

SAN LUIS OBISPO COUNTY ENVIRONMENTAL HEALTH SERVICES

DISINFECTION OF PRIVATE WATER WELLS

This handout has been prepared to tell owners of private wells how to disinfect a well that has had an unsatisfactory laboratory water report and to answer questions concerning water supplies that are often asked of the county health department.

A laboratory analysis alone will not show whether or not water is safe for human consumption. So far as ill health from water is concerned, the principal danger is intestinal disease from contamination of water by human sewage. Total coliform bacteria are an indicator of the sanitary condition of a water supply. The presence of coliform bacteria in a water supply shows possible pollution that may contain disease causing organisms. Total coliform bacteria are found in soil, in water that is on or near the surface of the ground, and in human and animal wastes. The total coliform group can survive longer in water than most disease causing organisms and are easier to identify. Therefore, safe water contains no total coliform bacteria.

When total coliform bacteria are found in a private well supply, the first step is usually to check the well for any physical defects. A broken or missing well cap, or a well casing that is too close to the surface of the ground or is located beneath the ground, can allow surface water, insects, and debris to enter the well. These conditions should be corrected and then the water should be retested.

If your well requires disinfection, use the following procedure:

1. Inform all users of the water that it will not be fit for use for 8-12 hours or longer.
2. Add to the well one-gallon or more of household bleach such as Clorox, Purex, etc., mixed with 3-5 gallons of water, making an attempt to wash down the inside of the casing and the surface of the drop pipe.
3. Allow to stand 30 minutes so the chlorine can settle. Then start and stop the pump repeatedly to mix the water and chlorine.
4. Let stand one hour and repeat pumping as under (3).
5. Open all taps until chlorine is smelled, tasted or tested in the water. Then close the taps and allow to stand overnight (or 8-12 hours). Disconnect or bypass any activated carbon filter system.
6. Flush out the system beginning with the well. Use a hose connected to an outside hose bibb and run until the odor of chlorine is gone or the chlorine test is negative. Do not discharge to a septic system or lawn. After the water from the well is free from chlorine, flush the remainder of the piping system.
7. Take all necessary steps to completely seal the well from any further contamination.
8. Contact the San Luis Obispo County Public Health Department, Environmental Health Services, at 781-5544 if you additional questions.