

# HOW TO COLLECT A WATER SAMPLE FOR BACTERIOLOGICAL ANALYSIS

September 14, 2011

**NOTE:** PUBLIC WATER SYSTEMS MAY REQUIRE SAMPLING BY A CERTIFIED WATER OPERATOR.

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Samples received by 3pm, are setup and ran the same day; otherwise they are held over and ran the following day. When samples are mailed, collect after 9:00 AM the same day you mail and mail priority before 12 noon. Do NOT mail on Friday, Saturday or the day before any holiday. EPA protocol requires that the analysis for Coliform bacteria begins within 30 hours of collection.

1. Do NOT open the sample bottle until you are ready to fill it.
2. Select a sample tap from which to take the sample. If you have treatment devices, such as a water softener or a reverse osmosis filter on your water system, you need to decide what you want to test. Do you want to know about your source water quality or the water you are actually drinking? If you want to sample what you are using, simply get the sample from the tap you get drinking water from. If you want to sample your source water, locate a faucet which is attached to the water line before the treatment system.
3. Always sample from the cold water tap. Try to avoid sampling from drinking fountains or outside hydrants/spigots. Remove any faucet attachments (aeration screens, hoses, etc.)
4. Remove screen from inside faucet and ***DISINFECT*** mouth of faucet with bleach.
5. Open tap fully. Let water run to waste for 3 to 4 minutes ensuring sufficient time to allow flushing of the service line and the removal of any residual disinfectant)
6. Reduce the flow (to about the diameter of a pencil). **NOTE:** If the water dribbles to the faucet edge and contacts the metal before entering the bottle the sample may be contaminated; readjust the flow or select a different sampling tap.
7. Wash your hands with warm soapy water for at least 30 seconds and dry them with a clean towel. Open the bottle being very careful not to breathe onto the mouth of the container or to allow anything to fall into the opening of the bottle. It only takes one little bacteria floating on a dust particle to contaminate the whole container. Hold the lid in one hand while filling the bottle. If you need to put the cap down, sit it with the inside facing up in a clean, calm area. The bottle contains sodium thiosulfate in a powder, liquid, or pill form. Do not remove the powder, liquid or pill from the container. Do not rinse the bottle before filling (sodium thiosulfate neutralizes the chlorine in the water). **HINT:** It is easier to write on the bottle when the sample has not yet been taken. Use ball point pen or permanent ink marker and allow any ink to dry before filling the sample bottle.
8. Fill the container up to the **100 ml line** on the bottle then replace the cap on the container.
9. Complete the information on the sample bottle label and on the chain of custody form. Transport the sample to Bridger Analytical Lab, Inc. using the shortest transit time possible. Try to maintain the sample at room temperature. Do not freeze or overheat the sample.
10. **All positive total Coliform samples are confirmed for the presence of *E. coli*. If the sample is found to be positive for *E. coli*, the microbiological report will indicate its presence.**
11. All results are confidential. Results will only be released by Bridger Analytical Lab, Inc. to the owner of the property. The results may be duplicated for third party persons pending permission from the owner of the property tested. Please visit with Bridger Analytical Lab, Inc. for turnaround time.



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