

# Lead and Copper Monitoring: Sample Site Selection Guide

For community water systems

Community Water Systems (CWS) must routinely monitor for lead and copper on a six-month, annual, or triennial basis. Your monitoring frequency and population determine the number of required samples. You are required to follow the Environmental Protection Agency's (EPA) tier designations to identify appropriate sample sites. It is up to your system to determine the locations for sample collection.

## 1. Select the sampling sites

Use the diagram below to choose a sampling pool that only contains sites where the risk of lead exposure is the highest. If a system has enough Tier 1 sites available to meet their sampling requirements, they must collect all samples from Tier 1 sites. If multifamily residences make up at least 20% of the structures served by a water system, they can be included in your Tier 1 sampling pool. Tier 2 sites can only be used when all available Tier 1 sites have been sampled. If all available Tier 1 and Tier 2 sites have been exhausted, then Tier 3 sites may be used to fulfill sampling requirements. Tier 4 sites may only be used when there are no available Tier 1, 2, or 3 sites remaining.



Please note: Apartment buildings, condos, and residential care facilities are **not** considered Tier 1 or Tier 3 sites (unless they meet the 20% rule indicated above.)

## 2. Choosing the taps

- When you select sites from a non-tier 1 location, prioritize residential homes over other buildings.
- Collect samples from taps where water consumption is most likely to occur, such as a kitchen faucet or a bathroom sink.
- Avoid empty or vacant buildings where the water has not been used for long periods of time. These sites will likely have higher levels of lead and/or copper than would be consumed under normal conditions.

#### 3. Documentation

Designated operators should keep detailed and accurate records. All records must be kept for no less than 12 years.

When collecting lead and copper samples, include the following information on the 141-A form:

- Sample ID
- Date and time of last water use
- Date and time of collection
- Location of the sampling site. Remember, be consistent with how you identify sampling sites.
- Tier of sampling site

#### 3. Changing a sampling site

Over time, certain homes may become unavailable for sampling or their tier designation may change. It is acceptable to switch sites if your system is replacing it with the highest priority site available. All changes and the reasons for the change must be recorded on your 141-A form and submitted to your lab along with your compliance samples.

Acceptable reasons for changing sampling sites include:

- The resident no longer wishes to participate in lead/copper sampling.
- The resident is not physically or mentally capable of taking a sample.
- The plumbing or fixtures have been replaced. Under some circumstances the site may remain in the sampling pool but as a lower tier.
- The residence is no longer inhabited.
- If all taps within a residence have in-home water treatment (such as a water softener.)

For more information about sampling for lead and copper, visit the Drinking Water Program website, www.medwp.com/pws/sampling.shtml, or contact your public water system inspector.

