

Directions for Water Systems on Lead & Copper Tap Sample Collection

The following instructions are for routine first-draw lead and copper compliance monitoring in the distribution system. If you collect special samples such as homeowner peace of mind samples, pre- and post-flushing diagnostic samples, or lead service line samples, code those as special samples and notify the Division. If you need to collect any raw water or entry point samples, please make sure those are clearly labelled on the chain of custody form.

Where to sample

Sample at locations according to the water system's Division-approved Lead and Copper Sampling Plan. If you do not have a copy of an approved plan or it needs to be updated, submit a new plan to the Division (forms and guidance available on our website and by request).

Sample from Tier 1 sites on your plan first, then Tier 2 sites if needed, then Tier 3, then Other. Where possible and where appropriate when following tiers, collect samples at previously sampled locations on your current plan. If you need to replace a sample site due to plumbing changes, vacancy, or ownership change, substitute a site of the same tier off your plan or contact the Division for prior approval.

For Community systems, use a cold water tap from kitchen or bathroom sinks, that has been in regular use. For Non-Community systems, use cold water, consumptive taps that have seen regular use. If it has a combined hot and cold water control (one lever for both), be sure to collect only cold water.

Do not remove faucet aerators or screens before sample collection. They should be removed and cleaned on a regular basis, but not during or leading up to compliance sampling. If any plumbing repairs or replacements have occurred in the building since the last sample collection, consider whether the site's Tier has changed. Residential samples should be collected from homes without whole-house water treatment equipment and from taps without water treatment equipment.

If residents or employees other than the water system operator will be collecting samples, provide the Directions for Lead and Copper Sample Collection by Residents with the sample kit. Before copying the instructions, fill out the contact name at the water system, phone number, and WSID #. Label sample bottles as needed prior to distributing them to residents. The Water System may not challenge the results or the location of sample collection if the sample was collected by someone other than the operator.

When to collect the first-draw sample

Collect the sample from a faucet that has not been used for a **minimum of 6 hours**, and where nearby fixtures also have not been used during that time. **Do not intentionally flush the water line before the start of the 6-hour waiting period.**

In general, you should collect your samples early in the monitoring period in case a sample is rejected by the lab or in case you exceed the lead or copper action level and must take other water chemistry samples within the monitoring period. You are not required to collect all of your lead and copper samples on one day, just within your system's 4-month or 6-month monitoring period. The Division will assess compliance upon receipt of the minimum number of results.

If your system has taps which may be needed at any time (such as a hospital or prison) or it has fewer than 5 taps, consult the Division to have your sampling plan and approval letter reflect your system's specific characteristics.

How to collect the sample

Use the 1 Liter (1000mL) bottle provided from the laboratory.

Remove the cap and place the sample bottle below the faucet.

Open the cold water tap with normal flow as if you were pouring a glass of water to drink. Fill the sample bottle to the line marked "1000mL". Always collect the 1L sample in a single container.

Tightly cap the sample bottle. Make sure the labels are complete.

After sample collection

Complete the chain of custody paperwork. Identify the sampling location by the 911 address if a community system or the facility/location name if an NTNC system.

Retain any signed resident/employee collection instructions in case the Division requests them after receiving the results.

Be sure analysis for both lead and copper are requested.

Upon receipt of results, calculate the 90th percentile and notify the Division if the water system has exceeded 15ppb Pb or 1.3 ppm Cu at the 90th percentile. If the lab has an electronic data submission agreement with the Division, you do not need to submit the data yourself, but you should check that the data shows up on the Division website a few weeks after you receive it.

The water system is required to provide participants whose locations were sampled with their lead results within 30 days of receiving the laboratory report.

If there is a lead action level exceedance, public education must be issued within 24 hour of receipt of the results.

Additional Resources:

State of Vermont Lead and Copper web page

<https://dec.vermont.gov/water/drinking-water/water-quality-monitoring/lead-copper-rule-resources>

State of Vermont Public Water System Forms and Applications

<https://dec.vermont.gov/water/dwgwpd-forms>

For Lead and Copper questions, please contact Joshua Gravlin at joshua.gravlin@vermont.gov or 802-261-1360.