

## TROUBLESHOOTING A CONTAMINATED WATER SYSTEM

Proper sampling practices are essential in order to get a good representation of the quality of the drinking water. If you received a positive result back for a bacteriological sample double check to see if the sample was collected according to the laboratory recommendations. Resample if necessary.

Prior to **disinfecting** a water system it is best to check for any obvious physical defects. See the table below for some potential problems which could cause a water system to become contaminated.

Problem	Recommended Corrective Action
The well is newly constructed, or maintenance/repair was recently done.	Disinfect and retest. <i>See our Disinfection of a Contaminated Drinking Water System handout.</i>
There is standing water around the well or water draining toward the well.	Re-grade around the well so the ground slopes away from your well.
The concrete well pad is cracked or separated from the well casing.	Re-pour pad or fix and seal all cracks and gaps.
The well is not completely sealed against incoming water, insects, or other foreign matter.	Replace any missing plugs, cap/screen any open pipes, and seal any openings, gaps or cracks.  Contact a licensed well contractor to replace or install a new wellhead gasket.
The pump was primed with impure water.	<i>Go to Disinfection of a Contaminated Drinking Water System.</i>
There is sediment at the bottom of the storage tank. Water tank is leaking or damaged. Storage tank vent or overflow pipe is unprotected.	Screen the storage tank vent or overflow pipe. Contact a water system contractor for tank cleaning/repair.
There are cross-connections in the plumbing system.	Make sure that your plumbing is not connected to another source of water that may be contaminated (i.e., a defunct community water system).
There is not adequate back-flow protection.	Install a back-flow prevention device on every outdoor faucet.  Contact a licensed well contractor to ensure that there is proper back-flow protection within the well.
There are dead-end or unused water lines connected to your plumbing system.	Flush the lines regularly.  Remove any unused lines or sections of the water system.
The well casing is corroded.	Contact a licensed well contractor to assess and repair.
There is sediment at the bottom of the well.	Contact a licensed well contractor to assess and repair.
The well casing is perforated too high or the sanitary seal is not adequate.	Contact a licensed well contractor to drill a new well and to properly destroy the old well.