Anchoring Residential Propane/Fuel Tanks in Flood Hazard Areas

In flood hazard areas of Larimer County, propane and other fuel tanks should be located out of the floodplain. Building, flood and fire codes require new and replacement tanks in flood hazard areas to be securely anchored to help prevent displacement in a flood. Below is the county’s recommended standard for anchoring the tanks. Methods of equivalent strength are acceptable.

Two Straps with Four Earth Augers/Anchors Method

Augers and straps must be strong enough to withstand the buoyancy forces expected in a flood, the lateral force of wind and water, and possible debris impact, and keep the tank upright.

Tanks under 125 gallons allowed next to a home must be securely attached to the home.

Tanks from 125 to 500 gallons must be located at least 10’ from homes, other structures and buildable property lines. These tanks require two straps and four augers with a minimum pullout value of 4,725 pounds in all soil types, with a minimum ground penetration of 3’.

Straps should be a minimum of 1.25” wide x 0.035 inches thick zinc-coated galvanized steel.

Empty tanks are more buoyant – try to fill up before a storm event.

For anchors, use Minuteman, Tie Down Engineering or their equivalent. For hard rock or other situations making it impossible to meet this standard, please consult with a Colorado engineer.

Gas regulators and fuel line penetrations into a house should be above the Design Flood Elevation.

Tanks in Wildfire Hazard Areas must be located within the defensible space.

For Flood Plain information, please call Larimer County Engineering at 498-5700