

## **BACTERIOLOGICAL MONITORING REQUIREMENTS FOR SMALL PUBLIC WATER SYSTEMS**

1. **ROUTINE SAMPLING** – monthly for community systems, quarterly for non-community and state small systems.
2. **COLIFORMS PRESENT** – laboratory notifies water supplier within 24 hours of positive results. Repeat sampling required.
3. **REPEAT SAMPLING**
  - A. Community and non-community systems: a repeat sample set shall consist of four samples. Within 24 hours a repeat sample shall be collected from sampling tap where the original coliform positive was taken. Other repeat samples shall be collected within five service connections upstream or downstream of the original sampling tap. At least one sample shall be from upstream and one from downstream (see Title 22, Section 64424). A single service connection system may collect the repeat sample set over a four day period.
  - B. State small systems: within 48 hours a repeat sample shall be taken at the original sampling tap where the original coliform positive sample was taken (see Title 22, Section 64212).
4. **COLIFORMS PRESENT IN REPEAT SAMPLE**

Contact the Department of Environmental Health within 24 hours at (530) 694-2146, FAX (530) 694-2252. Corrective action should include:

  - A. **Initiate Public Notification:** system operator shall make users aware of the unsafe water condition and issue a boil or bottled water order (see Title 22, Section 64470 for official public notification language).
  - B. Mitigate the problem.
  - C. Chlorinate the system.
  - D. Continue repeat sampling until no coliforms are detected in any repeat sample.
  - E. Include diagnostic sampling when possible to determine the source of the contamination.
  - F. At least five routine samples shall be collected in the month following the last repeat sample.
5. **COLIFORMS ABSENT IN REPEAT SAMPLE** – if all repeat samples in the initial repeat sample set for community and non-community systems or the initial repeat sample for state small systems are coliform negative (absent), continue routine sampling in the following sample period (month or quarter).

## SUMMARY OF REPEAT SAMPLING

Repeat samples shall all be collected with the same 24 hour time period. A single service connection system may request that the Department allow the collection of the repeat sample set over four-day period.

For the public water systems which report monthly, a repeat sample set shall be at least four samples for each total coliform-positive sample.

If a water supplier can not meet the 24 hour deadline, the supplier shall notify this Department within 24 hours. The Department will then determine how much time the supplier will have to collect the repeat sample. Documentation of contact is imperative.

When collecting the repeat sample set, the water supplier shall collect at least one repeat sample from the sampling tap where the original total coliform-positive sample was taken. Other repeat samples shall be collected with in five service connections upstream or downstream of the original site. At least one sample shall be from upstream and one from downstream unless there is no upstream and/or downstream service connection.

If one or more samples in the repeat sample set is total coliform positive, the water supplier shall collect and have analyzed an additional set of repeat samples. The supplier shall repeat this process until either no coliforms are detected in one complete repeat sample set or the supplier determines that the MCL for total coliforms has been exceeded and notifies the Department.

For water systems which sample monthly and has one or more total coliform-positive samples, the water supplier shall collect at least five routine samples the following month.

A water supplier may request the Department waive the requirement to collect at least five routine samples the following month if one of the following conditions is met:

1. The Department conducts a site visit before the end of the next month the system provides water to the public to determine whether additional monitoring and/or corrective action is necessary to protect the public health.
2. The Department determines why the sample was total coliform-positive and establishes that the system has corrected the problem or will correct the problem before the end of the next month the system serves water to the public. If a waiver is granted, a system shall collect at least one routine sample before the end of the next month it serves water to the public.

## **GUIDELINES FOR SELECTING SAMPLE SITES AND COLLECTING SAMPLES**

1. When selecting sample sites, it is important that the tap is located in a clean environment. Consider protection from contamination from humans, animals, dust, rain and other sources. Outside hose bibs should be clean, located at least 18 inches above the ground, be used frequently and discharge downward. You may wish to install specially designed and protected “dedicated sample taps” from which to collect routine samples.
2. Use only sterilized sample bottles provided by an approve laboratory. Check bottles upon receipt to ensure the lids are tight. Do not accept bottles with loose lids.
3. Maintain a supply of five bottles stored in a clean place and do not open until sample is taken. Use oldest bottle first.
4. Allow the water to flow for two to three minutes before collecting sample. Do no open the tap to full and adjust the rate of flow from the tap so that the jet of water breaks sharply away without lapping the outside lip of the tap.
5. Hold the sample bottle at or near the bottom and loosen the lid. Keep the lid pointed downward while filling bottle and replace as soon as sample is taken, then shut off tap and properly complete laboratory sample slip.
6. Store the sample in a clean container during transport to the laboratory. If the transport time will exceed one hour, store the sample in a clean ice chest for transport to the laboratory.
7. Do not sample from fire hydrants, bathroom taps, leaking taps, drinking fountains or taps which have aerators, strainers, or swivel faucets.
8. Do not rinse sample bottles or allow water to run over hands or other objects during collection.
9. Do not place the lid on the ground or other object during sampling.
10. Do not sample during unfavorable weather conditions such as during or immediately after a rain or while strong wind is blowing.
11. Do not sample from taps surrounded by excessive foliage or which are dirty or corroded. Never sample from a hose or other attachment fastened to the tap.
12. If the water supply is chlorinated, test for the chlorine residual before collecting the bacteriological sample and record the result on the sample slip.