

Campus Drinking Water Update

Catherine Brennan

Executive Director, Environment, Health & Safety



Lead in Drinking Water

- Most common sources of lead in drinking water are lead pipes, faucets and plumbing fixtures
 - Lead service pipes
 - Faucets and plumbing fixtures may contain welding solder, lining or pipe fittings which contain lead
- Lead can enter drinking water when these lead containing materials corrode over time and is dependent on a variety of factors
- OWASA adds corrosion inhibitors to municipal water to aid in preventing this from happening
- OWASA survey has shown no known lead service pipes

Lead Action Level

- EPA has an action level of 15 ppb for public water systems (OWASA)
- EHS is using the EPA action level as a reference but do not want to see any detectable lead in drinking water fixture results
- If any lead is detected a fixture is placed out of service immediately and will be replaced

Water Testing Phased Approach

- EHS alerted to potential issue in Wilson Library and performed comprehensive sampling and found 4/20 water fountains with detectable lead
- Results indicate localized issue related to specific fixtures
- EHS developed proactive and aggressive sampling plan base on EPA 3Ts guidance that includes phased approach:
 - Phase 1
 - Drinking water fixtures that potentially contain lead components based on their age and construction
 - Phase 2
 - Drinking water fixtures in buildings that were built in or prior to 1930
 - Phase 3
 - Drinking water fixtures in buildings that were built in or prior to 1990

Phase 1 - COMPLETED

- Drinking water fixtures that potentially contain lead components based on their age and construction
- Tested specific fixtures based on Facilities database
- From this survey detectable lead found in additional drinking water fixtures (specific fixtures identified in 10 buildings)
- If detectable lead was found, comprehensive sampling performed on all drinking water fixtures in that building (*still awaiting some results*)

Phase 2 – IN PROGRESS

- Drinking water fixtures in buildings that were built in or prior to 1930
- Approximately 55 buildings in this phase
- Perform comprehensive sampling of all drinking water fixtures in building
- Within phase - prioritizing residence halls and buildings who have not had major renovations
- 12 sampled so far with 3 building results received

Phase 3

- Drinking water fixtures in buildings that were built in or prior to 1990
- Approximately 200 buildings in this phase
- Will prioritize residence halls in addition to buildings who have not had major renovations

Scale and Staffing for Testing

- Three EHS staff from Industrial Hygiene group
- Student Volunteers - Environmental science focused
- University exploring other avenues for staffing to scale up

Notifications/Where To Receive Updates

- From beginning have notified building occupants when detectable lead is found
- Will continue to notify building occupants once testing is complete and will also update EHS dedicated webpage:
<https://ehs.unc.edu/topics/campus-drinking-water/>
- Also will share updates via EHS Twitter: [@unc_ehs](https://twitter.com/unc_ehs)
- General Questions: EHS main phone number (919-962-5507)
- Health Questions:
 - Employees should contact University Employee Occupational Health Clinic
 - Students should contact Campus Health