

FIGHTING THE INVISIBLE

UO's initiative on lead in drinking water

The University of Oregon took swift action to address unsafe levels of lead in its drinking water after it found lead-tainted fixtures in its dorms, office buildings and off-campus properties in June 2016. While officials found fixtures in newer buildings with almost no lead in the system, they also found fixtures with initial lead levels 48 times above the federal legal limits.

That effort may not be enough.

After conducting tests, the UO reported finding lead-tainted faucets in four of its dorms last September. One initial screening sample was 15 times above the federal "action level" of 15 parts per billion (ppb).

After testing more than 2,000 samples in buildings on campus and off, the UO confirmed in May 2017 that it doesn't have any non-compliant fixtures in service and successfully mitigated almost a hundred lead-tainted fountains.

But with these fixtures having gone untested for years, it's unclear when they started emitting lead and how long students, faculty and their young children have been drinking lead-contaminated water.

Unlike Portland public schools, which are still facing severe public backlash after failing to notify parents and fix its lead water issue, the UO's Safety and Risk Services voluntarily launched the first-ever campus-wide initiative to monitor drinking water on campus and UO properties last spring.

"It has a lot to do with the conscientiousness of the people who are doing the work," UO Communications Director Kelly McIver tells *EW*, adding that he knows the community would expect "a thorough, quality job" and transparency.

When asked if he thinks there's a possibility that UO has been providing contaminated water to its community, McIver says, "without testing it, you don't know what's in there."

Riley Hall, a dorm formerly owned by Northwest Christian University and bought by UO in 1987, has fixtures with initial screening test as high as 726 ppb. Out of 99 initial tests in November, 46 fixtures in Riley Hall show levels of lead that exceed 20 ppb.

This is the first time the UO has tested the drinking water in Riley Hall.

The university is replacing the built-up galvanized pipes in the interior plumbing and installing new plumbing fixtures throughout the building as a project within the ongoing renovation, Jones says. The UO plans to put students back in Riley Hall next year.

Building sciences manager Adam Jones says he's hopeful the mitigation will be a success, but UO will "dig deeper" to find the problem and fix it, or it will not allow the dorm to be occupied.

The UO acknowledges the initiative is the first time it will be proactively seeking non-compliant fixtures on campus and its properties — Jones says the purpose of the initiative is to catch those problematic fountains before they become harmful to the community.

Health officials agree that no level of lead is considered safe. Studies also show lead can damage kidneys and reproductive systems, build up in bones and cause negative lifelong effects to unborn children. In children under six years old, lead in blood is associated with reduced IQ, learning disabilities and impaired growth, and high levels can even lead to death, according to the Environmental Protection Agency.

Until now, water testing was done only as requested or as a project during major renovations, McIver says, as opposed to searching for possible contaminations.

According to the EPA, dissolved lead in water is undetectable through sight, smell or taste, and testing is the only sure-way to detect lead levels in drinking water.

Jen Coleman of Oregon Environmental Council (OEC) says that although the symptoms of lead poisoning in adults are mostly "very subtle and indistinguishable," the effect is long lasting and troublesome.

According to the EPA, lead pipes and brass pipes are subject to corrosion — lead pipes are banned under the EPA 1986 Clean Drinking Water Act, and brass pipes with lead components, despite meeting the current EPA requirements, could still produce unsafe lead water.

Upon learning about the tainted fixtures in the buildings, Jones and technician Nate Ferguson spent the last year getting the corrosion problems to meet EPA guidelines.

Jones says the initiative is voluntary and independent from UO's water supplier EWEB, which is required to re-

port annually on its water quality. According to EWEB's latest report, its water is safe for consumption. The lead issue arises in building fixtures and pipes.

Since May 2016, UO has spent around \$125,000 to \$130,000 on testing costs alone, McIver says.

The mitigation costs were not immediately available upon request, but the expense is made up with auxiliary funding from UO Housing and from the university's general fund budget.

The OEC praises the UO for spearheading the drinking water monitoring initiative.

"There's nothing [in the law] that requires public schools to conduct these testings," Coleman says. "On top of that, it's a huge expense to identify and mitigate these problems. This project is a huge public health initiative."

But many of those problems lie deeper than the brass faucets or aerators that could be cleaned or replaced easily, Jones says. In lead-tainted dorms, UO had to tear down walls to replace the brass plumbing system to resolve corrosion.

UO plans to continue regular testing on its campus and properties in upcoming years — school buildings and childcare centers will be tested annually. Other buildings, such as residence halls, are set to be revisited every five years, but UO will increase the frequency on buildings that have had past problems, Jones says.

But for other schools in Oregon and across the nation, the future is less certain.

On May 1, Oregon Rep. Alissa Keny-Guyer and Sen. Michael Dembrow introduced Senate Bill 1062 that would require Oregon public schools to adopt Healthy and Safe Schools Plan to address environmental conditions of their facilities.

On the federal level, Oregon Congressman Earl Blumendauer endorsed a bill that would prompt widespread testing for lead in water at the nation's schools and create a grant program at the EPA for lead testing and remediation of school drinking water last September.

Until any required protocol of testing drinking water monitoring is passed, it's up to each public school in Oregon to take proactive measures to keep its water safe. ■

IT'S ABOUT TIME

BY DAVID WAGNER

Stargazing has been tough for the past few months. Precipitation is the culprit, with a new record set for the number of rainy days this year. I have recently been missing Orion from the evening sky and didn't get a chance to say goodbye. Now I'm looking forward to the Big Triangle.

Our garden soil is still pretty soggy. We hope to get some more typical June weather in time to put out the vegetable starts.

Pacific Northwest tree diversity is not nearly as great as in the Appalachians. Our forests make up in kilograms per acre what they might lack in species numbers. It is interesting that most of our trees are wind pollinated, considering the rainy weather that predominates during the seasons

that pollen is produced. All the conifers are wind pollinated, starting with incense cedar in midwinter and Douglas fir topping off pollen season in late spring. Cottonwoods, hazelnuts, oaks and alders, all flowering plants, shed pollen from January to March. Pollen in the wind shifts from trees to grasses in late spring and early summer. Does more global warming equal more pollen? Curse

SPOTTED TOWHEE
PIPILO MACULATUS

warming-deniers.

Towhees are good neighborhood friends. Their buzzy tweet lets you know they are around, that they have a nest somewhere close, even if they are not easy to see. There are three nesting pairs in our neighborhood. Each pair maintains a fairly small territory that is easy to recognize because each pair is characterized by a slightly different tone to their "tzzzeet!"

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