

REC. OF STATE  
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CERTIFICATE AND ORDER  
FOR FILING  
**PERMANENT**  
ADMINISTRATIVE RULES WITH THE SECRETARY OF STATE

I HEREBY CERTIFY that the attached copy is a true, full and correct copy of PERMANENT rule(s) adopted on November 19, 1993  
(Date)

by the Water Resources Commission  
(Department) (Division)

to become effective January 1, 1994  
(Date)

The within matter having come before the Water Resources Commission  
(Department) (Division) after

all procedures having been in the required form and conducted in accordance with applicable statutes and rules and being fully advised in the premises:

Notice of Intended Action published in Secretary of State's Bulletin: NO  YES  Date Published: September 1, 1993

NOW THEREFORE, IT IS HEREBY ORDERED THAT the following action be taken: (List Rule Number(s) or Rule Title(s) on Appropriate Lines Below)

Adopted:  
(New Total Rules)

Amended:  
(Existing Rules) OAR 690-200 through OAR 690-235, "Water Supply Well Construction and Maintenance Rules" and OAR 690-240, "Monitoring Well Construction and Maintenance Rules"

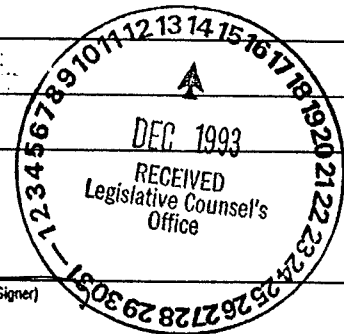
Repealed:  
(Total Rules Only)

Administrative Rules of the Water Resources Department  
(Department) (Division)

DATED this 14 day of December, 19 93

By: *Mustafa D. Patel*  
(Authorized Signer)

Title: Director



Statutory Authority: ORS 536.090 and 537.505 through 537.795

Chapter(s) \_\_\_\_\_, Oregon Laws 19 \_\_\_\_\_ or

House Bill(s) \_\_\_\_\_, 19 \_\_\_\_\_ Legislature; or Senate Bill(s) \_\_\_\_\_, 19 \_\_\_\_\_ Legislature

Subject Matter: Water Supply and Monitoring Well Construction Rules. Ground Water Advisory Committee Rules. These rules pertain to proper construction, maintenance and abandonment techniques to be used related to water supply and monitoring wells. Division 235 provides guidance to the Ground Water Advisory Committee.

For further information contact: Rob Carter/Beth Patrino Phone: 378-8455 (exts. 296/299)  
(Rule Coordinator)

## DIVISION 215

### MAINTENANCE, REPAIR AND DEEPENING OF WATER SUPPLY WELLS

#### Prevention of Groundwater Contamination, Health Hazard, and Waste

690-215-005 The landowner of the property on which the water supply well is constructed is ultimately responsible for the maintenance and use of the water supply well. The landowner shall maintain all wells in a condition where they are not a health threat, a [or] health hazard, [or] a source of contamination, or a source of waste of the groundwater resource. If, in the opinion of the Director, a well is a health threat, or health hazard, or a source of contamination or a source of waste of the groundwater resource, the Director may order discontinuance of or impose conditions upon the use of the well or order the well repaired or permanently abandoned in accordance with OAR Chapter 690, Divisions 215 and 220 of the Standards for Construction and Maintenance of Wells in the State of Oregon.

{adopted 2-18-77; amended: 1-1-79; 4-28-83; renumbered from 690-62-005 11-1-86; 6-24-88; 12-7-90}

#### [Notice Required to] Maintenance [Maintain] of an Existing Well Following Construction of Replacement Well

690-215-010 Any time a new well is constructed to replace an existing well which is a source of contamination, loss of artesian pressure or waste, the existing well shall be repaired in compliance with these rules or abandoned in accordance with rules OAR 690-220-030 through 690-220-140.

{adopted 6-24-88}

#### Accessibility to Well for Reconditioning, Repair or Abandonment

690-215-015 To enable drilling equipment future access to the well for reconditioning, repair or abandonment, the property owner should maintain a minimum five-foot separation distance between the well and any permanent structure.

{adopted 6-24-88}

#### Down Well Continuous Water Treatment and Back-Siphon Prevention Devices

690-215-017

(1) If a chemical is used to treat well water, it shall not be allowed to come into contact with the inside of the well casing. Down well treatment of well water will only be allowed if

a commercial water treatment system is used. Delivery pipes or tubes designed for the use with the treatment chemicals shall be used to place the chemicals into the water in the well. This rule does not apply when disinfecting the well and the pumping equipment.

(2) In no event shall agricultural pesticides and fertilizers be allowed to enter a well.

(3) As of January 1, 1992, back-siphon prevention equipment shall be installed on any irrigation system connected to a groundwater source when fertilizers or any other chemicals are applied through the system. The landowner or other responsible parties shall be responsible for assuring that the back-siphon prevention equipment is installed and functions properly. (See Figure 20, 1991.) The landowner or other responsible parties shall inspect the device at least once per year, prior to the first use of the year, to ensure that the device is installed and functions properly.

(a) The irrigation system shall contain:

(A) An automatic low-pressure drain which shall:

(i) be installed between the irrigation pump and the irrigation line check valve at the lowest point of the horizontal water supply pipeline.

(ii) be designed to drain all incidental leakage from the check valve out of the irrigation pipeline before that leakage enters the water supply.

(iii) be at least 3/4 inch in diameter with a closing pressure of not less than 5 psi.

(iv) use a corrosion-resistant tube, pipe, or similar conduit to discharge the solution at least 20 feet away and down-slope from the irrigation water source and any other water sources. At the discharge point there shall be an air gap between the discharge pipe and the discharged solution.

(v) not have any valves located on the outlet side of the drain tube.

(vi) have a dam or collection reservoir to prevent the discharged solution from pooling and draining back toward the water source.

(B) An inspection port which shall:

(i) be located on top of the pipeline between the irrigation pump and the irrigation pipeline check valve, directly overhead of the low-pressure drain.

(ii) have a minimum diameter opening of four inches from which the check valves and low-pressure drain shall be visible.

[(iii) be quick coupling.]

(C) An irrigation line check valve which shall:

(i) consist of at least a single check valve.

(ii) be located in the pipeline between the irrigation pump and the point of chemical injection into the irrigation pipeline, and downstream from a vacuum relief valve and automatic low-pressure drain.

(iii) be of heavy-duty construction with all materials resistant to corrosion or protected to resist corrosion.

(iv) be spring-loaded and provide a watertight seal against reverse flow.

(v) be labeled with the following information: manufacturer's name and model, working pressure in pounds per square inch (psi), maximum flow rate, and direction of flow.

(vi) not consist of metal-to-metal seal surfaces.

(vii) be designed and rated for pressures expected to be encountered, including those caused by pumping, water hammers, back-pressure, or other sources. Installation shall be according to design and manufacturer's specifications and recommendations.

(D) An air/vacuum relief valve which shall:

(i) be located on top of the horizontal irrigation pipeline between the irrigation pump and the irrigation line check valve.

(ii) have a total (individually or combined) orifice size of at least 3/4-inch diameter for a 4-inch pipe, a 1-inch diameter for a 5- to 8-inch pipe, a 2-inch diameter for 9- to 18-inch pipe, and a 3-inch diameter for a 19-inch and greater pipe.

(E) A chemical injection line check valve which shall:

(i) be located between the chemical injection pump and the point of chemical injection into the irrigation line.

(ii) be made of chemical-resistant material.

(iii) prevent irrigation water under operating pressure from entering the chemical injection line.

(iv) prevent leakage from the chemical supply tank on system shutdown.

(F) A system interlock which shall:

(i) mechanically or electrically connect the water supply pump and the chemical injection unit for the purpose of automatically shutting down the chemical injection unit in the event of water supply pump shutdown or failure.

(b) If modifications or changes in design, technology, irrigation practices, or other reasons warrant the use or placement of equipment in lieu of that specified herein, the Director may allow for such changes. Requests for modifications shall be in writing, detailing the existing system and uses, and shall include specifications on the proposed changes. The modification shall provide protection to the groundwater resource that is equal to or greater than that provided by the equipment required in this regulation.

(c) These regulations are in addition to equipment requirements for pesticide application under the Federal Insecticide, Fungicide and Rodenticide Act, and are not intended to replace those regulations.

(d) Irrigation systems that are subject to OAR 690-215-017(3) and are connected to a public water system, shall meet the cross-connection control requirements in OAR 333.

(e) Whenever the Director deems it appropriate, the Department may investigate alleged violation of statutes, standards or rules governing back-siphon prevention devices to determine whether a violation has occurred. Violations of OAR 690-215-017 may be administered under ORS 536.900(1)(c), ORS 537.990(3), or OAR 690 Division 260, as appropriate to gain compliance.

{adopted 6-24-88; amended: 2-1-91}

### **Valves and Casing on Artesian Wells**

690-215-020 Valves and casing on all artesian wells shall be maintained in a condition so that the flow of water can be completely stopped when the water is not being put to beneficial use. All casing, liner pipe, and casing seals shall be maintained in a condition that will prevent surface or subsurface leakage of groundwater. Valves shall be closed when

water is not being put to beneficial use. During periods of subfreezing temperatures, a valve may be partially opened to prevent damage due to freezing.

{adopted 2-18-77; amended: 1-1-79; renumbered from 690-62-010 11-1-86}

### **Casing and Liner Pipe**

690-215-030 All casing or liner pipe used in the repair or deepening of wells shall meet the minimum standards in rules 690-210-190 through 690-210-290.

{adopted 1-1-79; amended: renumbered from 690-61-221 11-1-86}

### **Sealing of Casing**

690-215-040 If in repair or deepening of a drilled well the old casing is withdrawn or advanced, the well shall be recased and resealed in accordance with the rules set forth in rules 690-210-020 through 690-210-510.

{adopted 1-1-79; amended: renumbered from 690-61-226 11-1-86; 6-24-88}

### **Well Cover**

690-215-050 All wells shall be securely covered to prevent any foreign substance from entering the well including any material which might contaminate the water-bearing zone.

{adopted 11-1-86}

### **Access Port or Airline**

690-215-060 The access port or airline on all wells required by 690-210-280 shall be maintained in a condition that will prevent contamination of the water body. Access ports and airlines shall be maintained so that the position of the water table can be determined at any time.

{adopted 2-18-77; amended: 1-1-79; renumbered from 690-62-015 11-1-86}

### **Pressure Gauge**

690-215-070 The pressure gauge and petcock valve required by rule 690-210-120 shall be maintained so that the artesian pressure can be accurately determined at any time. (See Figure 10.)

{adopted 2-18-77; amended: 1-1-79; renumbered from 690-62-020 11-1-86}

### **Flowmeters**

690-215-080 The Director may require the landowner to install totalizing flowmeters on any well, either as a condition of a water right permit or at a later date as circumstances may warrant. The landowner may be required to install flowmeters on existing permitted wells and on wells which are exempted by ORS 537.545.

{adopted 11-1-86}

#### **Conversion to an Artesian Well**

690-215-090 If a well becomes artesian upon deepening, the well shall be cased, sealed and completed in accordance with rule 690-210-120.

{adopted 1-1-79; amended: renumbered from 690-61-236 11-1-86}

#### **Drilling in a Dug Well**

690-215-100 In no case shall a dug well be deepened by drilling methods.

{adopted 1-1-79; amended: renumbered from 690-61-241 11-1-86}