

# Part 2

## Lead Testing Protocol

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### Section 1

#### General Procedures

This section outlines the general procedures involved in collecting drinking water samples for lead testing. Specifically, the section discusses laboratory analysis and collection, and handling procedures.

##### Laboratory Analysis and Handling of Sample Containers

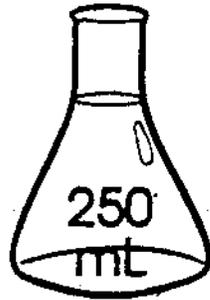
- (1) As discussed in the previous section, the certified drinking water lab you select to conduct your analyses will provide sample collectors, or they will provide you with materials and instructions if you plan to collect your own samples. Do not attempt to prepare your own sample containers unless you have qualified personnel and an appropriate facility. Sample containers should be prepared in a clean laboratory environment by qualified laboratory personnel using the appropriate purity chemicals.

If you collect your own samples, follow the instructions provided by the lab for handling sample containers to ensure accurate results. Do not rinse the sample containers before filling. The lab has prepared the containers to receive the samples you will take, and the containers may contain a chemical needed to preserve the samples properly until the samples reach the laboratory. Avoid any contact with this chemical. Be careful not to overfill the sampling containers with water. *For more information about the preparation of sample containers and sample preservation, refer to Appendix F. This information should also be shared with the laboratory officials with whom you plan to work.*

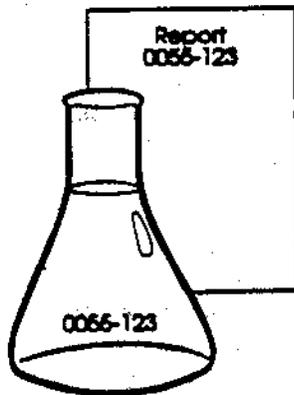
##### Collection Procedures

- (2) Collect all water samples before the facility opens and before any water is used. Ideally, the water should sit in the pipes unused for at least 8 hours but not more than 18 hours before a sample is taken. This time distinction is made to ensure that the water collected is representative of the building's normal water use patterns. At some infrequently used outlets, time gaps may routinely be 18 hours. In such situations, the sample will be representative of the building's normal water consumption pattern for that particular outlet.
- (3) Make sure that no water is withdrawn from the taps or fountains from which the samples are to be collected prior to their sampling. Samples collected from the designated sites after the taps have been used will indicate lower lead levels. It is important that consistent procedures be used in taking samples so that generalizations about test results can be made.
- (4) Unless specifically directed to do so, do not collect samples in the morning after vacations, weekends, or holidays. If lead is a problem in your facility, these samples will contain higher lead levels than those collected at other times. Such samples would not be representative of the normal water use patterns within your facility.

- (5) All water samples collected should be 250 milliliters (ml) in volume. Make sure the sample containers you plan to use will accommodate this volume of water and are appropriately marked.



- (6) Assign a unique sample ID number to each sample collected that is reflective of the type of outlet and outlet location being tested. Record this ID number on the sample bottle and on your recordkeeping



form. On your recordkeeping form, also denote such information as the type of sample taken, the date and time of collection, name of the sample collector, the location of the sample site, name of the manufacturer that produced the outlet, and the outlet's model number. *Consult the sample form in Appendix E for additional recordkeeping items.*

#### Response Actions

- (7) Institute interim and permanent corrective measures in your facility, as necessary, to minimize exposure to lead contamination. *See discussion of this topic in Part 1, Section 4 of this document for details.*