

Rural Water Safety: Sludge & Manure Challenges

Many rural wells are old, hand dug, artesian or stone lined. They were built for a world that had limited pesticides, no liquid manure and no sewage sludge. Now industrial farming practices, sludge storage and spreading, liquid manure storage, industrial activity and quarrying can challenge rural water quality and cause contamination.

As a rural drinking water well owner, you are responsible for your own drinking water testing. People on rural wells also need to keep their septic system in good shape.

Here are some suggestions:

Basic Nitrogen and Phosphorus tests can be purchased on-line for about \$15.00. This is an easy way to check for farmland run-off.

Rural wells should regularly test for Total Coliform, E.coli, Nitrates, turbidity. If the house is older, test for lead. If the area is prone to high arsenic or a former fruit orchard, test for arsenic.

If water is contaminated with E.coli or Coliform or other contaminants - water treatment systems are needed.

If rural residents hear that sewage sludge land application is coming or it has recently been spread, take a clean glass jar and fill it with a water sample and seal it, sign it with the date and put it in the back of the fridge. Useful if a sample water baseline is needed in the future.

Bacterial contamination happens over a period of time and there may be bacteria living in biofilms in the pipes, filters, and fixtures. These bacteria can continue to contaminate tap water even if the well water is clean. Testing at the tap is important to ensure that not just the well but also the tap water is good quality.

Any change in water odors, change in color, change in taste should trigger a move to other drinking water sources and laboratory testing of your water. Talk to neighbors, and talk to your local public health officials.

Many rural properties have hard water and have installed water softeners. This water can have a high salt content from the softening system and will distort testing results. Consider bypassing kitchen taps, particularly a problem for people who need salt restricted diets.

Consult with water quality professionals about treatment options if water is confirmed contaminated - whether with bacteria or with metals or petroleum or pesticides, etc. Remember that contaminated water can pose a health risk for cooking, showering or bathing.

Many people may install UV filters and/or reverse osmosis systems.

Questions About Your City Water:

Ask the municipality for copies of tests on your municipal water supply. Ask about any bacteria and non-compliance events.

Ask about lead hazards, chlorination, fluorides and trihalomethane in the water supply - all health or cancer causing agents.

Consider using a filter (like a Brita filter jug or something similar) to take out the chlorine. Jug water for an hour to allow the chlorine to evaporate before drinking or watering house plants.

Water Is Life:

Treat water sources with respect. Defend local groundwater and water recharge areas.

Oppose deep well injection of wastes or wastewater.

Create or join organizations who champion water issue to protect local rivers and lakes and beaches.

Teach your children to love and respect water.