

Kansas Administrative Regulations

Department of Labor

Article 50.—General Requirements for All Boilers

49-50-4. Cross-connection control.

(a) A person shall not install any water-operated equipment or mechanism, or use any water-treating chemical or substance, if it is found that this equipment, mechanism, chemical, or substance may cause pollution of the domestic water supply. The equipment or mechanism may be permitted only when equipped with an approved backflow prevention device.

(b) Each backflow prevention device installed in a potable water supply system shall be maintained in good working condition by the person or persons having control of the device. The devices may be inspected by authorized inspectors and, if found to be defective or inoperative, shall be repaired or replaced as directed by the inspector. A device shall not be removed from use or relocated or another device substituted without formal notification to the office of the responsible authorized inspection agency.

(c) Potable water piping shall not be installed or maintained within any piping or device conveying sewage, wastes, or other materials hazardous to health and safety.

(d) Each hot water heating and steam boiler connection shall be protected by an approved backflow prevention device as set forth in subsection (e) of this regulation and shall be tested and inspected by a qualified inspector.

(e) Nonpotable water piping. If it is impractical to correct individual cross-connections on the domestic water line, the line supplying these outlets shall be considered a nonpotable water line. Drinking or domestic water outlets shall not be connected to the nonpotable water line. Backflow or back-siphonage from the nonpotable water line into the domestic water line shall be prevented by the installation of a gravity tank or by a tank having a pump designated for nonpotable water. The domestic water inlets to the nonpotable water tank shall have an approved air gap as specified within the ASME code and the international plumbing code. Whenever it is impractical to install this tank,

an approved pressure-type backflow or back-siphonage prevention device shall be installed as follows:

(1) If reverse flow is possible only as a result of gravity or a vacuum within the line, an approved pressure-type vacuum breaker unit or other approved backflow prevention device shall be installed in the supply line.

(2) Each pressure-type vacuum breaker unit shall be installed at a height of at least 12 inches (.3m) above the highest tank, equipment, or other point at which the nonpotable water is used. Other approved backflow prevention devices shall be installed in a manner satisfactory to the responsible authorized inspection agency, but in no case less than 12 inches (.3m) above the surrounding ground or floor.

(3) If backflow can occur, creating a higher pressure in the nonpotable water line, an approved backflow prevention device shall be installed in the supply line. The backflow prevention device shall be installed at least 12 inches (.3m) above the surrounding ground or floor, or higher than five feet above the floor or surrounding ground, unless a work platform and ladder are provided.

(f) Whenever possible, all portions of the nonpotable water line shall be exposed, and all exposed portions shall be properly identified in a manner satisfactory to the responsible authorized inspection agency. Each outlet on the nonpotable water line that could be used for drinking or domestic purposes shall be posted with the following sign: DANGER—WATER UNSAFE.

(g) An approved backflow prevention device shall conform to the requirements of the American society of sanitary engineering (ASSE) publication 1013, as revised October 1993, and the American water works association (AWWA) publication C511-97, effective February 1, 1998, which are hereby adopted by reference.

(Authorized by and implementing K.S.A. 1998 Supp. 44-916; effective May 1, 1987; amended April 28, 2000.)

***** Authenticated Kansas Administrative Regulation *****