks that store special waste ~~must shall~~ meet the requirements set forth in 35 Ill. Adm. Code 731. ~~These Such~~ requirements must be met even if the tanks are excluded from coverage under ~~35 Ill. Adm. Code 731 by~~ 35 Ill. Adm. Code 731.110(b). The exclusions set forth in 35 Ill. Adm. Code 731.110(b) ~~does shall~~ not apply to any underground storage tank that stores special waste.

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

#### SUBPART I: PESTICIDE STORAGE AND HANDLING UNITS

### **Section 616.601 Applicability**

- a) This Subpart applies to any new unit for the storage and handling of pesticides that is located wholly or partially within a setback zone or regulated recharge area and that:
  - 1) Is operated for ~~the purpose of~~ commercial application; or
  - 2) Stores or accumulates pesticides prior to distribution to retail sales outlets, including ~~but not limited to~~ a unit that is a warehouse or bulk terminal.
- b) Despite subsections ~~Subsections~~ (a)(1) and (a)(2) ~~notwithstanding~~, this Subpart does not apply to any unit exempt under pursuant to Section 616.105.

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

### **Section 616.602 Prohibitions**

Under Pursuant to Sections 14.2(a), 14.2(c), and 14.3(e) of the Act, a person must not ~~no person shall~~ cause or allow the construction or operation of any unit for the storage and handling of pesticides that is:

- a) Located wholly or partially within a minimum setback zone and that is either a new potential primary source or a new potential secondary source, except as specified in Section 616.104(a) and (b); or
- b) Located wholly or partially within a maximum setback zone and that is a new potential primary source, except as specified in Section 616.104(b).

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

### **Section 616.603 Groundwater Monitoring**

The owner or operator must ~~shall~~ comply with the requirements of Subpart B.

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

### **Section 616.604 Design and Operating Requirements**

The owner or operator must ~~shall~~:

- a) Maintain a written record inventorying all pesticides stored or handled at the unit.
- b) At least weekly when pesticides are being stored, inspect storage containers, tanks, vents, valves, and appurtenances for leaks or deterioration caused by corrosion or other factors. If a leak or deterioration is found in any of these devices, the owner or operator must immediately repair or replace the device. The owner or operator must ~~shall~~ maintain a written record of all inspections conducted under this Section and of all maintenance relating to leaks and deterioration of these devices.
- c) Store all containers containing pesticides within a pesticide secondary containment structure, if ~~such~~ containers are stored outside of a roofed structure or enclosed warehouse. For ~~the purpose of~~ this subsection, a pesticide secondary containment structure is a structure that complies with the design standards ~~set forth~~ in 8 Ill. Adm. Code 255.
- d) Maintain all written records required under this Section at the site. The owner or operator must ~~shall~~ provide the written records ~~any such record~~ to the Agency upon request.

(Board Note: Owners or operators of facilities or units subject to this Part may also be subject to regulations under 8 Ill. Adm. Code 255.)

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

### Section 616.605 Closure and Post-Closure Care

The owner or operator must shall comply with the requirements of Subpart C.

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

### SUBPART J: FERTILIZER STORAGE AND HANDLING UNITS

#### Section 616.621 Applicability

This Subpart applies to any new unit for the storage and handling of fertilizers that is located wholly or partially within a setback zone or regulated recharge area and that:

- a) Is operated for ~~the purpose of~~ commercial application; or
- b) Stores or accumulates fertilizers prior to distribution to retail sales outlets, including ~~but not limited to~~ a unit that is a warehouse or bulk terminal.
- c) Despite subsections ~~Subsections (a) and (b) (1) and (2) notwithstanding~~, this Subpart does shall not apply to any unit exempt under pursuant to Section 616.105.

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

#### Section 616.622 Prohibitions

Under Pursuant to Sections 14.2(a), 14.2(c), and 14.3(e) of the Act, a person must not no person shall cause or allow the construction or operation of any unit for the storage and handling of fertilizers that is:

- a) Located wholly or partially within a minimum setback zone and that is either a new potential primary source or a new potential secondary source, except as specified in Sections 616.104~~(a) and (b)~~; or
- b) Located wholly or partially within a maximum setback zone and that is a new potential primary source, except as specified in Section 616.104~~(b)~~.

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

#### Section 616.623 Groundwater Monitoring

The owner or operator must shall comply with the requirements of Subpart B.

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

### Section 616.624 Design and Operating Requirements

The owner or operator ~~must~~ shall:

- a) Maintain a written record inventorying all fertilizers stored or handled at the unit.
- b) At least weekly when fertilizers are being stored, inspect storage containers, tanks, vents, valves, and appurtenances for leaks or deterioration caused by corrosion or other factors. If a leak or deterioration is found in any of these devices, the owner or operator ~~must~~ shall immediately repair or replace the device. The owner or operator ~~must~~ shall maintain a written record of all inspections conducted under this Section and of all maintenance relating to leaks and deterioration of these devices.
- c) Store all containers containing fertilizers (except anhydrous ammonia) within a fertilizer secondary containment structure, if ~~the such~~ containers are stored outside of a roofed structure or enclosed warehouse. ~~For the purpose of this subsection, a fertilizer secondary containment structure is a structure that complies with the design standards set forth in 8 Ill. Adm. Code 255.~~
- d) Maintain all written records required under this Section at the site. The owner or operator ~~must~~ shall provide the written records ~~any such record~~ to the Agency upon request.

(Board Note: Owners or operators of facilities or units subject to this Part may also be subject to regulations under 8 Ill. Adm. Code 255.)

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

### Section 616.625 Closure and Post-Closure Care

The owner or operator ~~must~~ shall comply with the requirements of Subpart C.

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

#### SUBPART K: ROAD OIL STORAGE AND HANDLING UNITS

### Section 616.702 Prohibitions

~~Under Pursuant to~~ Sections 14.2(a), 14.2(c)<sub>2</sub> and 14.3(e) of the Act, a person must not ~~no person shall~~ cause or allow the construction or operation of any unit for the storage and handling of road oils that is:

- a) Located wholly or partially within a minimum setback zone and that is either a new potential primary source or a new potential secondary source, except as specified in Sections 616.104(a) ~~and (b)~~; or

- b) Located wholly or partially within a maximum setback zone and that is a new potential primary source, except as specified in Section 616.104(b).

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

### **Section 616.703 Groundwater Monitoring**

The owner or operator must ~~shall~~ comply with the requirements of Subpart B.

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

### **Section 616.704 Design and Operating Requirements for Above-Ground Storage Tanks**

- a) The owner or operator of a tank must ~~shall~~ not cause or allow:
- 1) Materials to be placed in a tank if such materials could cause the tank to rupture, leak, corrode, or otherwise fail.
  - 2) Uncovered tanks to be placed or operated so as to maintain less than 60 centimeters (2 feet) of freeboard unless:
    - A) The tank is equipped with a containment structure (e.g., dike or trench), a drainage control system, or a diversion structure (e.g., standby tank); and
    - B) The ~~Such~~ containment structure, drainage control system, or diversion structure has a capacity that equals or exceeds the volume of the top 60 centimeters (2 feet) of the tank.
  - 3) Material to be continuously fed into a tank, unless the tank is equipped with a means to stop this inflow (e.g., a feed cutoff system or a bypass system to a standby tank).
  - 4) Incompatible materials to be placed in the same tank.
  - 5) Material to be placed in a tank that previously held an incompatible material unless the incompatible material has been washed from the tank.
  - 6) Ignitable or reactive material to be placed in a tank unless:
    - A) The material is stored or treated in such a way that it is protected from any material or conditions that may cause it to ignite or react; or
    - B) The tank is used solely for emergencies.

- b) The owner or operator must ~~shall~~ provide and maintain primary containment for the tank such that:
- 1) The tank has a minimum shell thickness that ensures that the tank will not fail (e.g., collapse, rupture~~i.e., collapse, rupture, etc.~~).
  - 2) The tank is compatible with the material to be placed in the tank or the tank is lined with a substance that is compatible with the material to be placed in the tank.
- c) The owner or operator must ~~shall~~ provide and maintain secondary containment for the tank that:
- 1) Is capable of containing the volume of the largest tank or 10% of the total volume for all tanks, whichever is greater;
  - 2) Is constructed of material capable of containing a spill until cleanup occurs (e.g., concrete or clay). The base of the secondary containment area must be capable of minimizing vertical migration of a spill until cleanup occurs (e.g., concrete or clay);
  - 3) Has cover (e.g., crushed rock or vegetative growth) on earthen embankments sufficient to prevent erosion; and
  - 4) Isolates the tank from storm water drains and from combined storm water drains and sanitary sewer drains.
- d) If incompatible materials are handled at the site, secondary containment sufficient to isolate the units containing the incompatible materials must be provided.
- e) The owner or operator of a tank must ~~shall~~ also:
- 1) Test above-ground tanks and associated piping every five years for structural integrity.
  - 2) Remove uncontaminated storm water runoff ~~run-off~~ from the secondary containment area immediately after a precipitation event.
  - 3) Handle contaminated storm water runoff ~~run-off~~ in compliance ~~accordance~~ with 35 Ill. Adm. Code 302.Subpart A.
  - 4) Provide a method for obtaining a sample from each tank.
  - 5) Install, maintain, and operate a material level indicator on each tank.

- 6) When not in use, lock all gauges and valves that are used to inspect levels in the tank. All such devices must be located within the containment structure.

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

#### SUBPART L: DE-ICING AGENT STORAGE AND HANDLING UNITS

##### **Section 616.722 Prohibitions**

- a) Under Pursuant to Sections 14.2(a), 14.2(c), and (14.3(e) of the Act, a person must not ~~no person shall~~ cause or allow the construction or operation of any unit for the storage and handling of de-icing agents that is:
- 1) Located wholly or partially within a minimum setback zone and that is either a new potential primary source or a new potential secondary source, except as specified in Sections 616.104~~(a) and (b)~~; or
  - 2) Located wholly or partially within a maximum setback zone and that is a new potential primary source, except as specified in Section 616.104~~(b)~~.
- b) A person must not ~~No person shall~~ cause or allow the construction or operation within any setback zone of any outdoor facility for the storage and handling of de-icing agents, except as provided ~~in~~ Section 616.105.

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

##### **Section 616.723 Groundwater Monitoring**

The owner or operator must ~~shall~~ comply with the requirements of Subpart B.

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

##### **Section 616.724 Design and Operating Requirements for Indoor Storage Facilities**

- a) The base of the facility must be constructed of materials capable of containing de-icing agents (i.e., bituminous or concrete pad).
- b) The roof and walls of the facility must be constructed of materials capable of protecting the storage pile from precipitation and capable of preventing dissolved de-icing agents from entering into the adjacent soil, surface water, or groundwater. The walls of the facility must be constructed of materials compatible with the de-icing agents to be placed in the facility. Run-off from the roof must be diverted away from the loading pad.

- c) The loading pad of the facility must be constructed of materials capable of containing a spill (i.e., concrete or bituminous pad). The borders of the loading pad must be curbed to prevent dry or dissolved de-icing agents from migrating from the loading pad into the adjacent soils, surface water, or groundwater. The loading pad must be covered by a roof of sufficient size to provide the pad and de-icing agents with protection from precipitation to prevent run-off or dissolved de-icing agents from entering into the adjacent soil, surface water, or groundwater.
- d) All areas surrounding the storage pile, including ~~but not limited to~~ the loading pad, must be routinely inspected to determine whether any release of de-icing agents has occurred. ~~These~~ ~~Such~~ areas must ~~shall~~ be cleaned as necessary. Spilled de-icing agents must be placed back under the protective covering of the indoor storage pile. The storage pile must be reshaped as often as necessary to prevent leaching.
- e) The integrity of the facility and loading pad must be maintained.
- f) All areas surrounding the storage facility must be inspected daily to determine whether any release of de-icing agents has occurred. Spilled de-icing agents must be placed back into the storage facility.

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

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

PART 617  
REGULATED RECHARGE AREAS

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AUTHORITY: Implementing Section 17.4 and authorized by Section 27 of the Environmental Protection Act [415 ILCS 5/17.4 and 27].

SOURCE: Adopted in R89-5 at 16 Ill. Reg. 1639, effective January 10, 1992, amended in R 96-18, at 21 Ill. Reg. 6569, effective May 8, 1997, amended in R00-17 at 25 Ill. Reg. 10350, effective September 1, 2001; amended in R18-26 at 46 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

NOTE: Italicization denotes statutory language.

#### SUBPART A: GENERAL

##### **Section 617.101 Purpose**

This Part establishes the general requirements and standards for regulated recharge areas as ~~defined~~, delineated and adopted by the Illinois Pollution Control Board under ~~pursuant to~~ Section 17.4 of the Illinois Environmental Protection Act (Act) [415 ILCS 5/17.4].

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

##### **Section 617.102 Definitions**

Unless a different meaning of a word or term is clear from the context, the definitions of words or terms in this Part ~~are~~ will ~~shall~~ be the same as those used in 35 Ill. Adm. Code 615.102, 35 Ill. Adm. Code 616.102, ~~Section 4~~ of the Act, or the Illinois Groundwater Protection Act [415 ILCS 55/4].

"Agency" means the Illinois Environmental Protection Agency.

"Agrichemical facility" means *a site used for commercial purposes, where bulk pesticides are stored in a single container in excess of 300 gallons of liquid pesticide or 300 pounds of dry pesticide for more than 30 days per year or where more than 300 gallons of liquid pesticide or 300 pounds of dry pesticide are being mixed, repackaged or transferred from one container to another within a 30-*

~~day~~30-day period or a site where bulk fertilizers are stored, mixed, repackaged or transferred from one container to another. [415 ILCS 5/3.110 3.77]

"Board" means the Illinois Pollution Control Board.

"Chemical substance" means any "extremely hazardous substance" listed in Appendix A of 40 CFR 355 that is present at a facility in an amount in excess of its threshold planning quantity, any "hazardous substance" listed in 40 CFR 302.4 that is present at a facility in an amount in excess of its reportable quantity or in excess of its threshold planning quantity if it is also an "extremely hazardous substance", and any petroleum including crude oil or any fraction thereof that is present at a facility in an amount exceeding 100 pounds unless it is specifically listed as a "hazardous substance" or an "extremely hazardous substance". "Chemical substance" does not mean any substance to the extent it is used for personal, family, or household purposes or to the extent it is present in the same form as a product packaged for distribution to and use by the general public. [430 ILCS 45/3]

"Class V injection well" means injection wells not included in Class I, II, III, or IV. Class V wells include:

air conditioning return flow wells used to return to the supply aquifer the water used for heating or cooling in a heat pump;

cesspools, including multiple dwelling, community, or regional cesspools, or other devices that receive wastes ~~that, which~~ have an open bottom and sometimes have perforated sides. The Underground Injection Control (UIC) requirements do not apply to ~~single-family~~ ~~single-family~~ residential cesspools nor to non-residential cesspools that receive solely sanitary wastes and have the capacity to serve fewer than 20 persons a day;

cooling water return flow wells used to inject water previously used for cooling;

drainage wells used to drain surface fluid, primarily storm runoff, into a subsurface formation;

dry wells used for the injection of wastes into a subsurface formation;

recharge wells used to replenish the water in an aquifer;

salt water intrusion barrier wells used to inject water into a fresh water aquifer to prevent the intrusion of salt water into the fresh water;

sand backfill and other backfill wells used to inject a mixture of water and sand, mill tailings, or other solids into ~~mined-out~~ portions of subsurface mines whether or not what is injected is a radioactive waste;

septic system wells used to inject the waste or effluent from a multiple dwelling, business establishment, community, or regional business establishment septic tank. The UIC requirements do not apply to ~~single-family~~ single-family residential septic system wells that are used solely for the disposal of sanitary waste and have the capacity to serve fewer than 20 persons a day;

subsidence control wells (not used for ~~the purpose of~~ oil or natural gas production) used to inject fluids into a ~~non-oil-non-oil~~ or ~~non-gas-producing-gas-producing~~ zone to reduce or eliminate subsidence associated with the overdraft of fresh water;

radioactive waste disposal wells other than Class IV;

injection wells associated with the recovery of geothermal energy for heating, aquaculture, and production of electric power;

wells used for solution mining of conventional mines such as stopes leaching;

wells used to inject spent brine into the same formation from which it was withdrawn after extraction of halogens or their salts;

injection wells used in experimental technologies; and

injection wells used for in-situ recovery of lignite, coal, tar sands, and oil shale. (40 CFR 146.5)

"Container" means any portable device (including, but not limited to, 55-gallon drums) in which material is stored, treated, disposed of, or otherwise handled. The term "container" does not include a vehicle used to transport material.

"Existing Potential Tertiary Source of Groundwater Contamination" means a potential tertiary source of groundwater contamination that is not new.

*"Facility" means the buildings and all real property contiguous thereto, and the equipment at a single location used for the conduct of business. [430 ILCS 45/3]*

"Generator (RCRA)" means any person, by site location, whose act or process produces "hazardous waste" identified or listed in 35 Ill. Adm. Code 721 (see 35 Ill. Adm. Code 702.110 and 35 Ill. Adm. Code 730.103).

"Household waste" means any waste material (including garbage and trash) derived from households (including single and multiple residences, hotels and motels, bunkhouses, ranger stations, crew quarters, campgrounds, picnic grounds, and day-use recreation areas).

"IEMA" means the Illinois Emergency Management Agency.

~~"Low-level~~ Low-level radioactive waste" ~~or "waste"~~ means *radioactive waste not classified as high-level radioactive waste, transuranic waste, spent nuclear fuel, or byproduct material as defined in Section 11e(2) of the Atomic Energy Act of 1954 (42 USC 2014) [420 ILCS 20/3].*

"Major Potential Source" means any unit at a facility or site not currently subject to a removal or remedial action that stores, accumulates, landfills, or land treats waste, other than household waste, that could cause contamination of groundwater and is generated on the site.

"Municipal solid waste landfill unit" or "MSWLF Unit" means *a contiguous area of land or an excavation that receives household waste, and is not a land application unit, surface impoundment, injection well, or any pile of noncontainerized accumulations of solid, nonflowing waste that is used for treatment or storage.* ~~An~~ A MSWLF unit may also receive other types of RCRA Subtitle D wastes, such as commercial solid waste, nonhazardous sludge, small quantity generator waste, and industrial solid waste. Such a landfill may be publicly or privately owned. ~~An~~ A MSWLF unit may be a new MSWLF unit, an existing MSWLF unit, or a lateral expansion. A sanitary landfill is subject to regulation as ~~an~~ a MSWLF unit if it receives household waste. [415 ILCS 5/~~3.285~~ 3-85]

"New Major Potential Source" means:

a major potential source that is not in existence or for which construction has not commenced at its location as of September 1, 2001; or

a major potential source that expands laterally beyond the currently permitted boundary or, if the potential source is not permitted, the boundary in existence as of September 1, 2001; or

a major potential source that is part of a facility that undergoes major reconstruction. ~~Reconstruction is considered~~ Such reconstruction must ~~shall be deemed~~ to have taken place ~~if~~ where the fixed capital cost of the new components, constructed within a 2-year period, ~~exceeds~~ exceed 50% of the fixed capital cost of a comparable entirely new facility as of September 1, 2001.

~~"New Potential Primary Source"~~ means:

~~a potential primary source which is not in existence or for which construction has not commenced at its location as of January 1, 1988; or~~

~~a potential primary source which expands laterally beyond the currently permitted boundary or, if the primary source is not permitted, the boundary in existence as of January 1, 1988; or~~

~~a potential primary source which is part of a facility that undergoes major reconstruction. Such reconstruction shall be deemed to have taken place where the fixed capital cost of the new components constructed within a 2-year period exceed 50% of the fixed capital cost of a comparable entirely new facility. [415 ILCS 5/3.3453.59]~~

"New Potential Route" means:

~~a potential route which is not in existence or for which construction has not commenced at its location as of January 1, 1988; or~~

~~a potential route which expands laterally beyond the currently permitted boundary or, if the potential route is not permitted, the boundary in existence as of January 1, 1988. [415 ILCS 5/3.3503.580]~~

"New Potential Secondary Source" means:

~~a potential secondary source which is not in existence or for which construction has not commenced at its location as of July 1, 1988; or~~

~~a potential secondary source which expands laterally beyond the currently permitted boundary or, if the secondary source is not permitted, the boundary in existence as of July 1, 1988, other than an expansion for handling of livestock waste or for treating domestic wastewaters; or~~

~~a potential secondary source which is part of a facility that undergoes major reconstruction. Such reconstruction shall be deemed to have taken place where the fixed capital cost of the new components constructed within a 2-year period exceed 50% of the fixed capital cost of a comparable entirely new facility [415 ILCS 5/3.3553.60]; or~~

~~A new potential secondary source excludes an agrichemical facility that modifies on-site storage capacity such that the volume of the pesticide storage does not exceed 125% of the available capacity in existence on April 1, 1990, or the volume of fertilizer storage does not exceed 150% of the available capacity in existence on April 1, 1990; provided that a written endorsement for an agrichemical facility permit is in effect under~~

~~Section 39.4 of (the) Act and the maximum feasible setback is maintained. This on-site storage capacity includes mini-bulk pesticides, package agrichemical storage areas, liquid or dry fertilizers, and liquid or dry pesticides. [415 ILCS 5/14.2(g)(4)]~~

"New Potential Tertiary Source of Groundwater Contamination" means:

a Potential Tertiary Source, that is not in existence or for which construction has not commenced at its location as of September 1, 2001; or

a Potential Tertiary Source that expands laterally beyond the currently permitted boundary or, if the tertiary source is not permitted, the boundary in existence as of September 1, 2001; or

a Potential Tertiary Source that is part of a facility that undergoes major reconstruction after September 1, 2001. Reconstruction is must ~~Such reconstruction shall be considered deemed~~ to have taken place ~~if~~ where the fixed capital cost of the new components, constructed within a 2-year period, ~~exceeds exceed~~ exceeds 50% of the fixed capital cost of a comparable entirely new facility.

~~"Potential Primary Source" means any unit at a facility or site not currently subject to a removal or remedial action that:~~

~~is utilized for the treatment, storage, or disposal of any hazardous or special waste not generated at the site; or~~

~~is utilized for the disposal of municipal waste not generated at the site, other than landscape waste and construction and demolition debris; or~~

~~is utilized for the landfilling, land treating, surface impounding or piling of any hazardous or special waste that is generated on the site or at other sites owned, controlled or operated by the same person; or~~

~~stores or accumulates at any time more than 75,000 pounds above ground, or more than 7,500 pounds below ground, of any hazardous substances. [415 ILCS 5/3.3453.59]~~

~~"Potential route" means abandoned and improperly plugged wells of all kinds, drainage wells, all injection wells, including closed loop heat pump wells, and any excavation for the discovery, development or production of stone, sand or gravel. [415 ILCS 5/3.3503.58]~~

~~"Potential secondary source" means any unit at a facility or a site not currently subject to a removal or remedial action, other than a potential primary source, that:~~

~~is utilized for the landfilling, land treating, or surface impounding of waste that is generated on the site or at other sites owned, controlled or operated by the same person, other than livestock and landscape waste, and construction and demolition debris; or~~

~~stores or accumulates at any time more than 25,000 but not more than 75,000 pounds above ground, or more than 2,500 but not more than 7,500 pounds below ground, of any hazardous substances; or~~

~~stores or accumulates at any time more than 25,000 gallons above ground, or more than 500 gallons below ground, of petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance; or~~

~~stores or accumulates pesticides, fertilizers, or road oils for purposes of commercial application or for distribution to retail sales outlets; or~~

~~stores or accumulates at any time more than 50,000 pounds of any de-icing agent; or~~

~~is utilized for handling livestock waste or for treating domestic wastewaters other than private sewage disposal systems as defined in the Private Sewage Disposal Licensing Act. [415 ILCS 5/3.3553.60]~~

"Potential Tertiary Source of Groundwater Contamination" means any unit at a facility or site not currently subject to a removal or remedial action that stores or accumulates any chemical substance during any calendar year and that is not a potential primary or secondary source of groundwater contamination.

"Regulated recharge area" means a compact geographic area, as determined by the Board, the geology of which renders a potable resource groundwater particularly susceptible to contamination. [415 ILCS 5/3.390 3.67]

"Setback zone" means a geographic area, designated pursuant to (the) Act, containing a potable water supply well or a potential source or potential route, having a continuous boundary, and within which certain prohibitions or regulations are applicable in order to protect groundwaters. [415 ILCS 5/3.450 3.61]

"Sinkhole" means any natural depression formed as a result of subsurface removal of soil or rock materials and causing the formation of a collapse feature that exhibits internal drainage. The existence of a sinkhole must ~~shall~~ be indicated by

the uppermost closed depression contour lines on the United States Geological Survey ~~7.5-minute~~ ~~7.5 minute~~ topographic quadrangle maps or as determined by field investigation.

"Site" means *any location, place, tract of land, and facilities, including ~~but not limited to~~ buildings, and improvements used for purposes subject to regulation or control by (the) Act or regulations thereunder.* [415 ILCS 5/~~3.460~~ ~~3.43~~]

"Unit" means *any device, mechanism, equipment, or area (exclusive of land utilized only for agricultural production). This term includes secondary containment structures and their contents at agrichemical facilities.* [415 ILCS 5/~~3.515~~ ~~3.62~~]

"Unit boundary" means a line at the land's surface circumscribing the area on which, above which, or below which waste, pesticides, fertilizers, road oils, or de-icing agents will be placed during the active life of the facility. The space taken up by any liner, dike, or other barrier designed to contain waste, pesticides, fertilizers, road oils, or de-icing agents falls within the unit boundary.

"Waste" means *any garbage, sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility or other discarded material, including solid, liquid, semi-solid, or contained gaseous material resulting from industrial, commercial, mining and agricultural operations, and from community activities, but does not include solid or dissolved material in domestic sewage, or solid or dissolved material in irrigation return flows, or coal combustion by-products as defined in Section ~~3.135~~ ~~3.94~~ (of the Act), or in industrial discharges which are point sources subject to permits under section 402 of the Federal Water Pollution Control Act, as now or hereafter amended, or source, special nuclear, or by-product materials as defined by the Atomic Energy Act of 1954 as amended (68 ~~Statstat.~~ 921) (~~42 U.S.C. 2011 et seq.~~) (~~42 USC 2011 et seq.~~) or any solid or dissolved material from any facility subject to the Federal Surface Mining Control and Reclamation Act of 1977 (P.L. 95-87) or the rules and regulations thereunder or any law or rule or regulation adopted by the State of Illinois pursuant thereto.* [415 ILCS 5/~~3.535~~ ~~3.53~~]

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

### **Section 617.110 Incorporation by Reference**

- a) The Board incorporates the following federal regulations by reference:

CFR (Code of Federal Regulations), Available from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 (202)-783-3238.

40 CFR 302.1 through 302.8 (2017).

- b) This ~~Section~~ ~~Part~~ incorporates no later amendments or editions.

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

### Section 617.115 Scope

This Part establishes regulated recharge areas and provisions governing specific activities in those areas ~~delineated defined delineated~~ by the Board.

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

### Section 617.120 Prohibitions

- a) The following new facilities, sites, units, or potential routes must not be located within a ~~delineated defined delineated~~ regulated recharge area:

- 1) ~~low-level~~ low-level radioactive waste sites;
- 2) class V injection wells;
- 3) municipal solid waste landfills; or
- 4) special or hazardous waste landfills.

- b) For ~~the purpose of~~ subsection (a), "new" means the following:

- 1) a facility, site, or unit that is not in existence or for which construction has not commenced at its location as of the effective date of any Subpart of this Part that creates a ~~delineated defined delineated~~ regulated recharge area in which that facility is located;
- 2) a facility, site, or unit that expands laterally beyond the currently permitted boundary or, if the potential primary source is not permitted, the boundary in existence as of the effective date of any Subpart of this Part that creates a ~~delineated defined delineated~~ regulated recharge area in which that facility is located;
- 3) a unit or site that is part of a facility that undergoes major reconstruction, which ~~is considered shall be deemed~~ to have taken place ~~if where~~ the fixed capital cost of the new components, constructed within a 2-year period, ~~exceeds exceed~~ 50% of the fixed capital cost of a comparable entirely new facility; or
- 4) a Class V injection well that is not in existence or for which construction has not commenced at its location as of the effective date of any Subpart

of this Part that creates a ~~delineated defined delineated~~ regulated recharge area in which that facility is located.

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

### **Section 617.125 Recharge Area Suitability Assessment**

The purpose of the recharge area suitability assessment process is to assess potential environmental impacts that a new facility would have within a regulated recharge area, and to assure that appropriate measures to protect against possible contamination will be included in the operation of the facility.

- a) The owners or operators of new major potential sources located wholly or partially within a delineated regulated recharge area must file submit a recharge area suitability assessment with to the Agency before the commencement of beginning ~~may not commence construction without first filing a recharge area suitability assessment with the Agency,~~ except for livestock operations that meet the criteria ~~set forth~~ in 35 Ill. Adm. Code 501.404(e) or except as provided in subsection (b) ~~of this Section.~~
- b) For any livestock waste handling facility subject to the Livestock Management Facilities Act [510 ILCS 77], the requirement in subsection (a) ~~of this Section~~ for filing a recharge area suitability assessment is only applicable to the such facility after filing a notice of intent, or a complete registration if the facility is designed to handle the waste from a 300-animal ~~300-animal~~ unit or larger operation, and:
  - 1) a public informational meeting under ~~pursuant to~~ Section 12 of the Livestock Management Facilities Act is not requested; or
  - 2) the provisions for a public informational meeting do not apply ~~are not applicable~~ to the such facility.
- c) A recharge area suitability assessment must include, ~~at a minimum,~~ the following:
  - 1) a legal description of the site and location maps including:
    - A) a topographic map of the site a drawn ~~to~~ scale of 200 feet to the inch or larger with a contour interval of less than 50 feet;
    - B) an area map that shows the approximate distance of the unit at a facility or site from the nearest potable water supply well or sinkhole; and
    - C) an area map that identifies all land uses within 1 mile of the site;
  - 2) soil survey data for the site;

- 3) an explanation of the proposed operation and any protection controls or measures;
  - 4) a description of any management systems that will be utilized to prevent environmental contamination; and
  - 5) an analysis of the potential environmental impacts that could occur due to the operation of the facility and any mitigating measures that will be implemented.
- d) Within seven 7 days after filing the suitability assessment, the owner or operator must:
- 1) notify all adjacent property owners of the filing; and
  - 2) publish a public notice regarding the filing of the assessment in a newspaper whose circulation covers the affected area.
- e) Within 45 days after the filing of an assessment, any person may:
- 1) request copies of the assessment from the Agency; and
  - 2) request that the Agency hold a public hearing ~~be held~~ at a location in the vicinity of the proposed facility.
- f) The Agency must hold the public hearing within ~~in a timely manner, but no more than~~ 45 days after receiving receipt of the written request response is received ~~under pursuant to subsection (e)(2) of this Section.~~
- g) The Agency must provide 21 days ~~days~~ public notice before ~~prior to~~ a public hearing.
- h) Within 90 days after the filing of an assessment or within 120 days after a hearing, the Agency must issue a written statement with one of the following determinations:
- 1) the assessment demonstrates the potential environmental impacts that a facility would have within the recharge area and includes the appropriate measures to protect against possible contamination;
  - 2) the assessment does not demonstrate the potential environmental impacts that a facility would have within the recharge area and does not include the appropriate measures to protect against possible contamination; or
  - 3) the assessment must be modified to address any impacts that the facility will have on the groundwater within the area.

- i) ~~Within 30 days after receiving the Agency's written statement under subsection (h)(2) or (h)(3) subsections (h)(1) or (h)(2), the~~ The owner or operator of the facility may, ~~within 30 days,~~ respond to ~~the a~~ statement issued by the Agency pursuant to subsection (h)(2) or (h)(3) of this Section.
- j) ~~Within~~ ~~Not later than~~ 30 days after ~~receiving receipt of~~ a response under subsection (i) from the owner or operator of the facility, the Agency must issue a final statement regarding the assessment ~~under pursuant to subsection (i) of this Section.~~ If no response is received by the Agency within the ~~30-day 30 day~~ period, no further Agency action is necessary and the statement ~~issued under subsection (h)~~ stands as ~~the Agency's final statement~~ initially issued.
- k) Operation of the facility may ~~start only begin~~ commence after ~~the Agency issues~~ issuance of a final statement ~~by the Agency is issued.~~
- l) The applicant may appeal the Agency's final statement to the Board by filing a petition ~~within 35 days on or before the 35<sup>th</sup> day after receiving the statement is issued~~ issuance of the statement. The petition must be filed, and the proceedings conducted, ~~under pursuant to~~ the procedures ~~set forth~~ in 35 Ill. Adm. Code 105.

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

### **Section 617.130 Technology Control Regulations**

The standards and requirements of 35 Ill. Adm. Code 615, ~~35 Ill. Adm. Code 616~~, 8 Ill. Adm. Code 257, or 77 Ill. Adm. Code 830 apply to the following existing and new activities if the ~~when these~~ activities are located wholly or partially within 2,500 feet of the wellheads and are located or take place within a regulated recharge area:

- a) landfilling, land treating, surface impounding, or piling of special waste and other wastes that could cause contamination of groundwater and that are generated on the site, other than hazardous waste, livestock waste, and construction and demolition debris;
- b) storage of special waste in an underground storage tank to which federal regulatory requirements for the protection of groundwater do not apply ~~are not applicable~~;
- c) storage and related handling of pesticides and fertilizers at a facility for ~~the~~ purpose of commercial application;
- d) storage and related handling of road oils and de-icing agents at a central location; and

- e) storage and related handling of pesticides and fertilizers at a central location for ~~the purpose of~~ distribution to retail sales outlets.

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

### **Section 617.135 Abandoned and Improperly Plugged Well Assistance Program**

The Department of Public Health and Department of Natural Resources may develop an assistance program for abandoned and improperly plugged water supply wells as follows:

- a) The Department of Natural Resources and Department of Public Health must develop educational materials on the requirements for properly plugging abandoned water supply wells within a regulated recharge area.
- b) The Department of Natural Resources and the Department of Public Health must work ~~with~~ ~~within~~ a school district to develop, and implement an educational program utilizing the materials developed under subsection (a) ~~of this Section~~ on the requirements for properly plugging abandoned water supply wells within, or within the service area of the water supply within a regulated recharge area.
- c) The water supply associated with a regulated recharge area will distribute the educational materials developed under subsection (a) ~~of this Section~~ to the water users within the service area.
- d) The Department of Natural Resources must work with a school district in the service area associated with a regulated recharge area to develop and implement groundwater protection information on the proper plugging requirements of abandoned water supply wells.

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

### **Section 617.140 Recharge Area Road Sign Posting**

Road signs will be posted at the entrance to and exit from a regulated recharge area after September 1, 2001, as follows:

- a) the Agency must work with the Illinois Department of Transportation to demarcate any State or interstate road or highway at the perimeter of a regulated recharge area; and
- b) the public water supply, as defined in 415 ILCS 5/~~3.365~~ 3-28, must demarcate where any major road other than a state or interstate road or highway enters or exits a regulated recharge area.

(Source: Amended at 46 Ill. Reg. \_\_\_\_\_ effective \_\_\_\_\_)

SUBPART B: PLEASANT VALLEY PUBLIC WATER DISTRICT REGULATED  
RECHARGE AREA

**Section 617.200 Purpose**

This Subpart establishes requirements and standards for the protection of the Pleasant Valley Public Water District for certain types of existing or new facilities, sites, or units located wholly or partially within the regulated recharge area boundary ~~delineated defined delineated~~ in 35 Ill. Adm. Code 617.Appendix A.

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

**Section 617.205 Applicability**

- a) This Subpart applies to the following facilities, sites, units, or wells located partially or wholly within the Pleasant Valley Public Water District's recharge area boundary:
- 1) those activities not regulated by 35 Ill. Adm. Code 615 or ~~35 Ill. Adm. Code 616~~;
  - 2) Class V wells and abandoned and improperly plugged wells of any type;
  - 3) existing and new potential primary sources of groundwater contamination, existing and new potential secondary sources of groundwater contamination, existing and new potential tertiary sources of groundwater contamination, and existing and new potential routes of groundwater contamination.
- b) ~~This Nothing in this~~ Subpart ~~has no impact impacts~~ on the application of State or ~~federal~~ Federal laws or regulations (35 Ill. Adm. Code 615, 35 Ill. Adm. Code 616, Sections 106 and 107 of the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. ~~USC~~ 9601, et seq.); Sections 3004 and 3008 of the Resource Conservation and Recovery Act (42 U.S.C. ~~USC~~ 6901, et seq.); Sections 4(q), 4(v), 12(g), 21(d), 21(f), 22.2(f), 22.2(m) and 22.18 of the Act; 35 Ill. Adm. Code 724, 725, 730, 731, 733, 740, 742, 750, 811 and 814)) to activities addressed in those Parts or Sections that occur within the boundaries of the regulated recharge area set out in this Part.

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

**Section 617.210 Registration of Potential Sources and Routes of Groundwater Contamination**

The owner or operator of potential sources or routes of groundwater contamination, located wholly or partially within the Pleasant Valley Public Water District's regulated recharge area

~~defined~~ detailed in Appendix A, must register the location with the Agency using forms provided in Appendix B as follows:

- a) ~~At least~~ Within 30 days before ~~the commencement of construction~~ construction begins ~~no later than 30 days prior to commencement of construction~~ for new potential routes or primary, secondary, or tertiary sources of groundwater contamination; or
- b) Within ~~no later than~~ 90 days after the registration meeting described in Section 617.215 ~~of this Subpart.~~

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

### **Section 617.220 Management Systems for Potential Sources**

- a) The owner or operator of any potential tertiary source of groundwater contamination located wholly or partially within the regulated recharge area must develop and implement a chemical substances management system that, ~~at a minimum,~~ must include the following:
  - 1) a brief description of ~~how the manner in which~~ the on-site chemical substances are stored and used;
  - 2) a potential release assessment and the response procedures to be followed by the facility for notifying local emergency response agencies;
  - 3) management measures that are employed to reduce the potential for releases; and
  - 4) ~~suitable~~ training as provided by the Agency under ~~pursuant to~~ Section 617.225 ~~of this Subpart.~~
- b) The owner or operator of an existing potential tertiary source of groundwater contamination located wholly or partially within the regulated recharge area must:
  - 1) Within 90 days after September 1, 2001, register for the training required under Section 617.225; and
  - 2) Within 120 days after September 1, 2001, attend an Agency-sponsored training program required under Section 617.225 before the development of the required chemical substances management plan (CSMP).
- c) The owner or operator of an existing potential tertiary source of groundwater contamination located wholly or partially within the regulated recharge area must, within 180 days after the training required under ~~pursuant to~~ Section 617.225, develop a CSMP and make it available on-site.

- d) The chemical substances management system for a new potential tertiary source must also include secondary containment. Chemical substance storage areas regulated under this Subpart must have a constructed or prefabricated ~~pre-fabricated~~ containment system that is operated as follows:
- 1) When not protected from receiving precipitation, the constructed or prefabricated ~~pre-fabricated~~ containment system must have:
    - A) a minimum containment volume of a 6-inch rain storm (a 25-year ~~25-year, 24-hour~~ 24-hour rain);
    - B) the capacity of the largest container or tank; and
    - C) the volume displaced by the bases of the other tanks located within the secondary containment structure.
  - 2) When protected from receiving precipitation, the constructed or prefabricated ~~pre-fabricated~~ containment system must have a minimum containment volume of 100 percent of the capacity of the largest container or tank, plus the volume displaced by the bases of the other containers or tanks.
  - 3) The owner or operator must prevent run-on into the prefabricated ~~pre-fabricated~~ or constructed secondary containment system; unless the collection system has sufficient excess capacity in addition to that required in subsection (d)(1) ~~of this Section~~ to contain any run-on ~~that, which~~ might enter the constructed or prefabricated ~~pre-fabricated~~ containment system.
  - 4) The owner or operator must remove spilled or leaked material and accumulated precipitation from the sump or collection area in a timely manner to prevent overflow of the collection system.
- e) The owner or operator of a new potential tertiary source of groundwater contamination located wholly or partially within the regulated recharge area must:
- 1) register for the training required under Section 617.225 at least 30 days before the commencement of construction ~~begins~~ ~~has commenced~~; and
  - 2) attend an Agency sponsored training program required under Section 617.225 within 60 days after registration.
- f) The owner or operator of a potential primary or secondary source must review the facility's chemical management practices and take any necessary actions to ensure protection equivalent to subsection (a) or (d) ~~of this Section~~.

- g) The owner or operator of a potential tertiary source of groundwater contamination must do the following; unless an equivalent CSMP has been prepared and filed:
- 1) maintain a CSMP at the facility at all times;
  - 2) review the CSMP annually;
  - 3) clearly identify changes in the CSMP;
  - 4) provide a copy of the initial Plan to the appropriate local fire department and police response agency; and
  - 5) make the CSMP available for inspection by the public during normal operating hours.

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

### **Section 617.225 Training Program for Potential Tertiary Sources**

- a) A chemical substance management training program (as required in Section 617.220(a)) must be conducted by the Agency as follows:
- 1) The training program must cover, ~~at a minimum,~~ the following topics:
    - A) an overview of the sensitivity of community water supply recharge areas and groundwater protection;
    - B) improperly abandoned wells;
    - C) the procedure for developing a chemical substance management system;
    - D) cost-effective~~cost effective~~ containment systems;
    - E) small business technical assistance opportunities; and
    - F) pollution prevention alternatives appropriate for the type of business.
  - 2) The chemical substances management system training program must ~~will~~ be offered at least once; and may be offered more frequently, depending upon demand. The Agency or its designee must publish advance notice of the time, date, and location for each training program.
  - 3) An individual must enroll with the Agency prior to the date for the next scheduled training program.

- 4) The Agency must provide the owner or operator of a potential tertiary source that participates in the chemical substances management training program with a certificate of completion.
- b) The owner or operator of a potential tertiary source who receives a certificate of completion of a chemical substances management training program must post the certificate of completion at the owner's or operator's ~~his~~ place of business, and must provide a copy of the ~~such~~ certificate to the Pleasant Valley Public Water District within 10 days after receipt of the certificate from the Agency.

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

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

PART 618  
 MAXIMUM SETBACK ZONES

SUBPART A: GENERAL

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618.APPENDIX A	Boundaries of Marquette Heights' Maximum Setback Zone
618.APPENDIX B	Boundaries of Fayette Water Company's Maximum Setback Zone

AUTHORITY: Implementing Section 14.3 and authorized by Section 27 of the Illinois Environmental Protection Act [415 ILCS 5/14.3 and 27].

SOURCE: Adopted in R05-9 at 30 Ill. Reg. 10448, effective May 23, 2006; amended in R11-25 at 36 Ill. Reg. 10042, effective June 27, 2012; amended in R18-26 at 46 Ill. Reg. \_\_\_\_\_, effective \_\_\_\_\_.

## Section 618.105 Definitions

a) Unless specified otherwise, all terms ~~will shall~~ have the meanings set forth in the Illinois Environmental Protection Act [415 ILCS 5], the Illinois Groundwater Protection Act [415 ILCS 55], and 35 Ill. Adm. Code 671.

b) For the purposes of this Part, the following definitions apply:

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

"Agency" means the Illinois Environmental Protection Agency.

"Board" means the Illinois Pollution Control Board.

"Facility" means *the buildings and all real property contiguous to the buildings~~thereto~~, and the equipment at a single location used for the conduct of business* [430 ILCS 45/3].

"New Potential Primary Source" means:

*a potential primary source which is not in existence or for which construction has not commenced at its location as of January 1, 1988; or*

*a potential primary source which expands laterally beyond the currently permitted boundary or, if the primary source is not permitted, the boundary in existence as of January 1, 1988; or*

*a potential primary source which is part of a facility that undergoes major reconstruction. Reconstruction is considered~~Such reconstruction shall be deemed~~ to have taken place ~~if where~~ the fixed capital cost of the new components, constructed within a 2-year period, ~~exceeds~~~~exceed~~ 50% of the fixed capital cost of a comparable entirely new facility [415 ILCS 5/3.345].*

"New Potential Route" means:

*a potential route which is not in existence or for which construction has not commenced at its location as of January 1, 1988; or*

*a potential route which expands laterally beyond the currently permitted boundary or, if the potential route is not permitted, the boundary in existence as of January 1, 1988 [415 ILCS 5/3.350].*

"New Potential Secondary Source":

*means a potential secondary source which:*

*is not in existence or for which construction has not commenced at its location as of July 1, 1988; or*

*expands laterally beyond the currently permitted boundary or, if the secondary source is not permitted, the boundary in existence as of July 1, 1988, other than an expansion for handling of livestock waste or for treating domestic wastewaters; or*

*is part of a facility that undergoes major reconstruction. Reconstruction is considered ~~Such reconstruction shall be deemed~~ to have taken place ~~if~~ where the fixed capital cost of the new components, constructed within a 2-year period, ~~exceeds~~ ~~exceed~~ 50% of the fixed capital cost of a comparable entirely new facility [415 ILCS 5/3.355]; but*

*excludes an agrichemical facility that modifies on-site storage capacity such that the volume of the pesticide storage does not exceed 125% of the available capacity in existence on April 1, 1990, or the volume of fertilizer storage does not exceed 150% of the available capacity in existence on April 1, 1990; ~~if provided that~~ a written endorsement for an agrichemical facility permit is in effect under Section 39.4 of the Act and the maximum feasible setback is maintained. This on-site storage capacity includes mini-bulk pesticides, package agrichemical storage areas, liquid or dry fertilizers, and liquid or dry pesticides. [415 ILCS 5/14.2(g)(4)]*

"Potential Primary Source" means *any unit at a facility or site not currently subject to a removal or remedial action which:*

*is utilized for the treatment, storage, or disposal of any hazardous or special waste not generated at the site; or*

*is utilized for the disposal of municipal waste not generated at the site, other than landscape waste and construction and demolition debris; or*

*is utilized for the landfilling, land treating, surface impounding or piling of any hazardous or special waste that is generated on the site or at other sites owned, controlled or operated by the same person; or*

*stores or accumulates at any time more than 75,000 pounds above ground, or more than 7,500 pounds below ground, of any hazardous substances [415 ILCS 5/3.345].*

"Potential route" means *abandoned and improperly plugged wells of all kinds, drainage wells, all injection wells, including closed loop heat pump wells, and*

*any excavation for the discovery, development or production of stone, sand or gravel [415 ILCS 5/3.350].*

"Potential secondary source" means *any unit at a facility or a site not currently subject to a removal or remedial action, other than a potential primary source, which:*

*is utilized for the landfilling, land treating, or surface impounding of waste that is generated on the site or at other sites owned, controlled or operated by the same person, other than livestock and landscape waste, and construction and demolition debris; or*

*stores or accumulates at any time more than 25,000 but not more than 75,000 pounds above ground, or more than 2,500 but not more than 7,500 pounds below ground, of any hazardous substances; or*

*stores or accumulates at any time more than 25,000 gallons above ground, or more than 500 gallons below ground, of petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance; or*

*stores or accumulates pesticides, fertilizers, or road oils for purposes of commercial application or for distribution to retail sales outlets; or*

*stores or accumulates at any time more than 50,000 pounds of any de-icing agent; or*

*is utilized for handling livestock waste or for treating domestic wastewaters other than private sewage disposal systems as defined in the Private Sewage Disposal Licensing Act [415 ILCS 5/3.355].*

"Setback zone" means *a geographic area, designated pursuant to the Act, containing a potable water supply well or a potential source or potential route, having a continuous boundary, and within which certain prohibitions or regulations are applicable in order to protect groundwaters [415 ILCS 5/3.450].*

"Site" means *any location, place, tract of land, and facilities, including ~~but not limited to~~ buildings, and improvements used for purposes subject to regulation or control by the Act or regulations thereunder [415 ILCS 5/3.460].*

"Unit" means *any device, mechanism, equipment, or area (exclusive of land utilized only for agricultural production). This term includes secondary containment structures and their contents at agrichemical facilities. [415 ILCS 5/3.515]*

"Unit boundary" means a line at the land's surface circumscribing the area on which, above which, or below which waste, pesticides, fertilizers, road oils or de-icing agents will be placed during the active life of the facility. The space taken up by any liner, dike or other barrier designed to contain waste, pesticides, fertilizer, road oils, or de-icing agents falls within the unit boundary.

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

### **Section 618.110 Regulated Activities, Facilities, or Units**

All new or existing activities, facilities, or units located wholly or partially in any maximum setback zone created by this Part ~~are~~ will be subject to the groundwater ~~requirements~~ rules set forth in Section 14.4 of the Act and any Board ~~rules~~ regulations promulgated under pursuant to Section 14.4 of the Act, including, ~~but not limited to,~~ 35 Ill. Adm. Code 615 and 616.

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

### **SUBPART B: MARQUETTE HEIGHTS' MAXIMUM SETBACK ZONE**

#### **Section 618.200 Purpose**

This Subpart ~~describes~~ prescribes maximum setback zones for individual community water supply wells in the interest of securing the public health, safety, and welfare; to preserve the quality and quantity of groundwater resources in order to assure a safe and adequate water supply for present and future generations; and to preserve groundwater resources currently in use and those aquifers having a potential for future use as a public water supply.

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

#### **Section 618.205 Marquette Heights' Maximum Setback Zone**

The Marquette Heights' maximum setback zone is established ~~as delineated~~ as delineated in Appendix A ~~of this Part~~.

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

#### **Section 618.210 Fayette Water Company's Maximum Setback Zone**

The Fayette Water Company's maximum setback zone is established as delineated in Appendix B ~~of this Part~~.

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