



## AMARILLO BI-CITY-COUNTY HEALTH DISTRICT

Amarillo, Canyon, Potter County, Randall County

CITY OF AMARILLO, P. O. Box 1971, Amarillo, TX, 79105-1971

### Subchapter J. Private Water Systems.

#### §228.271. Water Supply and Pressure.

Food Service Establishments having water supplies that do not meet the definition of a public water system as defined by Title 30 of the Texas Administrative Code Chapter (30 TAC) §290.38(66) or that are not regulated by the Texas Commission on Environmental Quality (TCEQ) shall comply with the requirements of this subchapter.

(1) Water supply. An adequate supply of water shall be available at all times in each food service facility, with a minimum of 24 Gallons/Person/Day (GPD) provided. <sup>Pf</sup>

(2) Water pressure. The system shall be designed to maintain a minimum pressure of 35 pounds per square inch (psi) and shall be designed to provide the maximum daily demand for the various types of facilities listed in 30 TAC §290.45(d)(1)(A). When the system is intended to provide firefighting capability, it shall also be designed to maintain a minimum pressure of 20 psi under combined fire and drinking water flow conditions. Minimum distribution pressure shall not be less than 20 psi at any time. <sup>Pf</sup>

#### §228.272. Water Quality.

(a) Bacteriological properties. Each food establishment that uses a private water system shall have its water sampled and tested for total coliform, fecal coliform, *E. coli*, or other fecal indicator organisms as specified in this subsection. <sup>P</sup>

(1) A food establishment shall have its water sampled and tested and must obtain negative test results one month before commencing operation. <sup>P</sup>

(2) A food establishment shall have its water sampled and tested every six months and must obtain negative test results. <sup>P</sup>

(3) If a test result is positive, the food establishment shall remediate the water system and have its water sampled and tested every month until test results are negative for 12 consecutive months. After achieving negative test results for 12 consecutive months, the facility shall resume water testing every six months as specified in paragraph (2) of this subsection. <sup>P</sup>

(4) Testing for microbial contaminants shall be performed at an accredited laboratory certified in accordance with 30 TAC Chapter 25 Environmental Testing Laboratory Accreditation And Certification.

(5) If a routine distribution coliform sample is positive for *E. coli*, then the facility shall post a written boil water notification. The notification shall state, "To ensure destruction of all harmful bacteria and other microbes, water for drinking, cooking, and ice making must be boiled and cooled before consumption or use in preparing food or cleaning food contact surfaces and equipment. The water shall be brought to a vigorous rolling boil and then boiled for least two minutes. Instead of boiling water, the food establishment may use purchased bottled water, water obtained from some other suitable source, or ice obtained from an approved source." <sup>P</sup>

(6) The boil water notification shall remain in effect until a repeat distribution coliform sample is coliform-negative. <sup>P</sup>

(7) Records of all bacteriological tests and of any boil water notification shall be kept on site.

(b) Chemical properties.

(1) Food service facilities shall submit a water sample obtained from the entry point to the distribution system to a laboratory for chemical analysis at least once every three years. <sup>P</sup>

(2) The chemical analysis shall be for primary and secondary constituent levels. <sup>P</sup>

(3) Maximum primary constituent levels are as described in the following table. <sup>P</sup>

Figure: 25 TAC §228.272(b)(3)

(4) Maximum secondary constituent levels are as described in the following table. <sup>P</sup>

Figure: 25 TAC §228.272(b)(4)

(5) Records of all chemical testing shall be kept on site. <sup>P</sup>

(c) Minimum residual disinfectant concentrations and maximum residual disinfectant levels (MRDLs). <sup>P</sup>

(1) The minimum residual disinfectant concentration in the water entering the distribution system and the water within the distribution system shall be 0.2 milligrams per liter (mg/L) free chlorine. <sup>P</sup>

(2) The MRDL of free chlorine in the water within the distribution system shall be 4.0 mg/L based on a running annual average. <sup>P</sup>

**Figure: 25 TAC §228.272(b)(3)**

<b>CONSTITUENT</b>	<b>LEVEL (mg/l except where otherwise stated)</b>
Antimony	0.006
Arsenic	0.010
Asbestos	7 million fibers/liter (longer than 10 µm)
Barium	2
Beryllium	0.004
Cadmium	0.005
Chromium	0.1
Cyanide	0.2 (as free Cyanide)
Fluoride	4.0
Mercury	0.002
Nitrate	10 (as Nitrogen)
Nitrite	1 (as Nitrogen)
Nitrate and Nitrite (Total)	10 (as Nitrogen)
Selenium	0.05
Thallium	0.002

**Figure: 25 TAC §228.272(b)(4)**

<b>CONSTITUENT</b>	<b>LEVEL (mg/l except where otherwise stated)</b>
Aluminum	0.05 to 0.2
Chloride	300
Color	15 color units
Copper	1.0
Corrosivity	Non-corrosive
Fluoride	2.0
Foaming agents	0.5
Hydrogen sulfide	0.05
Iron	0.3
Manganese	0.05
Odor	3 Threshold Odor Number
pH	>7.0
Silver	0.1
Sulfate	300
Total Dissolved Solids	1,000
Zinc	5.0

§228.273. Backflow Prevention. The plumbing system shall preclude backflow of a solid, liquid, or gas contaminant into the water supply system at each point of use, including on a hose bib, by:

(a) providing an air gap between the water supply inlet and the flood level rim of a plumbing fixture, equipment, or nonfood equipment that is at least twice the diameter of the water supply inlet and not less than 25 mm (1 inch);<sup>P</sup> or

(b) installing an approved backflow prevention device that meets the American Society of Sanitary Engineering (ASSE) standards for construction, installation, maintenance, inspection, and testing for that specific application and type of device.<sup>P</sup>

§228.274. Disinfection of New or Repaired Water System Facilities.

(a) When repairs are made to existing mains or when new main extensions are installed, they shall be disinfected using such amounts of chlorine compounds as to fill the repaired or new mains and appurtenances with water containing 50 mg/L chlorine.<sup>P</sup>

(b) After the water containing this amount of chlorine, which is greater than that normally present in drinking water, has been in contact with the pipe and appurtenances for at least 24 hours, the main shall be flushed until the free chlorine or chloramine in the water within the new or repaired distribution system is less than 4.0 mg/L.<sup>P</sup>

(c) A sample of water from the new or repaired main shall be submitted to a TCEQ Accredited laboratory for bacteriological examination so as to be assured that the disinfection procedure was effective.<sup>P</sup>

(d) A supply of sodium hypochlorite or calcium hypochlorite disinfectant shall be kept on hand for use when making repairs and repairing line breaks.

§228.275. Flushing of Water System Mains. All dead-end mains should be flushed at monthly intervals or more frequently to maintain water quality.<sup>P</sup>

§228.276. Collection System Location.

(a) No sanitary sewers or septic tanks shall be allowed within a distance of 150 feet of any well used for drinking water. No cesspool or septic tank open-jointed drain field shall be allowed within a distance of 150 feet of any well used for drinking water.<sup>P</sup>

(b) Storm sewers located within specified distances for sanitary sewers shall be constructed so as to prevent leakage from them.<sup>P</sup>

(c) Water lines and sanitary sewers shall be installed no closer to each other than nine feet.<sup>P</sup>

§228.277. Well Logs.

Copies of well material setting data, geological log, sealing information (pressure cementing and surface protection), disinfection information, bacteriological sample results, and a chemical analysis report of a representative sample of water from the well shall be kept on file. A State of Texas Well Report must be filed with the Texas Department of Licensing and Regulation (TDLR) in accordance with Texas Occupational Code, Title 12. Practices and Trades Related to Water, Health, and Safety, Chapter 1901.251.

§228.278. Interconnection.

No physical connection between the distribution system of a food service facility water supply and that of any other water supply shall be permitted. Unless that water supply meets all applicable requirements of 30 TAC 290.<sup>P</sup>