



Drinking Water Monitoring Plan

Introduction

The following document is intended to provide guidelines for drinking water monitoring in University of Oregon occupied facilities. The guidelines are based on guidance provided by the US Environmental Protection Agency (EPA). In all cases monitoring parameters were based on the most relevant guidance available based on facility type.

Inventory, Sampling, and Analysis by Facility Type

The following list identifies facility types for the purposes of drinking water monitoring and recommends prioritization, processes, frequency of monitoring, recordkeeping, and communication of results for each type.

A. School Buildings / Daycare Facilities

1. Prioritization – Monitoring shall include all buildings identified as school buildings or daycare facilities
2. Process – Fixture selection, initial sample collection, flush sample collection, and analysis shall be based on the EPA document titled, “3T’s for Reducing Lead in Drinking Water in Schools,” dated October 2006.
3. Frequency – The process will be repeated at least annually

B. Single-Family Residential Buildings

1. Prioritization – Monitoring shall prioritize all buildings constructed prior to 1986.
2. Process – Fixture selection, initial sample collection, flush sample collection, and analysis shall be based on the EPA document titled, “3T’s for Reducing Lead in Drinking Water in Schools,” dated October 2006.
3. Frequency – The process will be repeated during turnover for the units or at least every 5 years.

C. Multi-Family Residential Buildings

1. Prioritization – Monitoring shall prioritize all buildings constructed prior to 1986.
2. Process – Process – Fixture selection, initial sample collection, flush sample collection, and analysis shall be based on the EPA document titled, “3T’s for Reducing Lead in Drinking Water in Schools,” dated October 2006.
3. Frequency – Monitoring will be repeated at least every 5 years.

D. Residence Halls, Dining Facilities

1. Prioritization – Monitoring shall prioritize all buildings constructed prior to 1986.
2. Process – Fixture selection, initial sample collection, flush sample collection, and analysis shall be based on the EPA document titled, “3T’s for Reducing Lead in Drinking Water in Schools,” dated October 2006.
3. Frequency – Monitoring will be repeated in dining facilities annually and residence halls at least every 5 years.

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- E. Academic Buildings, Research Buildings, Athletic Facilities, Maintenance Facilities
 - 1. Prioritization – Monitoring shall prioritize all buildings constructed prior to 1986.
 - 2. Process – Fixture selection, initial sample collection, flush sample collection, and analysis shall be based on the EPA document titled, “3T’s for Reducing Lead in Drinking Water in Schools,” dated October 2006.
 - 3. Frequency – Academic Buildings, Research Buildings, Athletic Facilities, and Maintenance Facilities shall be tested at least every 7 years.

Interpretation of Results

Results of lead analysis from School Buildings / Daycare Facilities shall be compared to the contaminant limit as indicated by the Oregon Department of Education of 15 ppb. Fixtures producing results that equal or exceed 15 ppb shall be flush tested to further delineate the source of contamination, and shall be considered non-compliant fixtures.

Results of lead analysis from all other facility types shall be compared to the maximum contaminant limit as indicated in the EPA Lead and Copper Rule of 15 ppb as an action level, and 20 ppb as indicated in the EPA document titled, “3T’s for Reducing Lead in Drinking Water in Schools”. Fixtures producing results that equal or exceed 15 ppb shall be flush tested, and fixtures exceeding 20 ppb on initial and/or flush testing shall be considered non-compliant fixtures. Fixtures producing results less than 15 ppb, or with initial and flush testing with results less than 20 ppb shall be considered compliant fixtures.

Communication of Results

- A. Communication with building occupants is the responsibility of the Department with supervisory authority.
 - 1. EHS will make sample results available online, and is available to assist with communications development as requested by the Department.
 - 2. Campus Planning & Facilities Management (CPFM) Work Control can assist with distribution of notices to staff as requested by the Department.
- B. Communication requirements vary based on the facility type, identified below.
 - 1. School Buildings & Daycare Facilities
 - a) Notify relevant parent, teacher, student, and employee organizations of the availability of sampling program results.
 - b) Make copies of the sampling results available in administrative offices “for inspection by the public, including teachers, other school personnel, and parents.
 - 2. Single-Family & Multi-Family Residential Buildings
 - a) Compliant fixtures – Tenants will be provided with the results of all water monitoring within their unit upon their request and annually upon signing their lease agreement.
 - b) Non-compliant fixtures – Tenants will be immediately notified if a non-compliant fixture is identified within their residence during their lease period.
 - 3. Residence Hall, Dining Facilities, Academic Buildings, Research Buildings, Athletic Facilities, Maintenance Facilities
 - a) The campus community shall be notified of the availability of sampling program results.
 - b) Copies of the sampling results shall be maintained by EHS for inspection by the public, including students, faculty, and staff.

Further Action

Further actions regarding fixtures following drinking water monitoring sampling and analysis are outlined below:

- A. Compliant fixtures – Fixtures that are determined to be compliant will be monitored per the schedule indicated per facility type.
- B. Non-Compliant Fixtures – Non-compliant fixtures will be managed according to the steps indicated below:
 - 1. Immediately remove the fixture from service. Turn off fixture at valve and tag out.
 - a) Depending on the facility type, it may be necessary to temporarily provide drinking water.
 - b) Tenants shall be notified of the result and the steps to be taken to mitigate potential issues, if applicable.
 - 2. Collect and analyze additional samples if necessary to determine the source of the contamination.
 - 3. Make repairs to mitigate the source of the contamination. This may include repair or replacement of entire fixtures, aerators, valves, flex lines, service lines, or filter installation.
 - 4. Retest the fixture and return to service if results indicate that it is a compliant fixture.

Recordkeeping

Records pertaining to drinking water monitoring in University of Oregon facilities shall be maintained by Environmental Health & Safety.

References

United States Environmental Protection Agency (EPA). October 2006. 3T's for Reducing Lead in Drinking Water in Schools, retrieved from: https://www.epa.gov/sites/production/files/2015-09/documents/toolkit_leadschools_guide_3ts_leadschools.pdf

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