

Lead and Copper Sampling Guidance for Small Public Water Systems



The purpose of this factsheet is to provide an overview and recommended sampling procedures for compliance with the Lead and Copper Rule (LCR).

The primary objective of the Lead and Copper Rule (LCR) is to minimize lead and copper levels in public drinking water systems to protect public health.

- Community water systems are required to collect samples on a regular basis from consumer taps that are most likely to have plumbing materials containing lead.
- Instead of a maximum contaminant level, an action level is established. If the lead or copper action level is exceeded, the public water system must take actions to reduce the corrosivity of the water and reduce leaching of metals into the water.

Sampling Sites

- Prioritize sampling sites based on plumbing materials and age.
- Classify sampling sites by the tier rankings defined in the LCR (Tier 1, 2, and 3).
- Collect samples only from occupied sites under normal operation.
- Do not collect samples from vacant sites, sites under construction, or sites without access to indoor taps.
- Use the same sampling sites when possible.
- The required number of sampling sites is based on population served and your prior sampling results.
- Identify extra sites with similar plumbing characteristics in case a previously used site is unavailable.

Sampling Schedule

Check your current schedule:

Drinking Water Database (<https://anrweb.vt.gov/DEC/DWGWP/SearchWS.aspx>)

Reduced Monitoring: You must collect LCR samples every year or every 3 years between June 1 and September 30.

Standard Monitoring: You must collect LCR samples in two six-month periods every year (January 1 – June 30 and July 1 – December 31).

Alternate Schedule: DEC-approved systems collect LCR samples between February 1 and May 31.

Alternate LCR Monitoring Schedule in Vermont

Who is eligible: Systems that sample on a reduced schedule and may benefit from an alternate sampling timeframe. This includes systems that may serve a changing population throughout the year from peak season (when the water system is fully or mostly occupied) to off season (when the water system serves a reduced population), for example, a ski area, ski condos, or seasonal/vacation homes.

Why use an alternate schedule: This alternate schedule is helpful for systems with seasonal changes in water use and occupancy. LCR results can be skewed if samples are collected after months of low water use.

How to apply for the alternative sampling schedule: Complete the application on the DEC website.

You **must continue** to sample under your existing schedule until directed otherwise by DEC.

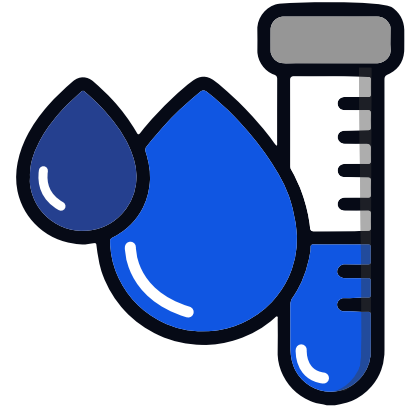
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Updating Your Sampling Plan:

You must update your sampling plan if there are changes in the water system, such as, service line material changes, internal plumbing changes, occupancy issues, or access changes. For NTNC systems, installation of filters on taps will also require updates to sampling plans.

Who Can Collect LCR Samples:

System personnel, residents, business owners or managers can all collect samples. If someone other than system personnel collect samples, be sure to provide directions and sampling kits. Full instructions can be found Directions for Water Systems on Lead & Copper Tap Sample Collection (<https://dec.vermont.gov/sites/dec/files/dwgwp/DW/samplecollectioninstructions-watersystem.pdf>) and Directions for Lead & Copper Sample Collection by Residents (<https://dec.vermont.gov/sites/dec/files/dwgwp/DW/samplecollectioninstructions-homeowner.pdf>).



Before Sample Collection:

If your water system has a peak season and an off season for water use, you should periodically flush during the off season to maintain water quality. Flushing should not be done leading up to planned lead and copper sampling. Lead and copper samples for water system compliance must be “first-draw” samples taken from cold water taps where the water has not been used for at least 6 hours, and faucet screens or aerators should not be removed.

Sample Collection:

The sample collector should collect the sample in a bottle provided by a contracted certified laboratory. A current list of certified laboratories list can be found here (https://www.healthvermont.gov/sites/default/files/documents/pdf/PHL_DW-Certified-Labs.pdf). The sample bottle is placed in line with the tap, opening a stream of normally flowing, cold water. The sample bottle should be filled to the line marked “1,000 mL.” Always collect the entire sample in one container. Cap the bottle tightly.



After Sample Collection:

Complete the required forms including the chain of custody. If the sample is collected by someone other than the system staff, ensure that the Directions for Lead & Copper Sample Collection by Residents form is complete. Water systems will ensure delivery of the samples to the certified laboratory. The water system is required to provide residents whose locations were sampled with lead and copper results within 30 days of receipt of the laboratory report, or 3 days if the individual tap result was above the action level of 15 ppb. This is required even if the results are all very low. The Lead Participant Tap Notification (<https://dec.vermont.gov/sites/dec/files/dwgwp/DW/LeadParticipantTapResultNotice.pdf>) provides a template for notification.

Questions? Contact the Vermont DEC – Drinking Water and Groundwater Protection Division

Main Office: 802-828-1535

Applications and Forms: <https://dec.vermont.gov/water/forms>

Information for Public Water System Operators: <https://dec.vermont.gov/water/drinking-water/pwso>

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