

Underground storage tanks: a hidden threat

Regulatory agencies urge contractors to halt work when tanks turn up unexpectedly

By JEFF McDONALD

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Jason Merritt's co-workers call him the "tank whisperer."

After unearthing underground storage tanks for 10 years, Merritt, a tank locator with Soil Solutions Environmental Services, knows how to find them.

"There's metal everywhere," he said while sweeping one house with a magnetometer. "You've got to learn lots of tricks."

The task, Oregon Department of Environmental Quality officials say, is not for everyone. Contractors need to be licensed to dig them up and potentially address soil or water contamination. The issue is increasingly arising as more redevelopment occurs on former fuel stations in transit corridors or in metro-area town centers.

Contractors who find tanks should stop work immediately, said Miranda Bateschell, a land use planner for Metro, which has mapped 580 parcels on 3,500 acres that could have underground storage tanks or hazardous substances. Many former mom-and-pop gas station properties exist, and some have tanks now covered by parking lots, she said.

Tanks often are identified in the preconstruction phase via an environmental site assessment. The survey could be required by a lender as part of a purchase and sale agreement for a commercial property. While no underground storage tank search is required, further investigation may be needed if fuel operations existed on a site previously, Bateschell said.

On some redevelopment sites, where contractors aren't aware of such a history, a tank may be unearthed accidentally.

"For contractors, the biggest thing is the unknown," Bateschell said. "If they run into an old, underground storage tank, they should halt work. The developer then would have to call in the correct environmental agencies."

If a leak is discovered, a contractor or owner is required to report it, said Kevin Parrett, manager of the DEQ's cleanup and tanks section. The DEQ will send out a letter describing how to clean up the site and oversee the work, which should be done either by a certified contractor or a licensed firm. Once the work is done, the DEQ will issue a "No Further Action" letter.

"Contractors have to deal with these - if they don't know what they're doing, they could get in a lot of trouble," he said. "For homeowners, it's a big deal because it could cost them several thousand dollars, particularly in older neighborhoods."

Portland Public Schools officials are familiar with the process; they



Sam Tenney/DJC
Todd Irvin, a field supervisor with Soil Solutions Environmental Services, removes a decommissioned heating oil tank from the backyard of a Southwest Portland home.

have had 47 underground tanks decommissioned over the past two summers as part of an effort to convert multiple schools from heating oil to natural gas. Five of those tanks were found with small leaks; PPS has since followed DEQ protocols, said Randy Miller, director of project management for the district.

Tanks are washed and then filled with cement. Two of the five leaks have been cleaned up; the three others will be addressed this summer, Miller said.

"It's really a straightforward process," he said. "The oil leaks were very minor."

Merritt, primarily searching in residential properties, said he now finds approximately 10 to 25 tanks per week. A simple inspection can cost \$85, but cleanup costs for a leaking tank can range from \$3,000 to \$6,000, he said. That amount can exceed \$20,000 when the leak has infiltrated groundwater.

Most tanks don't cause any problems, Merritt said, but determining that takes specialized equipment, including a hand auger for digging in soft soil and a double-handled slide hammer with a geo probe for rocky soil.

One of Merritt's tricks is to find oil lines in a basement, tap into those lines and send out electric signals to see where they go outside.

"I can tell if tanks have been removed surreptitiously by an unlicensed contractor," he said. "We do a soil sampling regime to try and make sure there is no contamination."



Sam Tenney/DJC
Soil Solutions Environmental Services employees, from left, Brandon Jabot, Todd Irvin and Charlie Cannon remove a fuel storage tank from a home's backyard.



Sam Tenney/DJC
Todd Irvin, a field supervisor with Soil Solutions Environmental Services, digs out a 675-gallon fuel storage tank.