

# TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

## HYDROPNEUMATIC PRESSURE TANK

### GENERAL CONSTRUCTION NOTES

1. These water well facilities must be constructed in accordance with the Texas Commission on Environmental Quality (TCEQ) Rules and Regulations for Public Water Systems 30 Texas Administrative Code (TAC) Chapter 290 Subchapter D.
2. All hydro-pneumatic tanks must be located wholly above grade and must be of steel construction with welded seams except as providing in note N<sup>o</sup> 10 of these construction notes.
3. Metal thickness for pressure tanks shall be sufficient to withstand the highest expected working pressures with a four to one factor of safety. Tanks for 1000 gallon capacity or larger must meet the standards of the American Society of Mechanical Engineers (ASME) Section VIII, Division 1 Codes and Construction Regulations and must have an access port of periodic inspections. An ASME name plate must be permanently attached to those tanks. Tanks installed before July 1, 1988, are exempt from the ASME coding requirement, but all new installations must meet this regulation. Exempt tanks can be relocated within a system, but cannot be relocated to another system.
4. All pressure tanks shall be provided with a pressure release device and an easily readable pressure gauge.
5. Facilities shall be provided for maintaining the air-water-volume at the design water level and working pressure. Air injection lines must be equipped with filters or other devices to prevent compressor lubricant and other contaminants from entering the pressure tank. A device to readily determine air-water-volume must be provided for all tanks greater than 1000 gallon capacity. Galvanized tanks which are not provided with the necessary fittings and were installed before July 1, 1988, shall be exempt from this requirement.
6. Hydropneumatic pressure tanks shall be painted, disinfected and maintained in strict accordance with current American Water Works Association (AWWA) standards. Protective paint or coating shall be applied to the inside portion of any pressure tank. However, no temporary coating, wax, grease coating or coating materials containing lead will be allowed. No other coating will be allowed which are not approved for use (as a contact surface with potable water by the United States environmental Protection Agency (EPA), NSF International, The United States Food and Drug Administration (FDA). All newly installed coatings must conform to ANSI/NSF International Standard 61 and must be certified by an organization accredited by ANSI.
7. No pressure tank that has been used to store any material other than potable water may be used in a public water system. A letter from the previous owner or owners must be provided.

8. Pressure tank installations should be equipped with slow closing valves and time delay pump controls to eliminate water hammer to reduce the chance of tank failure.
9. Associated appurtenances including valves pipes and fittings connected to pressure tanks must conform to ANSI/NSF International Standard 61 and shall be thoroughly tight against leakage.
10. Where seamless fiberglass tanks are utilized, they shall not exceed 300 gallons in capacity.
11. No more than three pressure tanks shall be installed at any one site without the prior approval of the executive director.
12. All potable water storage tanks and pressure maintenance facilities must be enclosed by an intruder resistant fence with lockable gates. Pedestal type elevated storage tanks with lockable doors and without external ladders are exempt from this requirement. The gates and doors must be kept locked whenever the facility is unattended.