

WAC 16-202-310 Water source backflow prevention. (1) Backflow prevention to the water source shall be required on all irrigation systems used for chemigation or fertigation.

(2) Backflow prevention devices on equipment used for chemigation or fertigation that connect to any water system intended for human use, including municipal and public water systems, shall have been approved by the Washington department of health per the requirements in WAC 246-290-490. Provided that a physical separation between the equipment and water system in the form of an air gap can be used to protect the water system if no backflow prevention device is used.

(3) Pressurized irrigation system.

(a) At least one irrigation mainline check valve must be correctly installed, properly operated, and adequately maintained to prevent contamination of the water source. The check valve must be located upstream from the injection point. The check valve must be automatic, quick-closing, and capable of forming and maintaining a watertight seal.

(b) An inspection port or a direct access point must be positioned immediately upstream of the check valve to allow visual and manual inspection of the check valve and the low-pressure drain. The inspection port or access point must have a minimum diameter of four inches. If a four-inch inspection port or access point is not feasible, an alternative access system must be devised.

(c) An inspection port or access point is not required with an approved backflow prevention assembly.

(d) A vacuum-relief valve must be located upstream of the irrigation line check valve, installed at the top of the irrigation pipeline, and adequately sized to prevent backsiphoning. The orifice size must comply with current American Society of Agricultural and Biological Engineers (ASABE) standards.

(e) An automatic low pressure drain or similar mechanism must be placed upstream of the irrigation line check valve and at the lowest point in the bottom of the pipeline. The low-pressure drain must be of adequate size and properly positioned to intercept and purge leakage away from the water source.

(f) Product-treated water cannot be discharged through a water outtake.

(4) Nonpressurized water delivery system.

(a) An open surface water delivery system cannot be used for chemigation unless allowed by the label.

(b) System design must prevent the introduction of treated water into the water source.

(c) Backflow prevention may be achieved with a hydraulic discontinuity in source water flow or by a sufficient hydraulic gradient.

(d) Backflow devices for nonpressurized systems may include a weir box, drop structure, ASAE approved air gap, batch tank, or similar device that can function to prevent backflow into the source water.

(e) Injection must occur downstream from the water diversion point.

[Statutory Authority: RCW 17.21.030, 15.58.040(2), and 15.54.800(2). WSR 25-22-066, s 16-202-310, filed 10/31/25, effective 12/1/25.]