

## THERMAL REMEDIATION SERVICES DEFIES ECONOMIC SLUMP WITH DRAMATIC GROWTH IN 2008

Looking solely at the dramatic growth enjoyed by advanced soil and groundwater remediation technologies and solutions firm **Thermal Remediation Services, Inc. (TRS)** (Longview, WA; [www.thermalrs.com](http://www.thermalrs.com)) over the past several months, you'd never know the U.S. was stuck in an economic quagmire. A deployer of electrical resistance heating (ERH) technology for the cleanup of volatile and semi-volatile compounds in soil, the firm is on a pace to grow its revenue by 100% this calendar year.

"This past summer, we generated more business than we have in the last couple of years combined," says David Fleming, TRS' vice president of sales and marketing. TRS is no stranger to this type of growth. The company received a 2007 *EBJ* Business Achievement Award, earning a gold medal for breakthrough sales growth in 2007 and sustained revenue growth since 2000. Revenues increased from \$150,000 in 2000 to \$4 million in fiscal 2006, and then to approximately \$12 million for TRS' 2007 fiscal year, which ended on March 31, 2007.

What may be a bit surprising to outsiders is that the company has sustained its recent triple-digit growth during a time of credit tightness in the overall economy. TRS attributes this good fortune to a solid backlog of cleanup work with a client base that's been somewhat insulated from the economic turmoil. The firm does approximately 80% to 90% of its business with the private sector, primarily with *Fortune* 100 companies. "These companies are somewhat protected from the recession because, under U.S. Securities and Exchange Commission (SEC) rules, they have set aside the required reserves for their remediation programs," Fleming says.

Although regulation, such as meeting drinking water or human health standards, is an occasional driver for TRS' remediation business, the drivers are usually economic in nature, Fleming says. The client may be trying to buy or sell a property, which must be cleaned up before the transaction can go through, or the client may simply be trying to remove a liability from its books in order to renew an insurance policy or, as noted above, to meet SEC requirements.

Whatever the reason, TRS is generating substantial business, and doing so at the expense of competitors. "In the last year, there have been about 10 or 11 thermal projects awarded, all of which went to ERH, and we were awarded all but one. We really dominate in the thermal space," Fleming says.

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ERH has proven superior over other thermal technologies, such as radio-frequency heating and conductive heating, in terms of cost and cleanup turnaround, Fleming says. This is especially true, he says, when cleaning up contamination by volatile compounds, such as polyaromatic hydrocarbons (PAHs) and the BTEX compounds—benzene, toluene, ethylbenzene, and xylenes. ERH also compares favorably with non-thermal in situ technologies, such as chemical oxidation, Fleming says. "When you have a low-permeability formation, like clay or silt, our technology has a real advantage," he says.

TRS has seen a regional explosion of growth in southern California, going from essentially no projects to seven to eight projects in the last year, Fleming says. There's been a similar explosion in the Northeast, and especially New Jersey—jumping from basically no business to about five projects.

Other highlights of the past year were the start-up of cleanup projects at the company's first manufactured gas plant (MGP) site and its first oil refinery, as well as the deepest application of the ERH technology, to 130 feet at a site in the Los Angeles area. TRS also completed several cleanups with "four nines" removal rates—i.e., the reduction of the contamination by 99.99%—and it completed work at the first

Superfund site in California ever to use ERH technology.

The one blemish on the growth rate is the 10% to 20% of the business derived from the federal cleanup market. "With the war in Iraq, lots of funds have shifted away from military base restoration," Fleming says. "There is still tremendous need for source cleanup on bases. We're seeing the projects. They are just being delayed."

TRS performs all of its work on a fixed-price basis, with 65% historically engaged as standard fixed-price remediation (SFPR) and 35% as guaranteed fixed-price remediation (GFPR). This balance has been changing recently, as one of every two clients is now asking for performance guarantees, Fleming says. Whereas other GFPR players go out to the market to obtain cost-cap insurance—which is harder to obtain today than ever—"what we've done is self-insure the project through contingency pricing," Fleming says. "We're still competitive with the insurance product, and in many cases charging a lot less. We've done about two dozen of those projects, and all of them have worked out, but I should add that we're very selective with GFPR, because you can get in over your head."

TRS is on the threshold of international expansion. Initially, it had sought to penetrate the European market, but it received an overture from a company in Sao Paulo, Brazil, and so it formed a joint venture with that company to pursue opportunities the Brazilian remediation market. TRS' goal will be to land one project in Brazil this year and continue to search for a partner in Europe.

In addition to expanding internationally, TRS is looking for opportunities to

deploy the ERH technology outside the remediation field, Marketing Group Manager Tracy Barton says. With the price of oil hovering around \$100 per barrel, ERH could provide an attractive alternative for rapidly extracting oil from the ground, she says. Within the remediation field, "combining technologies isn't out of the question either," Barton says. Heating soil through ERH has the potential to enhance other cleanup processes, such as bioremediation or hydrolysis, she says.

Despite TRS' solid growth in revenue, the firm is watching closely the current twists and turns in the state of the economy along with everybody else, Fleming says. Access to capital is a particular concern, both in terms of what tight credit might do to customers' capital expenditure plans and in terms of what it might do to TRS' own plans for growth. "Everything I'm reading says that banks are just not loaning money right now," Fleming says.

The company has a goal of growing revenue by about 20% to 30% annually, a much slower rate than the growth in recent years. This reduced growth rate doesn't reflect the difficult economic environment so much as it does the fact that, as Fleming says, "100% growth is not sustainable." Sustaining a 20% to 30% growth rate, however, will be challenging not only because credit is tight, but also because finding qualified people is difficult, he says. TRS has been relying on listings on *craigslist.org*, on Monster, and in business journals and newspapers, and on simply getting the word around. "Word of mouth has been the most successful way to recruit so far," Fleming says, "but now we're going to have to do more."—GEORGE STUBBS ([gstubbs@zweigwhite.com](mailto:gstubbs@zweigwhite.com)) ■

#### Ranking of Remediation Revenue Growth by market category: 2008-2010

	Very strong/ strong	Good	Slow/ flat	Decline
Private/Corp. Non-Regulatory Projects	15%	28%	51%	7%
Brownfields/Redevelopment	9%	26%	51%	14%
Department of Defense (DOD)	12%	16%	59%	12%
Department of Energy (DOE)	8%	20%	62%	9%
Underground Storage Tanks	10%	17%	57%	16%
RCRA Corrective Action	10%	13%	73%	4%
Manufactured Gas Plants	6%	14%	69%	11%
State Superfund	6%	15%	66%	13%
Superfund (EPA Lead)	3%	18%	69%	10%
Superfund (PRP Lead)	4%	18%	69%	8%

Source: EBJ's 2008 Survey of Remediation Companies Markets & Technologies;

Respondents selected very strong, strong, good growth, slow growth, flat, modest decline, or big decline;

Markets are ranked by the sum of 2x very strong, strong and 0.5x good.