

Harmarville-based firm creates first-of-its-kind commercial lab

Pittsburgh Business Times - November 10, 2006 by [Dan Reynolds](#)

An environmental lab in Harmarville is adding a new technology that will make it the first commercial lab of its kind in the country.

Microseeps Inc., which was founded by former **Gulf Oil Co.** employees in 1984, is spending \$500,000, or about 15 percent of its annual revenue of \$3.4 million, on a new system that will allow it to perform compound-specific isotope analysis of various chemical compounds.

The process will allow environmental engineers to determine the elemental make up of fuel and chemical spills and determine how best to treat them in the field. The lab's certification also will allow engineers to use the testing data in court as admissible evidence in forensic investigations that are attempting to determine the sources of toxic spills.

Microseeps president Robert Pirkle said the company expects to see a return on its investment in 2007 and 2008 that should pay for the cost of the equipment.

In addition to \$600,000 or more in yearly revenue it is expected to create for the company, the CSIA lab will add to Pittsburgh's reputation as a leader in environmental engineering.

Todd Wiedemeier, a Denver-based environmental engineer who literally wrote the book on measuring the degradation of organic compounds, as well as protocols on the topic for the U.S. Department of Energy, said because of the newness of the commercial application, Pirkle's lab will be the first commercial lab of its type in the country.

Pirkle said professional clients will see a benefit from using a commercial lab over a university lab that performs CSIA tests. "They don't always work on the schedule that you would like," he said.

Though larger labs haven't introduced the technology commercially yet, Wiedemeier said they inevitably will follow Pirkle's lead.

"He's a cutting-edge guy in the field of environmental science," said Wiedemeier, president of **T.H. Wiedemeier & Associates**.

One of the substances Pirkle's equipment will be able to test is MTBE, or methyl tertiary butyl ether, a compound added to gasoline in the 1990s to reduce carbon monoxide emissions, but which has since been found to be toxic. When gasoline is spilled or leaked, environmental engineers will be able to use the Microseeps lab to measure how fast MTBEs are degrading in water or soil and how best to treat the pollutant.



Joe Wojcik

Microseeps president Robert Pirkle says his lab will offer quicker turnaround times than university labs that perform similar testing.

[View Larger](#)

"That's difficult to do unless you understand how the system is reacting," said Pirkle.

A local regulator also said Pirkle's technology is cutting edge, proven in university settings but not previously available commercially.

"That technique is very proven and very valuable," said Fred Baldasare, an isotope geochemistry researcher and a registered geologist with the Pennsylvania Department of Environmental Protection.

"Microseeps will be the first commercial lab with this capability that I'm aware of," said Tim Buscheck, a senior staff hydrogeologist with **Chevron Corp.** who is based in Richmond, Calif.

Baldasare said the applications Microseeps is talking about will expand Pennsylvania's reputation as a leader in isotope analysis and other forms of environmental remediation testing.

"We are on the leading edge of that," he said.

A local environmental engineer agreed with Baldasare.

"Because we have had all these years of industrial growth here, we have had a lot of opportunities to develop protocols," said Troy Harris, a corporate health and safety manager with **Weavertown Environmental Group**, based in Houston, Pa. "This is pretty much state-of-the-art stuff."

Already, Microseeps works with clients in 48 states and is a subcontractor with major national labs such as the Pittsburgh office of **Severn Trent Laboratories**, Walnut Creek, Calif.-based Brown and **Caldwell Inc.** and Pasadena, Calif.-based **Tetra Tech Inc.** Pirkle said he hopes the new technology will expand his client base with environmental consulting companies that work with the country's oil producers and with such large manufacturers as **U.S. Steel Corp.** and **PPG Industries Inc.**