

# Purifics flourishes globally

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The London Free Press

Working through the recession to sharpen its business focus has sparked one London company to its "best year ever." Purifics, the water treatment industry, has landed several major water purification contracts and grown sales six-fold over last year, after it used the economic slump as a time to re-evaluate its business plan — and pursue a more aggressive growth strategy.

"Business is finally starting to run," Brian Butters, Purifics president, said Wednesday. "There is now some awareness about who we are and that has held us back in this global community." While it has largely used its technology for industries, Purifics moved aggressively into treating municipal waste water systems and that had the effect of not only increasing sales, but increasing awareness about the company — and they have been getting noticed.

"We always had an awareness problem because most of our work (for industry) was under non-disclosure agreements, but our forays into municipal waste and drinking water systems increased our profile and that was one reason we increased business." The new business has also seen it double staff, and it will employ 20 by the end of this year, Butters said.

"This is our best year ever," Butters said.

Purifics has landed:

- A soil washing contract in France, cleaning groundwater.
  - Water purification for the community of High Point, N.C.
  - Purifying well water for schools in the Eastern Ontario township of Harrowsmith.
  - Cleaning water used in the Alberta oil fields to help pump oil. That water can be discharged back into surface water, or used again.
  - In some Ontario municipalities it is replacing municipal water systems.
- Purifics has also landed a deal to clean contaminated groundwater for defence contractor

## ■ ECONOMY



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President Brian Butters, left, and Applications Manager Tony Powell of Purifics with a water purification unit powered by solar energy. Purifics has landed several major water purification contracts in the last year and its sales have grown significantly.

Locheed at an airport site in Florida, and smaller deals in Australia and Chicago. In addition, Purifics received a \$1 million research award from the National Research Council to further its work in the area of water purification and re-use.

Butters declined comment on exactly how much sales have grown at the private business or what the deals are worth, but while one typical sales contract may be worth "a little more or less" than \$1 million, some of the recent deals are worth more than \$4 million, he said.

In addition, the company has developed a solar-powered water purification system that

can be used in dry regions of the world to purify water where there is no power source nearby — but plenty of sun.

That is part of Purifics developing "new technologies to fill gaps," Butters said. "We have filed more patents in the last three years than in the first 12 years," he added.

Purifics' claim to fame, and what has helped it get the attention of municipalities, is that unlike other systems it is a one-stop process. While others use systems requiring as many as six stages in the cleaning process, highlighted by peroxide and ultraviolet light filtration, Purifics has one unit which can clean the

water, combining a membrane and photo catalytic system that cleans water of chemicals, metals and other toxins.

"We draw water from one

source, purify it and discharge it. We offer full treatment as opposed to being just one part of a treatment train," Butters said.

### How photo catalytic water purification works.

■ Imagine a machine where dirty water enters and clean water is discharged.

■ As water flows into the machine, it flows into a catalytic process which has a catalyst inside called titanium dioxide.

■ The contaminant is exposed to light, in this case ultra violet, which breaks the DNA bond of the material, and when titanium dioxide is exposed to the light it forms a free radical which breaks up organic material and alters contaminants turning them into carbon dioxide and water, literally destroying the contaminants. The process also oxidizes and removes metals.

■ The process also removes any issues with colour, taste and odour of water.