

**WAC 16-202-1013 What alternative methods may be used to prevent backflow into the irrigation water source?** The application of alternative technology in achieving backflow prevention must be accomplished either by a backflow system or by system design to fulfill the provisions of this chapter. The operator must be able to demonstrate that backflow cannot occur. Alternative technology must provide substantially equal or greater protection than the provisions of this chapter.

(1) System design.

(a) If a system's configuration will provide substantially equal or greater protection due to the physical laws of gravity and water hydraulics, components of a backflow prevention system may be waived by the department.

(2) Barometric pipe loop.

(a) Barometric loops can only be used on systems pumping from a surface water source.

(b) The barometric pipe loop must be located in the main water line immediately downstream of the irrigation water pump.

(c) A barometric pipe loop must be designed with sufficient elevation differential to compensate for backflow.

(d) The bottom of the barometric loop apex must be at least thirty inches above the highest water-emitting device or of any portion of the irrigation application system.

(e) The barometric loop must contain a vacuum relief device at the loop apex that allows air into the pipeline immediately upon loss of pressure. The orifice size must comply with current American Society of Agricultural Engineers (ASAE) standards.

(f) The chemical injection port must be located downstream of and at least thirty inches below the bottom of the pipe loop apex.

(3) The department will recognize authorized U.S. Environmental Protection Agency (USEPA) alternative backflow devices, providing they are as restrictive as the provisions of this chapter.

[Statutory Authority: Chapters 15.54, 15.58, 17.21, and 34.05 RCW. WSR 01-23-018, § 16-202-1013, filed 11/9/01, effective 11/9/01.]