

WAC 16-202-345 Alternative product injection equipment. (1)

When utilizing a surface supplied water source, the injection point must occur downstream from the point of diversion.

(2) When utilizing a pressurized water source, the injection point must be located such that product backflow cannot occur.

(3) Injection with barometric loops.

(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 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 30 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 and Biological Engineers (ASABE) standards.

(f) The injection point on a barometric loop must be located downstream of and at least 30 inches below the bottom of the barometric pipe loop apex.

(4) Solenoid and check valve.

(a) The chemical injection line must contain either a normally closed solenoid-operated valve connected to the system interlock or a normally closed hydraulically operated valve that opens only when the main water line is adequately pressurized. A normally closed, solenoid-operated valve must be placed on the intake side of the injection pump, immediately adjacent to the application tank.

(b) The chemical injection line between the application tank and the metering device must contain an automatic, quick-closing check valve to prevent the flow of liquid back toward the application tank. The check valve must be placed immediately adjacent to the venturi chemical inlet.

[Statutory Authority: RCW 17.21.030, 15.58.040(2), and 15.54.800(2). WSR 25-22-066, s 16-202-345, filed 10/31/25, effective 12/1/25.]