IDAPA 58 - DEPARTMENT OF ENVIRONMENTAL QUALITY

58.01.08 - IDAHO RULES FOR PUBLIC DRINKING WATER SYSTEMS

DOCKET NO. 58-0108-0801

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 2009 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 Sixtieth Idaho Legislature unless prior to that date the rule is rejected 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, August 6, 2008, Vol. 08-8, pages 175 through 274. After consideration of public comments, the rule has been revised at Sections 511, 514, 531, 542, 544, and 552. The remainder of the rule has been adopted as proposed. The Rulemaking and Public Comment Summary can be obtained at http://www.deq.idaho.gov/rules/drinking_water/58_0108_0801_pending.cfm or by contacting the undersigned.

IDAHO CODE SECTION 39-107D STATEMENT: Section 39-107D, Idaho Code, provides that DEQ must meet certain requirements when it formulates and recommends rules which are broader in scope or more stringent than federal law or regulations, or which propose to regulate an activity not regulated by the federal government. There is no federal law or regulation that is comparable to plan and specification review and facility standard provisions set forth in these rules. Therefore, the changes to the rules are not broader in scope or more stringent than federal law or regulations.

Section 39-107D, Idaho Code, also applies to a rule which "proposes to regulate an activity not regulated by the federal government." The engineering standards for design, construction, and operation of public drinking water systems regulate activities that are not regulated by the federal government. These rules address the review and approval of plans and specifications for public drinking water systems and the standard by which the agency does the review and approval. This is not an activity regulated by the federal government. Therefore, Section 39-107D, Idaho Code, applies.

Section 39-107D(3), Idaho Code, provides that any rule subject to 39-107D that proposes a standard necessary to protect human health and the environment must also include in the rulemaking record and in the notice of rulemaking additional information. This additional information includes any estimates of risk accomplished, identification of populations or receptors addressed by any estimates, and other information related to an estimation of risk. These rules include facility and design standards which are intended to protect human health and the environment. The standards, however, are for the design and construction of public drinking water facilities. The rules are not based upon any express estimate or analysis of risk to public health or the environment. Instead, the facility and design standards are based upon guidelines set forth in documents, such as the "Recommended Standards for Water Works" and the "American Water Works Association Standards," that are generally accepted and used throughout the United States by engineers and state regulators.

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: Not applicable.

ASSISTANCE ON TECHNICAL QUESTIONS: For assistance on questions concerning this rulemaking, contact Michael Stambulis at michael.stambulis@deq.idaho.gov, (208)373-0123.

Dated this 10th day of October, 2008.

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DOCKET NO. 58-0108-0801 - ADOPTION OF PENDING RULE

Substantive changes have been made to the pending rule.
***Italicized* text is new text that has been added to the pending rule.**

Only those sections or subsections that have changed from the original proposed text are printed in this Bulletin following this notice.

The text of the proposed rule was published in the Idaho Administrative Bulletin, Volume 08-8, August 6, 2008 pages 175 through 274.

This rule has been adopted as a pending rule by the Agency and is now awaiting review and approval by the 2009 Idaho State Legislature for final adoption.

THE FOLLOWING IS THE AMENDED TEXT OF DOCKET NO. 58-0108-0801

Subsection 511.04

511. FACILITY AND DESIGN STANDARDS: WELL PUMPS, DISCHARGE PIPING, AND APPURTENANCES.

04. Flow Meter and Check Valve. Unless otherwise approved by the Department, an instantaneous and totalizing flow meter equipped with nonvolatile memory shall be installed on the discharge line of each well. An accessible check valve, which is not located in the pump column, shall be installed in the discharge line of each well between the pump and the shut-off valve. *Additional check valves shall be located in the pump column as necessary.*
~~(3-30-07)~~( )

Subsection 514.02

514. FACILITY AND DESIGN STANDARDS: SPRING SOURCES.
Written approval by the Department is required before water from any new or reconstructed spring source may be served to the public. For new spring sources, the Department may require a site evaluation report as set forth for wells in Section 510. Any supplier of water for a public water system served by one (1) or more springs shall ensure that the following requirements are met: (3-30-07)

02. Access to Spring Box. *~~A watertight and locking access port shall be provided. The~~* Each spring

box access ~~*port*~~ shall be elevated at least twenty-four (24) inches above the top of the box or ~~*covering sod*~~ *the ground level*, whichever is higher. *The actual height above the top of the box or the ground level must be sufficient to prevent incidental contamination from snow accumulation, storm water runoff or accumulation, irrigation water, or other potential sources of contamination.* Each access shall be fitted with a solid water tight cover which overlaps a framed opening and extends down around the frame at least two (2) inches. The frame shall be at least four (4) inches high and shall have a locking device. ~~*(3-30-07)*~~*( )*

Subsection 531.02.k.iii.

531. FACILITY DESIGN STANDARDS: DESIGN STANDARDS FOR CHEMICAL APPLICATION.

02. Facility Design. (3-30-07)

k. Day tanks are subject to the requirements in Subsections 531.02.k.i. through 531.02.k.iv. For the purposes of Section 531, day tanks are defined as liquid chemical tanks holding no more than a thirty (30) hour chemical supply. *( )*

531.02.k.iii.

iii. Where feasible, secondary containment shall be provided so that chemicals from equipment failure, spillage, or accidental drainage of day tanks shall be fully contained. A common receiving basin may be provided for each group of compatible chemicals. The common receiving basin shall provide a secondary containment volume sufficient to hold the volume of the largest storage tank. If secondary containment is not feasible, day tanks shall be located and protective curbings provided so that chemicals from equipment failure, spillage, or accidental drainage of day tanks shall not enter the water in conduits, treatment, or storage basins. *Secondary containment is not required for a day tank if an Idaho licensed professional engineer demonstrates to the Department that the chemical concentration and volume, if spilled, will not be a safety hazard to employees, will not be hazardous to the public health, and will not harm the environment.* *( )*

Subsections 542.15, 542.15.a., and 542.15.b.

542. FACILITY AND DESIGN STANDARDS - DISTRIBUTION SYSTEM.

542.15

15. Air Valves. At high points in water mains where air can accumulate, provisions shall be made to remove the air by means of air release *and vacuum relief* valves *or combination air release/vacuum relief valves. Air release valves, vacuum relief valves, or combination air release/vacuum relief valves may not be required if* vacuum relief and air release functions in the pipeline *can* be adequately handled by approved appurtenances such as fire hydrants. *( )*

a. The open end of an air *valve* shall be extended to at least one (1) foot above grade and provided with a screened, downward-facing elbow. When *the air vent on* an air *relief valve* cannot be practically installed above ground, the vent may be below grade provided that the *valve is manually operated and the air vent is extended to the top of the valve vault and provided with a screened, downward-facing elbow. In addition, for below ground vents, the valve vault must be* rated for appropriate traffic loading in traffic areas and the *vault* drained to daylight *or provided with adequate drainage to prevent flooding of the vault.* *( )*

b. Discharge piping from air relief valves *or combination air release/vacuum relief valves* shall not connect directly to any storm drain, storm sewer, or sanitary sewer. *( )*

Subsections 544.02.e., 544.07.a. through 544.07.c., and 544.08.d.

544. FACILITY AND DESIGN STANDARDS: GENERAL DESIGN OF FINISHED WATER STORAGE. The materials and designs used for finished water storage structures shall provide stability and durability as well as protect the quality of the stored water. Finished water storage structures shall be designed to maintain water circulation and prevent water stagnation. Steel structures and facilities such as steel tanks, standpipes, reservoirs, and elevated tanks shall be designed and constructed in accordance with applicable AWWA Standards, incorporated by reference into these rules at Subsection 002.01. Other materials of construction are acceptable when properly designed to meet the requirements of Section 544. ~~(3-30-07)~~( )

02. Location. Storage facilities shall be located in a manner that protects against contamination, ensures structural stability, ~~and~~ protects against flooding, and provides year-round access by vehicles and equipment needed for repair and maintenance. ~~(3-30-07)~~( )

544.02.e.

e. Ground-level or *above-ground* storage structures or facilities shall be located a minimum of twenty (20) feet from the nearest property line and a minimum of twenty (20) feet from any potential source of contamination. *( )*

544.07

07. Access. Finished water storage structures shall be designed with reasonably convenient access to the interior for cleaning and maintenance. At least two (2) manholes shall be provided above the waterline at each water compartment where space permits. (3-30-07)

a. The following access requirements apply to ~~*elevated*~~ above-ground *and ground-level* storage structures~~:~~. ~~(3-30-07)~~

~~*i.*~~ ~~*At least one (1) of the*~~ *Each* access manhole~~s~~ shall be framed ~~*at least*~~ *a minimum of* four (4) inches above the surface of the roof at the opening. ~~*The manholes shall be fitted with a solid water tight cover which overlaps the framed opening and extends down around the frame at least two (2) inches, shall be hinged on one side, and shall have a locking device.*~~ *The actual height above the surface of the roof must be sufficient to prevent incidental contamination from snow accumulation, storm water runoff or accumulation, irrigation water, or other potential sources of contamination.* ~~(3-30-07)~~( )

~~*ii. All other manholes or access ways shall be bolted and gasketed according to the requirements of the reviewing authority, or shall meet the requirements of the Subsection 544.07.a.i.* (3-30-07)~~

b. The following access requirements apply to ~~*groundlevel*~~, partially buried or below-ground storage structures~~:~~. *Each access manhole shall be elevated a minimum of twenty-four (24) inches above the surface of the roof or the ground level, whichever is higher. The actual height above the surface of the roof or the ground level must be sufficient to prevent incidental contamination from snow accumulation, storm water runoff or accumulation, irrigation water, or other potential sources of contamination.* ~~(3-30-07)~~( )

~~*i. Each manhole shall be elevated at least twenty-four (24) inches above the top of the tank or covering sod, whichever is higher.* (3-30-07)~~

~~*ii.*~~**c.** Each manhole shall be fitted with a solid water tight cover which overlaps a framed opening and extends down around the frame at least two (2) inches. The frame shall be at least four (4) inches high. Each cover shall be hinged on one side, and shall have a locking device. (3-30-07)

544.08.d.

08. Vents. Finished water storage structures shall be vented. The overflow pipe shall not be considered a vent. Open construction between the sidewall and roof is not permissible. Vents shall: (3-30-07)

d. On ground-level, partially buried, or below-ground structures, open downward with the opening at least twenty-four (24) inches above the roof or ~~*sod*~~ *the ground level* and covered with twenty-four (24) mesh non-corrodible screen. The screen shall be installed within the pipe at a location least susceptible to vandalism. ~~*(3-30-07)*~~*( )*

Subsections 552.01.a. and 552.01.a.i.

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. ~~*(12-1-92)*~~*( )*

a. Minimum ~~*Quantity*~~ *Capacity*. The capacity of a public drinking water system shall ~~*in no instance be less than*~~ be at least eight hundred (800) gallons per day per residence~~*, plus irrigation flows*~~. ~~*(5-3-03)*~~*( )*

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. *( )*