



Lead and Copper Monitoring: Sampling Techniques and Procedure

Non-transient non-community (NTNC) and community water systems must routinely monitor for lead and copper. Sampling technique is important because improper sampling can result in unusually high lead or copper levels or could lead to a Failure to Monitor violation if your laboratory rejects your sample. It is up to your system to use proper sampling techniques when taking lead and copper samples.

Here are a few things to remember when taking your samples:

Lead and copper sample collection sites:

- ◆ Before sampling, check to see that you have selected the appropriate sites to collect lead and copper samples. For a complete lead and copper sampling site guide, please refer to the Drinking Water Program's lead and copper sampling fact sheets: *Lead and Copper Site Selection Guide for Community Systems* and *Lead and Copper Site Selection Guide for Non-Transient Non-Community Systems* available here: <http://bit.ly/DWPlleadcopper>
- ◆ You must collect lead and copper samples from different locations. If you don't have enough taps, please contact your public drinking water inspector or call the Drinking Water Program at 287-2070.



Photo: Washington State Department of Health

Sampling Protocol:

- ◆ Do not remove aerators before collecting samples.
- ◆ Use the cold water tap. If your faucet mixes hot and cold water (does not have separate faucet heads), turn off the hot water line before you collect the sample or choose a different sampling site. Collecting hot water can result in higher lead levels.
- ◆ Collect a "first draw" sample: Place the water sample bottle under the faucet before turning on the water. Do not run the water before collecting a lead and copper sample.
- ◆ Ensure you've met the necessary six hour *stagnation time*. Do not intentionally flush the water line before beginning the stagnation time.

Stagnation Time:

- ◆ Before collecting a lead and copper water sample, water must sit in the pipe for at least six hours.
- ◆ There is no maximum stagnation time. The recommended time is six-ten hours. However, if a sample is taken at a vacant residence or at a school after summer break, that sample will count towards compliance even though it does not represent normal use.
- ◆ If your taps are located within 10 feet of each other, you must collect your samples from these taps on different days to ensure the water has sat motionless for at least six hours in each tap (has had the necessary stagnation time.)



Sampling Procedure:

1. Let water sit motionless in the pipes for at least six hours. The recommended stagnation time is six-ten hours.
2. Place water sample bottle under the tap and gently turn on the cold water faucet.
3. Fill the sample container to the shoulder of the bottle or the line indicated on the sample instructions. Turn off the water and close the bottle tightly.
4. Fill out the laboratory paper work (chain of custody, 141-A form) and submit to your laboratory with the samples. Remember to record the date and time of last water use and date and time of sample collection. Be aware that incomplete paperwork could result in a Failure to Monitor violation.
5. Have the designated operator sign the 141-A form to indicate they have reviewed and approved the sample collection.
6. Send or deliver your samples to your laboratory. Remember: Your laboratory must receive the samples within 14 days.
7. You must provide the lead sample results to customers who collected water samples using the *Consumer Notification Form* (<http://bit.ly/pbnotice>). Consumer notification is required for each round of lead and copper monitoring.
8. You must complete and submit the *Certification for Consumer Notification* (<http://bit.ly/cncertification>) form to the Drinking Water Program within 30 days of delivering the *Consumer Notification Form*.

Remember:

Always ask questions. If you think a sample was improperly collected (i.e., it was not a first draw sample, it was from an incorrect site), ask questions to ensure that you have followed proper procedure. *Do not send in for analysis until you are positive that it was collected properly.* Once a sample is analyzed by your laboratory it counts towards compliance. It is better to ask questions and get clarification instead of risking a violation due to improper site selection or sampling technique.

If you have any questions, contact your public water system inspector or call the Drinking Water Program at 287-2070.