

Kansas Administrative Regulations

Kansas Department of Agriculture— Division of Water Resources

Article 1.—Definitions

5-1-6. Water flowmeter installation specifications.

(a) Each water flowmeter required by the chief engineer on or after the effective date of this regulation shall meet the following minimum water flowmeter installation specifications:

(1) Be installed so that the requirements specified in K.A.R. 5-1-4(a) and K.A.R. 5-1-9(a)(1) are reasonably likely to be met throughout the water flowmeter's expected operational life without further adjustment or calibration;

(2) be installed in a manner that meets or exceeds the instructions of the manufacturer;

(3) except for single jet water flowmeters, multi-jet water flowmeters, fluidic oscillator water flowmeters, and positive displacement water flowmeters, be installed so that there are at least five pipe diameters of straight pipe upstream and at least two pipe diameters of straight pipe downstream of the sensor portion of the water flowmeter, or as many pipe diameters upstream and downstream of the water flowmeter as is required by the manufacturer's installation specifications, whichever is greater;

(4) be sized and installed so that full pipe flow will be maintained through the water flowmeter and so that water velocity in the measuring chamber will be within the normal operating range of the water flowmeter at all times while water is being diverted;

(5) if a water storage device is utilized, be installed upstream from the water storage device;

(6) be installed to measure all water diverted from the source of supply and not to measure other discharge, including tailwater and sewage effluent, and be installed to ensure that each beneficial use of water is measured by a separate water flowmeter;

(7) be installed in such a way that, if prior authorization is not obtained from the manufacturer, an authorized representative of the manufacturer, or the chief engineer, the water flowmeter's totalizer reading and calibration cannot be altered, and the water flowmeter's totalizer cannot be prevented from registering flow, without any tampering or alteration being evident;

(8) be installed to meet any other specifications that the chief engineer determines are necessary based on field conditions.

(b) In addition to the requirements specified in subsection (a), each flanged water flowmeter required to be installed on or after the effective date of this regulation shall be installed with a minimum number of cross-drilled flange bolts sufficient to allow the water flowmeter to be sealed to the pipe.

(c) In addition to the requirements specified in subsection (a), electromagnetic water flowmeters and ultrasonic water flowmeters shall not be installed downstream of a chemical injection port unless chemical injection is necessary for accurate meter operation.

(d) Each water flowmeter that was required by the chief engineer to be installed before the effective date of this regulation, either as a condition of approval of an application, by an order of the chief engineer, or by a regulation adopted by the chief engineer, shall meet the following minimum installation specifications:

(1) Be installed in a manner that meets or exceeds the installation requirements of the manufacturer and, except for single jet water flowmeters, multi-jet water flowmeters, and positive displacement water flowmeters, be installed so that there are at least five pipe diameters of straight pipe upstream and at least two pipe diameters of straight pipe downstream of the sensor portion of the water flowmeter or as many pipe diameters upstream and downstream of the water flowmeter as is required by the manufacturer's installation specifications, whichever is greater;

(2) be sized and installed so that full pipe flow will be maintained through the water flowmeter and so that water velocity in the measuring chamber will be within the

normal operating range of the water flowmeter at all times while the water is being diverted; and

(3) be installed to measure all water diverted from the source of supply and not to measure other discharge, including tailwater and sewage effluent, and be installed so as to ensure that each beneficial use of water is measured by a separate water flowmeter.

(e) In addition to the requirements specified in subsection (d), electromagnetic water flowmeters and ultrasonic water flowmeters required by the chief engineer to be installed before the effective date of this regulation, either as a condition of approval of an application, by an order of the chief engineer, or by a regulation adopted by the chief engineer, shall not be installed downstream of a chemical injection port unless chemical injection is necessary for accurate meter operation.

(Authorized by K.S.A. 82a-706a; implementing K.S.A. 82a-706a and K.S.A. 82a-706c; effective Sept. 22, 2000; amended Oct. 24, 2003; amended Aug. 14, 2026.)

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