FINAL PROPOSAL

IDAHO RULES FOR PUBLIC DRINKING WATER SYSTEMS, DOCKET NO. 58-0108-1101

The proposed rule was published in the Idaho Administrative Bulletin, May 2, 2012, Vol. 12-5, pages 118 through 243. DEQ recommends that the Board take the following action:

IDAPA 58.01.08

Section 002	ADOPT AS PROPOSED
Section 003	ADOPT AS PROPOSED
Section 005	ADOPT AS PROPOSED
Section 010	ADOPT AS PROPOSED
Section 050	ADOPT AS PROPOSED
Section 100	ADOPT AS PROPOSED
Section 150	ADOPT AS PROPOSED
Section 200	ADOPT AS PROPOSED
Section 250	ADOPT AS PROPOSED
Section 300	ADOPT AS PROPOSED
Section 301	ADOPT AS PROPOSED
Section 302	ADOPT AS PROPOSED
Section 303	ADOPT AS PROPOSED
Section 304	ADOPT AS PROPOSED
Section 310	ADOPT AS PROPOSED
Section 311	ADOPT AS PROPOSED
Sections 320 - 323	ADOPT AS PROPOSED
Section 400	ADOPT AS PROPOSED
Sections 450 - 451	ADOPT AS PROPOSED
Sections 500 - 504	ADOPT AS PROPOSED
Sections 510 - 511	ADOPT AS PROPOSED
Section 514	ADOPT AS PROPOSED
Section 518	ADOPT AS PROPOSED
Sections 520 - 525	ADOPT AS PROPOSED
Sections 529 - 535	ADOPT AS PROPOSED
Sections 540 - 542	ADOPT AS PROPOSED
Section 543	ADOPT AS REVISED
Section 544	ADOPT AS PROPOSED
Section 548	ADOPT AS PROPOSED
Section 552	ADOPT AS REVISED
Section 554	ADOPT AS PROPOSED

IDAPA 58 - DEPARTMENT OF ENVIRONMENTAL QUALITY
58.01.08 – IDAHO RULES FOR PUBLIC DRINKING WATER SYSTEMS

DOCKET NO. 58-0108-1101

NOTICE OF RULEMAKING – ADOPTION OF PENDING RULE

EFFECTIVE DATE: This rule has been adopted by the Board of Environmental Quality (Board) and is now pending review by the 2013 Idaho State Legislature for final approval. The pending rule will become final and effective immediately upon the adjournment *sine die* of the First Regular Session of the Sixty-second Idaho Legislature unless prior to that date the rule is rejected in whole or in part by concurrent resolution in accordance with Idaho Code Sections 67-5224 and 67-5291.

AUTHORITY: In compliance with Section 67-5224, Idaho Code, notice is hereby given that the Board has adopted a pending rule. This action is authorized by Chapter 1, Title 39, Idaho Code, and Chapter 21, Title 37, Idaho Code.

DESCRIPTIVE SUMMARY: A detailed summary of the reason for adopting the rule is set forth in the initial proposal published in the Idaho Administrative Bulletin, May 2, 2012, Vol. 12-5, pages 118 through 243. After consideration of public comments, the rule has been revised at Sections 543 and 552. The remainder of the rule has been adopted as proposed. The Rulemaking and Public Comment Summary can be obtained at www.deq.idaho.gov/58-0108-1101 or by contacting the undersigned.

IDAHO CODE 39-107D STATEMENT: This rule does not regulate an activity not regulated by the federal government, nor is it broader in scope or more stringent than federal regulations.

FISCAL IMPACT STATEMENT: The following is a specific description, if applicable, of any negative fiscal impact on the state general fund greater than ten thousand dollars ($10,000) during the fiscal year when the pending rule will become effective: Not applicable.

ASSISTANCE ON TECHNICAL QUESTIONS: For assistance on technical questions concerning this rulemaking, contact Mike Piechowski at (208) 373-0274, mike.piechowski@deq.idaho.gov.

DATED this ____ day of October, 2012.

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Revisions to proposed rule for Board Consideration, Docket No. 58-0108-1101
The revisions made to the proposed rule are highlighted. Only those portions of the proposed rule containing revisions are included.

543. FACILITY AND DESIGN STANDARDS: CROSS CONNECTION CONTROL.
There shall be no connection between the distribution system and any pipes, pumps, hydrants, water loading stations, or tanks whereby unsafe water or other contaminating materials may be discharged or drawn into a public water system. The water purveyor is responsible through its cross connection control program to take reasonable and prudent measures to protect the water system against contamination and pollution from cross connections through premises isolation or containment, internal or in-plant isolation, fixture protection, or some combination of premises isolation, internal isolation, and fixture protection. (4-7-11)

01. Testable Assemblies. All double check valve backflow prevention assemblies, reduced pressure principle backflow prevention assemblies, spill resistant vacuum breakers, and pressure vacuum breakers used must pass a performance test conducted by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research (USC Foundation) and be included on the USC Foundation "List of Approved Assemblies." (4-7-11)

02. Atmospheric Vacuum Breakers. All atmospheric vacuum breakers used shall be marked approved either by the International Association of Plumbing and Mechanical Officials (IAPMO) or by the American Society of Sanitation Engineers (ASSE). (5-8-09)

03. Replacement Parts and Components. All replacement parts and components, including resilient seated shutoff valves, shall meet original manufacturer's specifications or otherwise be approved by the USC Foundation as replacement parts or components for use on double check valve backflow prevention assemblies, reduced pressure principle backflow prevention assemblies, ~~and~~ pressure vacuum breakers, and spill resistant pressure vacuum breakers. The design, material, or operational characteristics of any assembly must not be altered during maintenance or repair. ~~(4-7-11)~~( )

04. Assembly Selection. Appropriate and adequate backflow prevention assembly types for various facilities, fixtures, equipment, and uses of water should be selected from the AWWA Pacific Northwest Section Cross Connection Control Manual, the Uniform Plumbing Code, the AWWA Recommended Practice for Backflow Prevention and Cross Connection Control (M14), the USC Foundation Manual of Cross Connection Control, or other sources deemed acceptable by the Department. The selected assembly manufacturer model number must be included on the USC Foundation "List of Approved Assemblies" and must comply with local ordinances. ~~(4-7-11)~~( )

(Break in Continuity of Sections)

552. ~~FACILITY AND DESIGN STANDARDS:~~ OPERATING CRITERIA FOR PUBLIC WATER SYSTEMS.

01. Quantity and Pressure Requirements. Design requirements regarding pressure analysis are found in Section 542.13. (5-8-09)

a. Minimum Capacity. The capacity of a public drinking water system shall be at least eight hundred

(800) gallons per day per residence. (5-8-09)

i. The minimum capacity of eight hundred (800) gallons per day shall be the design maximum day demand rate exclusive of irrigation and fire flow requirements. (5-8-09)

ii. The minimum capacity of eight hundred (800) gallons per day is only acceptable if the public drinking water system has equalization storage of finished water in sufficient quantity to compensate for the difference between a water system's maximum pumping capacity and peak hour demand. (5-8-09)

iii. The design capacity of a public drinking water system for material modifications may be less than eight hundred (800) gallons per day per residence if the water system owner provides information that demonstrates to the Department's satisfaction the maximum day demand for the system, exclusive of irrigation and fire flows, is less than eight hundred (800) gallons per day per residence. (5-8-09)

b. Pressure. All public water systems shall meet the following requirements: (4-7-11)

i. Any public water system shall be capable of providing sufficient water during maximum day demand conditions, including fire flow where provided, to maintain a minimum pressure of twenty (20) psi throughout the distribution system, at ground level, as measured at the service connection or along the property line adjacent to the consumer's premises. (4-7-11)

ii. Public Notification. ( )

(1) During unplanned or emergency situations, ~~W~~when water pressure~~s~~ within the system ~~are~~ is known to have fallen below twenty (20) psi, the water ~~system~~ supplier must notify the Department, provide public notice to the affected customers within twenty-four (24) hours, and disinfect the system. When sampling and corrective procedures have been conducted and after determination by the Department that the ~~supply~~ water is safe, the water supplier ~~shall~~ may re-notify the affected customers that the ~~supply~~ water is safe for consumption. The water supplier shall notify the affected customers if the water is not safe for consumption. ~~(4-7-11)~~( )

(2) During planned maintenance or repair situations, when water pressure within the system is expected to fall below twenty (20) psi, the water supplier must provide public notice to the affected customers prior to the planned maintenance or repair activity and shall ensure that the ~~supply~~ water is safe for consumption. ( )

iii. If an initial investigation by the water ~~system~~ supplier fails to discover the causes of inadequate or excessive pressure, the Department may require ~~a public drinking~~ the water ~~system~~ supplier to conduct a local pressure monitoring study to diagnose and correct pressure problems. Compliance with these requirements by water systems that do not have a meter vault or other point of access at the service connection or along the property line adjacent to the consumer's premises where pressure in the distribution system can be reliably measured shall be determined by measurements within the consumer's premises, or at another representative location acceptable to the Department.

~~(4-7-11)~~( )

iv. Copies of pressure monitoring study reports required under Subsection 552.01.b.iii. detailing study results and any resulting corrective actions planned or performed by the public water system shall be submitted to the Department in accordance with these rules. (4-7-11)

v. The following public water systems or service areas of public water systems shall maintain a minimum pressure of forty (40) psi throughout the distribution system, during peak hour demand conditions, excluding fire flow, measured at the service connection or along the property line adjacent to the consumer's premises. (5-8-09)

(1) Any public water system constructed or substantially modified after July 1, 1985. (5-8-09)

(2) Any new service areas. (5-8-09)

(3) Any public water system that is undergoing material modification where it is feasible to meet the pressure requirements as part of the material modification. (5-8-09)

vi. Any public water system shall keep static pressure within the distribution system below one hundred (100) psi and should ordinarily keep static pressure below eighty (80) psi. Pressures above one hundred (100) psi shall be controlled by pressure reducing ~~devices~~ valve stations installed in the distribution main. In areas where failure of installed pressure reducing valve stations would result in extremely high pressure, pressure relief valves may be required. The Department may approve the use of pressure reducing devices at individual service connections on a case by case basis, if it can be demonstrated that higher pressures in portions of the distribution system are required for efficient system operation. If system modification will cause pressure to routinely exceed eighty (80) psi, or if a check valve or an individual pressure reducing device is added to the service line, the water system owner shall notify affected customers. Notification may include reasons for the elevated pressure, problems or damage that elevated pressure can inflict on appliances or plumbing systems, and suggested procedures or mitigation efforts affected property owners may initiate to minimize problems or damage. ~~(4-7-11)~~( )

vii. The Department may allow the installation of booster pump systems at individual service connections on a case by case basis. However, such an installation may only occur with the full knowledge and agreement of the public water system, including assurance by the water system that the individual booster pump will cause no adverse effects on system operation. (4-11-06)

viii. For elevated storage tanks, pressure calculations during peak hour demand shall be based on the lowest water level after both operational storage and equalization storage have been exhausted. Pressure calculations during fire flow demands shall be based on the lowest water level after operational storage, equalization storage, and fire suppression storage have been exhausted. ( )

ix. For hydropneumatic tanks, pressure calculations shall be based on the lowest pressure of the pressure cycle and this requirement shall be noted in the operation and maintenance manual. ( )

c. Fire Flows. Any public water system designed to provide fire flows shall ensure that such flows are compatible with the water demand of existing and planned fire-fighting equipment and fire fighting practices in the area served by the system. (5-3-03)

d. Irrigation Flows. (12-1-92)

i. Any public water system constructed after November 1, 1977, shall be capable of providing water for uncontrolled, simultaneous foreseeable irrigation demand, which shall include all acreage that the system is designed to irrigate. (5-3-03)

(1) The Department must concur with assumptions regarding the acreage to be irrigated. In general, an assumption that no outside watering will occur is considered unsound and is unlikely to be approved. (5-3-03)

(2) An assumption of minimal outside watering, as in recreational subdivisions, may be acceptable if design flows are adequate for maintenance of “green zones” for protection against wildland fire. (5-3-03)

ii. The requirement of Subsection 552.01.d.i. may be modified by the Department if: (5-3-03)

(1) A separate irrigation system is provided; or (12-10-92)

(2) The supplier of water can regulate the rate of irrigation through its police powers, and the water system is designed to accommodate a regulated rate of irrigation flow. The Department may require the water system to submit a legal opinion addressing the enforceability of such police powers. (5-3-03)

iii. If a separate non-potable irrigation system is provided for the consumers, all mains, hydrants and appurtenances shall be easily identified as non-potable. The Department must concur with a plan to ensure that each new potable water service is not cross-connected with the irrigation system. (5-3-03)

(Break in Continuity of Subsections)

06. Cross Connection Control Program - Community Water Systems. The water purveyor is responsible through its cross connection control program to take reasonable and prudent measures to protect the water system against contamination and pollution from cross connections through premises isolation, internal or in-plant isolation, fixture protection, or some combination of premises isolation, internal isolation, and fixture protection. Pursuant to Section 543, all suppliers of water for community water systems shall implement a cross connection control program to prevent the entrance to the system of materials known to be toxic or hazardous. The water purveyor is responsible to enforce the system's cross connection control program. The program will at a minimum include: (4-7-11)

a. An inspection program to locate cross connections and determine required suitable protection. For new connections, suitable protection must be installed prior to providing water service. (5-8-09)

b. Required installation and operation of adequate backflow prevention assemblies. Appropriate and adequate backflow prevention assembly types for various facilities, fixtures, equipment, and uses of water should be selected from the AWWA Pacific Northwest Section Cross Connection Control Manual, the Uniform Plumbing Code, the AWWA Recommended Practice for Backflow Prevention and Cross Connection Control (M14), the USC Foundation Manual of Cross Connection Control, or other sources deemed acceptable by the Department. The assemblies must meet the requirements of Section 543 and comply with local ordinances. ~~(4-7-11)~~( )

c. Annual inspections and testing of all installed backflow prevention assemblies by a tester licensed by a licensing authority recognized by the Department. Testing shall be done in accordance with the test procedures published by the University of Southern California Foundation for Cross-Connection Control and Hydraulic Research. See the USC Foundation Manual of Cross-Connection Control referenced in Subsection 002.02. (4-7-11)

d. Discontinuance of service to any structure, facility, or premises where suitable backflow protection has not been provided for a cross connection. (4-7-11)

e. Assemblies that cannot pass annual tests or those found to be defective shall be repaired, replaced, or isolated within ~~five (5)~~ ten (10) business days. If the failed assembly cannot be repaired, replaced, or isolated within ~~five (5)~~ ten (10) business days, water service to the failed assembly shall be discontinued. ( )