Lead & Copper

SAMPLE SITE SELECTION, SAMPLING TECHNIQUES, and SAMPLING PROCEDURE

LEAD/COPPER SAMPLE SITE LOCATIONS

✓ Sites for lead and copper testing must be locations generally used for drinking water consumption.
✓ This would include kitchen and bathroom sinks, break room sinks, drinking fountains, etc.
✓ DO NOT collect lead and copper samples from mops sinks, outside faucets, etc.
✓ If you are a COMMUNITY system, you should be collecting from SINGLE FAMILY HOMES or MULTI-FAMILY HOMES – NOT from post offices, public buildings, etc.
✓ DO NOT collect lead and copper samples from vacant buildings, empty apartments or trailers, etc.
✓ A site that is not normally used for drinking water, but can be (such as a bathroom sink in a business that has a break room- chances are good that the bathroom sink is seldom used for drinking, but an employee COULD use it) is considered a viable sample location and should be part of the sample site pool if there are not enough other sources to round out the required number of sites.

✓ You must use different sites for each lead/copper sample bottle. If you do not have enough sinks/faucets to collect the number of samples the Lead/Copper Rule requires, you must collect multiple samples from your sites over several days, allowing the fixtures to sit for a minimum of 6 hours between sample collections. 
NOTE: If you have 5 sinks and need to collect 10 samples, you should be collecting a 2nd sample from each sink (not 5 samples from each sink and then 5 additional samples from one sink).

✓ When collecting multiple samples from a site, you MUST collect your 2nd sample a minimum of 6 hours after the 1st sample was taken and the site cannot be used during that 6 hour time-frame. So if you have only one suitable lead/copper site, you cannot collect your lead/copper samples in less than 30 hours (and that is assuming you can insure that the sink is not used at all during that time).
LEAD/COPPER SAMPLING TECHNIQUES

✓ Allow fixture to remain unused for a minimum of 6 hours. Do Not intentionally flush the water line before the start of the 6 hour period. Try to collect the sample within 6-10 hours after the fixture has been turned off.

✓ Do not remove any aerators prior to collecting sample(s).

✓ Collect a 1st draw sample (stick bottle under faucet before turning on the faucet).

✓ Use the cold faucet for filling the sample bottle.

✓ 1st draw means 1st draw for EVERY sample. If you have one sink at your business and you are required to collect 5 samples, you MUST collect them over the course of several days, allowing the water to stand for a minimum of 6 hours between each sample collection. You DO NOT collect the first bottle at 7am, the 2nd bottle at 7:01am, the 3rd bottle at 7:02am, etc. If, due to the nature of your business, you cannot feasibly leave the water off at a location for 6 hours straight, please contact the Drinking Water Program to discuss alternative sampling.

✓ You have 14 days from sample collection to get the bottles to the lab for analysis. If you collect your 1st sample on June 1st, you have until June 15th to get bottles to the lab.

SAMPLING PROCEDURE FOR LEAD & COPPER
(if you are on annual or 3-year testing, remember to collect between June 1st & September 30th)

1. Shut off tap and tape off, etc. to insure faucet is not used for a minimum of 6 hours (recommended stand time is 6-10 hours- longer stand times are not generally representative of normal exposure).
2. Do not remove any aerators prior to collecting sample(s).
3. After tap has sat unused for at least 6 hours, place sample bottle under faucet, fill bottle with 1st draw from the cold water tap & close the bottle tightly. Note time of sample collection on chain of custody form.
4. Collect all required samples in the same manner and submit for analysis within 14 days of collection.
5. Fill out laboratory paperwork (chain of custody, etc.) completely and submit with samples. Please remember to indicate the date and time the water was last used and the date and time the sample was collected.
6. You must also complete both sides of the 141-A Form, sign it and return it with the samples or send it to the Drinking Water Program.

OTHER THINGS TO REMEMBER

- If you think a sample was collected improperly (not 1st draw, from an incorrect site, from a faucet that has been off for too long)- ASK QUESTIONS AND DO NOT SEND IN FOR ANALYSIS UNTIL YOU ARE SURE IT WAS COLLECTED PROPERLY- Once it is analyzed it COUNTS towards compliance (with very few exceptions).
- If your faucet mixes hot and cold (does not have separate faucet heads), you may want to turn off the hot water line prior to testing.
- Ensure you provide the results of the lead sample taken to each consumer that collected a sample at the specific sample site from which the sample was taken using the Consumer Notification Form (pdf). Consumer notification is required for each round of lead and copper tap monitoring.
- Complete and submit the Certification for Consumer Notification (pdf) form to the Drinking Water Program within 30 days after the public water system is notified of the lead sampling results.

***WHEN IN DOUBT: Contact your Field Inspector. It is better to ask and get clarification, than to sample incorrectly and end up with a violation due to improper site selection or sample technique.
Fill out one Form 141-A per system.
Enclose copy of completed form with sample bottles/paperwork or fax the form to the Drinking Water Program at (207) 287-4172.

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**STATE OF MAINE DRINKING WATER PROGRAM USE ONLY** (Lead and Copper Test Results)

<table>
<thead>
<tr>
<th>PASSED</th>
<th>FAILED Cu ONLY</th>
<th>FAILED Pb ONLY</th>
<th>FAILED BOTH</th>
</tr>
</thead>
</table>

**TEST RESULTS:** (to be completed by laboratory or Drinking Water Program)

90th Percentile, Lead: ________ Note: EPA action level = 0.015 mg/L
90th Percentile, Copper: ________ Note: EPA action level = 1.3 mg/L

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Samples Collected- Insert Date(s): __________________________________________

Lab Name: ________________________________________________________________

System Name: ______________________________________________________________

Address: __________________________________________________________________

PWSID#: _______________________

Number of Samples Required: _______________________

Compliance Period: ____ / ____ - ____ / ____

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**FILL OUT 1 CERTIFICATION OF COLLECTION METHODS PER WATER SYSTEM & RETURN COPY W/SAMPLES**

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**Certification of Collection Methods**

I certify that: (Place a ✔ next to each sentence)

- Each first draw tap sample for lead and copper is one liter in volume and has stood motionless in the plumbing system for **at least six hours**.
- Each first draw sample collected from a single-family residence has been collected from the cold water kitchen tap or bathroom sink tap.
- Each first draw sample collected from a non-residential building has been collected at an interior tap from which water is typically drawn for consumption.
- Each first draw sample collected during a reduced monitoring period has been collected in the months of **June, July, August, or September**.
- Each resident who volunteered to collect tap water samples from his or her home has been properly instructed by [insert water system’s name] _______ in the proper methods for collection lead and copper samples. I do not challenge the accuracy of those sampling results. Enclosed is a copy of the material distributed to residents explaining the proper collection methods, and a list of the residents who performed sampling.

I certify that I have completed both sides of this form. I certify that the information on this form is accurate to the best of my knowledge.

_________________________  __________________________  __________________________  __________________________
Signature                Printed Name                Title                Date

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**NOTE: COMPLETE THE WORKSHEET ON THE BACK OF THIS FORM.**
Fill in all 5 columns of the Collection Site Worksheet for all samples collected.

Samples should be collected from different locations. If you don’t have enough sites, call the Drinking Water Program at (207) 287-2070.

<table>
<thead>
<tr>
<th>Lab Sample #</th>
<th>Date and Time Water Last Used</th>
<th>Date and Time Sample Collected</th>
<th>Sample Site Location</th>
<th>Tier</th>
</tr>
</thead>
<tbody>
<tr>
<td>D012345-001</td>
<td>1/1/2008 8:50 PM</td>
<td>1/2/2008 5:50 AM</td>
<td>Example: 123 Water Street, Anytown, ME</td>
<td>1</td>
</tr>
<tr>
<td>-002</td>
<td></td>
<td></td>
<td>Example: Boys bathroom, west wing, Hoosier building</td>
<td></td>
</tr>
</tbody>
</table>

ATTACH ADDITIONAL SHEETS AS NECESSARY
## Tier Designations and Additional Instructions

### TIER DETERMINATION FOR MOBILE HOME PARKS

<table>
<thead>
<tr>
<th>Tier</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mobile homes with copper pipes/lead solder built between 1982 - 1987</td>
</tr>
<tr>
<td>2</td>
<td>Mobile homes with copper pipes/lead solder built before 1982</td>
</tr>
<tr>
<td>3</td>
<td>All other mobile homes in park</td>
</tr>
</tbody>
</table>

**NOTE:** For Tier 3 sites, note ~year built and plumbing type (if not copper pipes with lead solder)  Ex: Tier 3-1989, pvc

### TIER DETERMINATION FOR MUNICIPAL WATER DISTRICTS

<table>
<thead>
<tr>
<th>Tier</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Single-family homes with copper pipes and lead solder built between 1982-1987</td>
</tr>
<tr>
<td>2</td>
<td>Buildings, including multi-family homes, with copper pipes and lead solder built between 1982-1987 (Duplexes are multi-family)</td>
</tr>
<tr>
<td>3</td>
<td>All other single family homes with copper pipes and lead solder built before 1982</td>
</tr>
<tr>
<td>4</td>
<td>All other residences within the distribution system</td>
</tr>
</tbody>
</table>

**NOTE:** For Tier 3 & 4 sites, note ~year built and plumbing type (if not copper pipes with lead solder)  Ex: Tier 4-1989, pvc

### TIER DETERMINATION FOR APARTMENTS/CONDOS/RESIDENTIAL CARE FACILITY

<table>
<thead>
<tr>
<th>Tier</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Dwelling units built between 1982-1987</td>
</tr>
<tr>
<td>2</td>
<td>Dwelling units built prior to 1982</td>
</tr>
<tr>
<td>3</td>
<td>All other dwelling units served by the system</td>
</tr>
</tbody>
</table>

**NOTE:** For Tier 3 sites, note or approximate the year built  Ex: Tier 3-1989

✦✦ SCHOOLS AND FACTORIES DO NOT PROVIDE TIER DESIGNATIONS ✦✦

### SITE CHANGES:
If you have changed sampling sites for any reason since the last round of lead and copper testing, please list the former location and its tier designation. Then indicate the location of the new site and its tier designation and the reason for the change.

### SAMPLE COLLECTION:
Each first draw tap sample for lead and copper is one liter in volume and has stood motionless in the plumbing system for **at least six hours**.

### ANNUAL AND TRIENNIAL SCHEDULES:
Although the compliance period is for an entire year, you **must** collect your samples between June 1 and September 30.