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## **LEAD PLUMBING FIXTURE REPLACEMENT ASSISTANCE GRANT PROGRAM**

### **Sampling Protocol**

### **August 2016**

#### **Background**

In June 2016, amended substitute House Bill 390 of the 131<sup>st</sup> Ohio General Assembly authorized the creation of the Lead Plumbing Fixture Replacement Assistance Grants Program, and created an appropriation of \$12,000,000 in state funds to be used for this purpose. The grants are to be used to reimburse public and chartered nonpublic schools to sample their drinking water and replace drinking fountains, water coolers, plumbing fixtures, and limited connected piping found to be a cause of lead above the federal action level of 15 parts per billion (ppb) in drinking water.

Public schools which were constructed prior to 1990 without plumbing renovations since 1990 are the target facilities for this sampling initiative. Buildings constructed before 1990 are the ones most likely to have solder, pipes, drinking faucets and water coolers containing lead.

This document provides an overview of the sampling guidelines and reporting protocol that must be followed by schools that want to participate in the program and get reimbursed for sampling and fixture replacements.

#### **Developing a Sampling Plan**

To obtain accurate data to be able to make determinations concerning fixture replacement each district or school should develop a process. The following are steps to consider:

- Determine sample locations
- Obtain sample containers from an Ohio EPA laboratory certified to perform lead in drinking water analysis;
- Allow for a period of non-use as described below at each sample location;
- Collection of 1<sup>st</sup> draw samples including submission of samples to certified laboratory;
- Receipt of sample results from the laboratory; and
- Documenting sampling activities and results to the Ohio School Facilities Commission.

#### **Determining Sample Locations**

Samples should be collected from those fixtures most likely to be used by students or teachers to drink from or fill water bottles, including drinking fountains, and kitchen sinks. Only sinks with separate cold water handles should be sampled.

The sample locations should be identified on a map of the facility with which each location given a distinct sampling location name. This will make it easier to match sample results with specific fixture.

The manufacturer, model number and serial number of drinking fountains or water coolers should be recorded to compare against the attached list of recalled water coolers. This information is important because if it has been recalled it must be reported with the analytical results. Coolers which have been recalled should be removed. Recalled coolers are not eligible for replacement costs.

Check faucet aerators for debris and clean if necessary. Aerators must be reinstalled prior to sampling. Utility sinks used for janitorial services should not be sampled.

### **Obtain sample containers from an Ohio EPA laboratory certified to perform lead in drinking water analysis**

Obtain 250 ml sample bottles from the Ohio EPA certified laboratory where analysis is to be completed. For a list of certified labs visit:

<http://epa.ohio.gov/Portals/28/documents/labcert/Chemical%20Labs.pdf>

### **Allow for a period of non-use of each sample location**

Water must not be used at the sample location for at least 6 hours, but no longer than 60 hours. Do not flush the sample location before the start of the 6 hour holding period. Do not sample after periods of time when water not been used for periods of time greater than 60 hours.

### **Sampling Protocol for the Collection of 1<sup>st</sup> Draw Samples**

Using the bottles provided by the laboratory take a "first draw" 250 milliliter sample at each sample location. A "first draw" sample is the water first to come out of the tap after the period of inactivity. The sample submission report forms provided by the laboratory must be filled out correctly so the school can accurately report the information as required by the OSFC and match the sample results to the locations identified on the sampling map.

### **Documenting Sampling Activities and Results**

A sampling report must be completed and contain specific information about each sample location and collection, including:

- 1) Time and date sample was collected
- 2) Time and date when the water at the fixture was last used
- 3) Fixture type and location within the building (e.g. water cooler outside Room 213)
- 4) Lead concentration for each sample collected
- 5) Was sample collected from a softened water tap
- 6) Was sample collected from a recalled water cooler
- 7) Identify if lead concentration is over U.S. EPA action level

The attached form (or similar form) can be used to document sample collection activities. The reporting form must also be maintained by the school and be made available, upon request, as a public record.

### **Additional Information and Resources**

Testing Schools and Child Care Centers for Lead in the Drinking Water, U.S. EPA Guidelines and Procedures, <https://www.epa.gov/dwreginfo/testing-schools-and-child-care-centers-lead-drinking-water>. Schools that soften water should evaluate the consequences of softening on their plumbing system. Softened water can become corrosive to the plumbing system. A water quality specialist should be consulted with to ensure the softened water is not aggressive to plumbing fixtures.

### **Who to Contact with Questions**

Please contact Susan Schell, Ohio EPA, Division of Drinking and Ground Waters by email at [susan.schell@epa.ohio.gov](mailto:susan.schell@epa.ohio.gov) for questions regarding sampling procedures, etc.

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**Sampling and Analysis Report**

Date of Sample	Time Sample Collected	Meets Non-Use Period? (Yes/No)*	Laboratory Sample Number	Fixture Type and Location**	Lead Concentration (ppb)	Was the sample collected after softener? (Yes/No)	Recalled Fixture? (Yes/No)	Is lead result over 15 ppb? (Yes/No)

\*Non-Use Period: The acceptable period of non-use of the tap is at least 6 hours but less than 60 hours

\*\*Fixture Type and Location: For example, "2<sup>nd</sup> floor Bathroom Sink"