

LEAD AND COPPER SAMPLE SITE SELECTION AND SAMPLING GUIDANCE

Selecting appropriate sampling sites and use correct sampling procedures are very important in determining the safety of the drinking water delivered to customers' taps. System operators/samplers should have a detailed knowledge of the water distribution system and services before sampling sites are selected. This should include the approximate age of the distribution system water mains and laterals and the composition of the water mains and service lines. All sampling sites must fall into three categories or "tiers":

For MUNICIPAL or OTM Systems:

1. **Tier 1**-These are single family residences served by water mains with lead joints, lead goose necks, lead services or copper plumbing with lead solder joints installed between January 1, 1983 and September 30, 1984. Any sites with lead goosenecks or lead services are considered Tier-1 sites regardless when they were installed.
2. **Tier 2**-These are multi-family residences or buildings served by water mains with lead joints, lead goose necks, lead services or copper plumbing with lead joints installed between January 1, 1983 and September 30, 1984.
3. **Tier 3**- These are sites with plumbing installed prior to 1983.

For NON-TRANSIENT NON-COMMUNITY Systems:

Tier 1 - These are sites with lead service lines, or copper plumbing and lead solder constructed between January 1983 and September 1984. If you do not have enough Tier 1 sites, use sites with copper plumbing and lead solder constructed before January 1983, or other sites where water is typically drawn for drinking or cooking. Sites constructed after 1984, or sites with water softeners are **Exceptional sites**. Do not use sites with water softeners unless they are the only sites available for testing

All lead/copper compliance samples must be first draw, which means water must remain motionless in the distribution system for at least 6 hours prior to collecting samples. It is important that water systems collect lead/copper samples from locations that are representative of water used for drinking or cooking.

For community water systems, samples must be collected at a kitchen or bathroom cold water tap.

Examples of sites that may be valid lead/copper sample locations at non-community water systems include:

- Drinking water coolers (newer installations that do not have lead components)
- Drinking fountains
- Break room sinks
- Kitchenettes (or other food preparation areas)

Examples of sites that may not be representative lead/copper sample locations include:

- Outside hose bibs
- Eye wash stations
- Laundry sinks
- Taps on pressure tanks
- Vacant apartments/condos/hospital rooms
- Any site where water has remained motionless for significantly longer than 6 hours

If sample bottles and lab forms are given to home or building owners/renters to complete, make sure they understand all sampling site criteria and procedures, and that they fill out the reporting form completely. Collect sample bottles and forms from the samplers and send to a certified lab for analysis. If the sample is not immediately preserved with nitric acid (HNO₃), it may be initially preserved with ice, and immediately shipped to the laboratory.

If your system is granted a reduced lead and copper monitoring waiver, make sure a new sampling site form is completed and sent to your DNR representative. All of the highest priority sites (Tier 1, etc.) are used for sampling on the reduced monitoring schedule. If new sampling sites are required because of home ownership changes, lack of access or other reasons, please alert your DNR representative. You will likely be required to complete a new sampling site form and forward it to your DNR representative.

If you have any additional questions about sampling site selection, sampling procedures or lab results, please contact your DNR representative.

