

Fact Sheet: 1

Bacteriological (Coliform) Sampling Noncommunity Public Water Supplies

Water Supply Serial Number (WSSN) _____ Well # _____

Name of Water Supply _____

Sampling Contact _____ Phone _____

Health Department Contact _____ Phone _____

Coliform Sampling Frequency _____ (Annual, Quarterly, Monthly)

Coliform Sampling Location _____
(Sample siting plan required to be approved by local health department, see sanitary survey.)

Laboratory Name _____ Phone _____

Coliform Bacteria - General Information

Coliform bacteria are used as an indicator organism to assess the sanitary quality of drinking water. They are commonly found in high numbers in the intestinal tract of man and other warm-blooded animals and in sewage. They can also be found in surface waters, soils, and surfaces exposed to the elements. Coliform bacteria should not be found in a closed drinking water system that is functioning properly. Their presence can mean the integrity of the water system has been compromised. Repeat testing is required after an initial positive result.

Sampling Protocol

- Collect the samples just prior to delivery or mailing to the laboratory. Samples must be analyzed within 30 hours of collection.
- Use the proper sample container obtained from a certified laboratory.
- Read the sampling instructions carefully.
- Sample from an approved tap per the sample siting plan, not from hoses or locations that are unsanitary.
- Allow the water to run at full flow for several minutes before collecting the sample to flush stagnant water. (Fill out the sample form while you wait.)
- Adjust the tap to provide a pencil-sized stream of water. Remove the cap from the sterile bottle and take the sample immediately and replace the cap. *Note: The inside of the sample bottle may be treated with a powdered reagent, which must not be rinsed or blown out. Do not touch the inside of the bottle or cap.*
- Complete the report form *making sure the WSSN, well number, date and time of sampling* and return address are recorded on the form correctly. Be sure to request the proper lab analysis or test code for coliform bacteria and place the form with the container.
- Deliver or mail the sample to the lab as soon as possible so the 30 hours transit time is not exceeded. Sample must be iced or refrigerated while in transit to the laboratory.

After Receiving Coliform Test Results

Review the sample results and send a copy of results to the local health department. (If you use the DEQ lab and have properly completed the sample form, results are automatically sent to the local health department.)

- If sample results indicate coliform bacteria were not detected, i.e. Not Detected, ND, 0, or similar notation, continue on the designated routine sampling frequency.
- If sample results indicate coliform bacteria were detected, i.e. Positive, POS, Detected, FC POS, EC POS, or similar notation, you must:
 - Contact the local health department to discuss repeat sampling procedures.
 - Collect four (4) repeat samples within 24 hours of receiving the positive result (or by the next business day).
 - At least one sample must be from the same tap as the original positive sample.
 - At least one sample must be from the raw water tap (at or near pressure tank).
 - The rest should be from approved sampling locations within the distribution system listed on your sample siting plan. If there are not two other approved sampling taps in the system, collect at the original tap and the raw water tap again.
 - Three (3) routine samples are required the month following the repeat samples to confirm the problem was corrected.
 - If there is more than one coliform positive in any routine and/or repeat sampling or all 4 repeat samples are not collected, a Level 1 Assessment of the supply must be conducted within 30 days.
 - If the initial sample was E. coli positive, and one or more of the four repeat samples were total coliform positive or E. coli positive, an ***E. coli MCL*** has occurred.

If you have an MCL violation, you must:

1. Notify the local health department within 24 hours or the next business day.
2. Initiate an investigation to determine the cause and extent of the problem.
3. Notify the public (consumers) of the MCL violation as instructed by the local health department (LHD).
4. Provide a temporary alternate supply of water from an approved source, such as bottled water.
5. Take corrective measures, such as disinfection, repairs or construction upgrades, installation of a new well, etc., after the LHD conducts the Level 2 Assessment.
6. Once the corrective measures have been taken, additional sampling is required to resume normal service. Two consecutive samples must be negative for coliform bacteria and collected at least 24 hours apart. There must be no chlorine residual at the time of sampling, as confirmed by the use of a chlorine test kit.

You must have local health department approval prior to placing the well back into normal service and discontinuing public notice.