

Under city, 1,000 old tanks hiding?

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Austin-American
Statesman

March 28, 2008

Nearly 1,000 old, unregulated underground storage tanks could sit beneath the streets of downtown Austin, a city study has found.

The review, which tallies the Austin City Council's approvals of tank installation from 1909 to 1965, began after oil from a long-forgotten storage tank burbled onto the street in January and into Waller Creek.

The city says it is unsure how many of the underground tanks - which might have held gasoline, fuel-oil or dry-cleaning chemicals - were actually installed after bygone City Councils approved them.

The City Council records confirm "only the possibility of existing tanks today," Victoria Li, director of the watershed protection and development review department, wrote in a March 24 memo to the mayor and City

Council. The American-Statesman obtained a copy of the memo by filing a request under the Texas Public Information Act.

Most of the underground tanks that the City Council approved for installation were to be clustered around Congress Avenue and Fifth, Sixth and Seventh streets. But just how deep the tanks are, whether they were installed (and, if so, whether they were ever removed), or whether they contain material are all open questions.

"Some tanks may have been approved and never installed," Li wrote. "Others may have been installed and subsequently removed. Some may still be in place but empty, while others may still contain fuel."

The average cleanup cost for a leaking underground tank is \$125,000, according to the federal Environmental Protection Agency.

The January oil spill, which was caused by a water main break, sent oil into an alley between Congress Avenue and Brazos Street and just north of Sixth Street. The oil

made its way into a storm drain and into Waller Creek. The city spent about \$220,000 to clean up the spill, which it said did not lead to serious environmental or health problems.

Having pored over old City Council records, employees said this month that they found minutes from a Dec. 8, 1910, City Council meeting in which the city gave permission to George W. Littlefield to place a fuel-oil storage tank in the alley behind his building, on Sixth Street and Congress Avenue.

But in a sign of how little information property owners have about what sits beneath their lots, the current owners of the Littlefield building say their pre-purchase surveys turned up no record of fuel-oil storage tanks below their property. The city has said that it might try to bill the current owners, pending the state's finding on who is responsible for the tank.

Part of the problem is that most tanks installed in the first part of the 20th century simply didn't face the regulation and

monitoring they do now, and records of their existence (or their removal) have been lost as property changed hands or construction projects went up.

The Texas Commission on Environmental Quality began monitoring tanks in 1987 and currently has 167,460 registered tanks statewide, more two-thirds of which are no longer in service. The commission does not monitor old tanks that are not registered, but it does respond to complaints of leaks, according to spokeswoman Andrea Morrow.

Underground storage tanks cause headaches each year: Authorities nationally oversaw more than 13,000 cleanups of the tanks last year, according to the EPA. In Texas, 790 storage tanks were cleaned up last year, but a backlog of 3,169 sites still need cleaning, a 2007 EPA report says.

Since at least the 1980s, when oil and gasoline leaking from corroded tanks laid underground a half-century earlier began causing environmental problems across the country, everyone from homeowners in New Hampshire to farmers in Illinois have been warned about the hazards of old tanks.

Besides contaminating groundwater, petroleum and its vapors can build up in small pockets in the soil and raise the risk of explosion, according to the EPA.

The old, unregistered tanks pose environmental challenges because "they could still have fuel in them," said Schuyler Schwarting, head of the city's underground storage tank program. "If one leaked, it could be a problem."

Future leaks "are not going to be as easy to trace," Schwarting said. "They could be leaking and getting slowly into the ground and groundwater and seep into the creek. If we see a plume in the creek, we won't be sure where it's coming from and if we can ever find it."

Around 1909, the City of Austin began requiring council approval for the installation of underground storage tanks, a responsibility the council held until the mid-1960s, when the job was handed off to other city departments, Schwarting said. The city now monitors and inspects about 1,500 underground storage tanks at about 500 locations, most of them gas stations. Some institutions, such as

hospitals, also have tanks filled with diesel fuel to power emergency generators.

According to the city's review, the City Council approved 879 sites for the installation of underground tanks by 1965. Some of those sites may have more than one storage tank, according to the city. The majority of them were intended as gasoline tanks. A few, such as the one that leaked in January, were proposed fuel-oil storage tanks used to power small generators.

Soil makeup, water conditions and even the route of old trolley lines - which could send stray electric currents underground - all play a role in the deterioration of underground storage tanks, according to Allen Hatheway, a retired professor of geological engineering who lives in Missouri and has written about early urban heating and power systems.

The city memo says it is investigating devices to locate tanks and other buried utilities without digging up city streets.

This month, the city received a demonstration from Entech Engineering Inc., a St. Louis, Mo., company that detects underground pipes and tanks placed by

utilities. Using a mixture of infrared thermography and ground-penetrating microwave radar, the company says it could survey Austin's underground tanks by van or helicopter at about \$500 a tank, according to President Gary J. Weil.

The federal Leaking Underground Storage Tank Trust Fund provides money for enforcement or for cleanups at leaking tank sites where the owner or operator is unknown, unwilling or unable to respond, or which require emergency action. The fund gets about \$70 million a year, financed by a 0.1 cent tax on each gallon of motor fuel sold nationwide.

The average cleanup costs about \$125,000, according to the EPA. If only a small amount of soil needs to be removed or treated, cleanup costs can run as low as \$10,000.

More extensive soil contamination can cost more than \$125,000 to clean, and leaks that affect groundwater grow pricier to clean, from \$100,000 to more than \$1 million, depending on the extent of contamination.

A water main break in January sent oil into an alley between Congress Avenue and Brazos Street. The city

spent about \$220,000 to clean up the spill.

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Many of the underground storage tanks that the Austin City Council approved by 1965 for installation were to be clustered around Congress Avenue.

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