

Alpine Lakes Ranch Water Company

Cisterns to Supply Potable Water

Many property owners in Alpine Lakes Ranch have chosen to install residential cisterns to provide an emergency supply of potable water for their homes. The Alpine Lakes Ranch Water System is reliable yet there are times when repairs, maintenance, loss of electrical power, or breaks in piping prevent the system from supplying water. When these situations occur having a residential cistern available is very welcome.

Typically a cistern consists of a 700 – 1,800 gallon concrete or heavy gauge plastic tank buried below ground and connected between the Alpine Lakes Ranch Water System and your home. In addition a pump, pressure tank, and control and power circuits are required. Cistern systems are commonly set-up to supply water in one of two ways:

Flow Through Cisterns: The Alpine Lakes Ranch Water System supplies water to the cistern until it is filled to a predetermined level at which point water flow is shut off by a control unit. Water is pumped to the home on demand until the water level in the cistern falls below the level at which the control unit opens the valve to the ALR Water System to refill the cistern. In this configuration the cistern and homeowners have a fresher supply of disinfected water. In an emergency, when the Water System cannot supply water, the cistern will contain a supply that can be used for several days.

By-Pass Cisterns: In this arrangement the cisterns is set-up on a by-pass to the water line that directly connects a home to the ALR Water System. The cistern may be filled and then shut off from the water service line. Under normal operation, residents will get their water directly from the supply line connected to the ALR Water System. In an emergency, when the Water System cannot supply water, the resident must activate the cistern system to bring it "online". By-Pass Cisterns must be disinfected when initially filled with water and on a regular frequency thereafter.

There are other configurations for cisterns beyond these; they should be discussed with a qualified installer.

While cisterns bring a number of benefits, they also introduce potential avenues for contamination of drinking water. Consequently, the Water Quality Control Division of Colorado Department of Public Health and Environment supports Alpine Lakes Ranch Water Company (ALR WATCO) in implementing policies for annual bacteriological testing of residential cisterns.

NOTE: Cisterns used for potable water supply are not the same as cisterns used to collect rain water or (or wastewater/graywater reuse. A cistern that collects rain water or wastewater/greywater (or reuse must NEVER be connected to a cistern intended as a potable water supply. Any such connection poses an immediate health hazard to the homeowner and potentially to the entire Alpine Lakes Ranch Water system.

ALR WATCO

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Alpine Lakes Ranch Water Company

P.O. Box 3220

Pagosa Springs, CO 81147-3220

Alpine Lakes Ranch Residents and Property Owners

Subject: Bacteriological Testing of Residential Cisterns

Those property owners in Alpine Lakes Ranch who have installed permanent residential cisterns are strongly encouraged to implement the following:

1. Water originating from each residential cistern should have testing for bacteriological contamination at least once a year. A copy of the test results must be sent to ALR WATCO.
2. If bacteriological contamination is detected in the initial test and in a retest, then a qualified individual should inspect the cistern to determine if the contamination may have been introduced due to the physical condition of the cistern.
3. Each homeowner with a residential cistern will receive notification about the proper procedures to disinfect a cistern.
4. Property owners who do not wish to have their cistern tested are hereby notified that there are health risks and consequences associated with consumption of water from their untested cisterns.

To ensure the water treatment system for Alpine Lakes Ranch runs efficiently, each property owner needs to complete the following regarding their cistern:

Action needed from you.

1. Obtain the forms outlined below from either a WATCO BOD member or the WATCO website: www.alrwatco.com. Forms & Links, Complete the brief questionnaire about your cistern. If you do not have a cistern please note that on the "Residential Cistern Information Sheet".
2. Return the questionnaire and signed agreement to ALRWATCO at P.O. Box 3220, Pagosa Springs, CO 81147.
3. A list is provided for those companies that complete bacteriological testing in our area.

If you have any questions or concerns about the cistern testing policy or procedures please contact any Board Member.

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(ALRWATCO)