

GEORGIA TECH RESEARCH

News Release

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DEFUSING A TIME BOMB:

For Immediate Release

PROGRAM HELPS OWNERS OF UNDERGROUND

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TANKS DISCOVER & CORRECT LEAK PROBLEMS

Color/B&W Available

Thousands of service stations in the United States sit atop ticking time bombs: aging underground storage tanks that may leak toxic petroleum products into underground water supplies. The tanks pose severe liability problems for station owners, some of whom may be forced out of business by the high cost of complying with new environmental regulations.

Tank owners, installers, engineers and others are learning how to deal with the problem through special courses taught at the Georgia Institute of Technology.

"We have hundreds of thousands of storage tanks that have been in the ground for a number of years," explained David Mayer, director of the program. "Because of their age or improper installation, these tanks over time may start leaking into groundwater."

The stakes are high because half of U.S. residents obtain their drinking water from wells and underground aquifers. Fuel and chemical leaks from underground storage tanks could jeopardize those critical groundwater supplies.

The problem, said Mayer, is particularly acute among "bare-steel" tanks installed with no protection against corrosion. In some soils, those tanks can become severely damaged within a few years of installation. Other leak problems result from improperly installed piping.

But until recently, most service station operators had no good way of detecting problems.

"With many older systems, there is no in-place monitoring and the owner is not testing on a regular basis," said Mayer. "You must have a major loss of product to know you have a problem."

Today, however, technology exists for detecting problems before they become serious, and new Environmental Protection Agency regulations will require monitoring of underground systems. Operators must also carry liability insurance and conduct regular testing programs designed to detect problems early.

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But the cost of installing the new equipment and meeting the inspection requirements may drive smaller service stations out of business. The new equipment alone could cost \$5,000 per tank, while replacing tanks would cost much more -- too much for many small operators.

Mayer suggests that some service station operators might find that a blessing in disguise. "The owner has to realize the tremendous liability by having that tank in place," Mayer warned. "Once the groundwater becomes contaminated, it is a very expensive, time-consuming and almost impossible task to do corrective action. Closing down might be better than having the tank leak and being faced with the tremendous cost of clean-up."

Surveys by the U.S. Environmental Protection Agency show that potential underground tank problems are widespread. One study found that a third of the tanks tested could not meet tightness requirements.

The Georgia Tech course helps tank owners and operators understand the new regulations. It also teaches them how to find leaks -- and how to install new tanks and piping so they will not become problems in the future.

The course involves inspection of two partially installed tanks. There, students receive instruction in the proper installation of the tanks, piping and monitoring systems, said Mayer.

Approximately 600 persons from across the United States have completed the courses, which are offered several times each year. The course covers both type of tanks available: steel and fiberglass.

Mayer does not recommend one type of tank over another. The steel tanks are more prone to corrosion problems, he said, though the fiberglass tanks can be more easily damaged during installation.

Mayer believes certification and licensing of tank installers will help prevent future problems. The U.S. Environmental Protection Agency, however, has left such licensing to states, few of which have enacted regulations.

For more information about the Underground Storage Tank Classes, please contact the Training Programs Office at (404) 894-3806.

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