

Testing the Air

Mt. Pleasant business is known internationally for work in screening for chemicals, toxic substances

By IAN PATRICK GRAY
Sun Staff Writer

When mysterious fumes sickened several employees at the Soaring Eagle Casino and Resort several years ago, Sigi-naw Chippewa Tribe leaders didn't send off to New York City or even Detroit for help.

They made a phone call to a little known company right in Mt. Pleasant, located north of Pickard on Fancher Street.

In the unassuming building, built of a typical industrial-style rectangular design with masonry and outdated roof accents, hides an internationally known company.

Prism Analytical Technologies Inc. works throughout the United States and in Canada and Europe and yet is rarely recognized in its back yard, said co-owner and President Lester Keeper.

"I can't tell you how many times I tell people what we do and they say, 'I've never heard of that' or 'I never knew we had something like that here.'"

Keeper said, admitting that the company's business strengths do not put it in contact with the public on a regular basis.

The 15-year-old company tests indoor air quality primarily in businesses, manufacturing firms, processing facilities, industrial sites and corporate offices, Keeper said. They also analyze emissions from industrial stacks, such as at cement kilns.

Some of the items on their lengthy list of compounds they test for include formaldehyde, toluene, benzene, naphthalene, vinyl chloride, acetone, acetylene, ammonia, hydrochloric acid and sulfur dioxide and water. Many of the substances they test for are carcinogenic or otherwise harmful to humans.

"Our job is we analyze compounds typically found in the air," Keeper said. "Anything in the air could be a pollutant, could be harmful to a person, depending on how much there is. We test mainly for volatile organic compounds."

Founded in the summer of 1991, but opening its doors for the first time in 1992, PATI serves Fortune 100 companies as well as air quality consultants, prospective homebuyers and law enforcement.

In addition to the typical array of indoor air quality tests they perform, PATI researched and developed TDT Air Scan, which is the model for indoor air quality scanners, as well as MoldScan, which detects actively growing mold.

"We typically test for unseen mold activity," Keeper said. "If you have mold, then you have a water problem. We can't speculate or determine the type of mold, but that's not so important in mold remediation. You just need to get rid of it if it's there."

Phone calls from home-



Lester Keeper, president and co-owner of Prism Analytical Technologies in Mt. Pleasant, is shown at his desk at the business.

owners are rare, Keeper said, but the home inspection market is a growing area for PATI.

"We are starting to cater to home inspectors," he said. "We have a scaled down test that's more cost effective for home inspectors. Michigan passed a law requiring indoor air quality to be taken into consideration for property transfers. Other states have followed suit."

Company chemists, biologists and environmental scientists also do soil and water sample analysis and other common environmental testing.

For most clients, however, PATI scientists act as consultants, Keeper said. Once a report is issued, it takes trained personnel to interpret it and make sure the client understands what those numbers mean.

"Our customer base may get a report with a list of the compounds found, but they want to know what it means," Keeper said. "Part of our job is to point out to customers the compounds that are going to cause problems and help resolve the source of that problem."

Companies and homeowners can also call them for "GreenScans," to be certified as a green building, Keeper said.

Law enforcement calls them out to help analyze the situation at methamphetamine production labs, which frequently are a stew of toxins and other gases.

Randall Fike, Ph.D., director of analytical and laboratory operations, wrote about the company's meth lab work in Trapped Air, the latest PATI newsletter.

PATI's origins lie in the Keeper's frustrations when he worked in the manufacturing industry and could not get the answers he needed about air quality.

"We hired some firms



Chemist Phil Kauppi demonstrates how a sample is placed into the instrument to test it.

to come in and do testing, but they weren't really answering our questions," said Keeper, who has a bachelor's degree in chemistry from Lake Forest College in Illinois and an MSBA from Indiana University. "We were involved in chemistry and understood what was going on, but we couldn't really get answers."

Several of their technologies, including the Fourier Transform Infrared (FTIR) spectrometer, have applications for Homeland Security and the Department of Defense, Keeper said.

FTIR technicians can collect a sample of gas and instantly tell whether the concentration is too high or what is contained in it.

Soldiers on the front line and emergency response crews could use

Prism Analytical Technologies

What: Prism Analytical Technologies Inc. (PATI)

Who: Owner and President Lester Keeper and co-owner Randall Fike, Ph.D., who doubles as director of analytical and laboratory operations, plus investors.

Where: 1200 N. Fancher, Mt. Pleasant

When: Monday through Friday, 8 a.m. to 5 p.m.

Employees: 10, full- and part-time

Contact: 989-772-5088 or www.pati-air.com

such technology to quickly assess the threat during combat or terrorist attacks, Keeper said.

Approaching its 15-year celebration in 2007, PATI is accredited through the American Industrial Hygiene Association.

"Other companies use a cookie cutter approach," Keeper said. "But we

develop our own methodology. We've gone one step beyond in each type of our tests. We have combined two different types of instruments (FTIR and the Gas Chromatograph Mass Spectrometer). We keep pushing the envelope and we are being recognized nationally as a leader in this area."

Sun photograph by LISA YANICK

Sun photograph by LISA YANICK