

Secretary of State  
**STATEMENT OF NEED AND FISCAL IMPACT**  
A Notice of Proposed Rulemaking Hearing accompanies this form.

**FILED**  
4-14-17 1:44 PM  
ARCHIVES DIVISION  
SECRETARY OF STATE

Water Resources Department  
Agency and Division

690  
Administrative Rules Chapter Number

Modifies back-siphon prevention device standards for irrigation systems using groundwater to chemigate or fertigate.

Rule Caption (Not more than 15 words that reasonably identifies the subject matter of the agency's intended action.)

In the Matter of:

The modification of existing rules in order to allow for the use of alternate devices to prevent backflow when using groundwater irrigation systems to chemigate or fertigate.

**Statutory Authority:**

ORS 536, 537 & 540

**Other Authority:**

**Statutes Implemented:**

ORS 537.780

**Need for the Rule(s):**

The purpose of the well construction standards is to protect groundwater resources from contamination, waste, and loss of artesian pressure. The Oregon Water Resources Department (Department) is pursuing this rulemaking in the interest of protecting the groundwater resources and water users of the State. These rules would modify the well construction standards in order to provide additional backflow prevention options to irrigators that choose to apply chemicals or fertilizers through a groundwater irrigation system. The changes include:

- Clarifying the installation requirements for down well water treatment systems.
- Specifying the requirements for chemicals used to treat down well groundwater.
- Clarifying back-siphon prevention device testing requirements.
- Clarifying back-siphon prevention device options for irrigation wells with a mainline diameter four inches or larger when used to chemigate or fertigate.
- Clarifying back-siphon prevention device options for irrigation wells with a mainline diameter less than four inches when used to chemigate or fertigate.
- Clarifying the options for individuals that wish to utilize other methods to prevent backflow when applying chemicals or fertilizers through an irrigation system.
- Adding information regarding other agencies that also have backflow assembly requirements.
- Adding detailed requirements for bypass piping installed around approved back-siphon prevention devices.
- Specifying Department authority to require back-siphon prevention devices on any water supply well.

**Documents Relied Upon, and where they are available:**

Oregon Water Resources Administrative Rules can be viewed at: <http://www.oregon.gov/owrd/pages/law/oar.aspx>.

**Fiscal and Economic Impact:**

The Department does not expect that the proposed rule changes will have a fiscal impact on the Department, but does predict that the proposed rules will result in a small cost increase for irrigators with mainline diameters that are less than four inches due to the cost of annual testing. The Department anticipates that the cost of an annual back-siphon prevention device test will be between approximately \$50 to \$100. Current rules already require the installation of back-siphon prevention devices on groundwater irrigation systems used to chemigate or fertigate. Irrigators without a device already installed are expected to move forward with installation of a device. The cost of a device for groundwater irrigation systems with a mainline diameter that is less than four inches is approximately \$225 to \$1,575, depending on the size. The cost of a device for groundwater irrigation systems with a mainline diameter that is four inches or larger is approximately \$650. Installation costs are estimated to be approximately \$500.

**Statement of Cost of Compliance:**

**1. Impact on state agencies, units of local government and the public (ORS 183.335(2)(b)(E)):**

The Department does not expect a fiscal impact on state agencies or units of local government unless they are the owners of wells that use chemigation or fertigation techniques. The public may see a slight increase in costs (~ \$50 to \$100) as a result of the proposed rule changes if

they are already using a groundwater irrigation system to chemigate or fertigate and their mainline is smaller than four inches due to the cost of an annual back-siphon prevention device test.

**2. Cost of compliance effect on small business (ORS 183.336):**

**a. Estimate the number of small business and types of businesses and industries with small businesses subject to the rule:**

Irrigators that use groundwater irrigation systems to chemigate or fertigate will be subject to the proposed rules. The Department is unable to make a determination of the number of irrigators that are currently involved in this practice because they are not required to register these operations with the Department (See description of increased costs in fiscal impact statement, above).

**b. Projected reporting, recordkeeping and other administrative activities required for compliance, including costs of professional services:**

The Department does not expect that the proposed rules will result in additional reporting by irrigators. The anticipated cost associated with annual testing will be approximately \$50 to \$100 per year for groundwater irrigators with mainline diameters smaller than four inches that choose to chemigate or fertigate. Groundwater irrigators with mainline diameters four inches and larger that choose to chemigate or fertigate are able to test the required back-siphon prevention devices themselves. Therefore, the Department does not expect a cost increase for these individuals.

**c. Equipment, supplies, labor and increased administration required for compliance:**

Current rules require the installation of a back-siphon prevention device for groundwater irrigation systems that are used to chemigate or fertigate. The modified rules separate large irrigation systems from small systems based on the size of the mainline. Small systems (Mainline smaller than four inches in diameter) will now be allowed to install a back-siphon prevention device that is different from the device required on the larger systems (Mainline diameter four inches and greater). The cost of the smaller device (\$225 to \$1,575) varies depending on the mainline size, but is similar to the cost of the device required on larger irrigation systems (~\$650), so in most cases, irrigators should not see a cost increase, except the cost of annual testing (~ \$50 to \$100 a year). The larger irrigation systems are able to test the systems themselves. Therefore, the Department does not anticipate a cost increase for these individuals.

**How were small businesses involved in the development of this rule?**

The Department assembled a rules advisory committee that included members who will be affected by the proposed rule changes, including an irrigator, a water treatment professional, a backflow prevention equipment trainer and retailer, the Nature Conservancy, and OHA Drinking Water Services.

**Administrative Rule Advisory Committee consulted?: Yes  
If not, why?:**

05-31-2017 5:00 p.m.	Diana Enright	diana.m.enright@oregon.gov
Last Day (m/d/yyyy) and Time for public comment	Printed Name	Email Address