Sewage seen as profit source

BIOTECHNOLOGY: Process recovers commercial value from waste

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A Vancouver company using "green" technology developed at the University of B.C. has come up with a way to make money from sewage.

Ostara Nutrient Recovery Technologies Inc. says its reactor system can remove phosphorus, ammonia and other polluting nutrients from the sewage process and convert them into environmentally safe commercial fertilizer.

The company, founded in 2005, now has its first industrial-scale plant operating in Edmonton that will be producing fertilizer for commercial sale.

Phillip Abrary, president and CEO of the private company that has licensed the technology from UBC, which is also a shareholder of Ostara, said yesterday that the company and its technology have a great future.

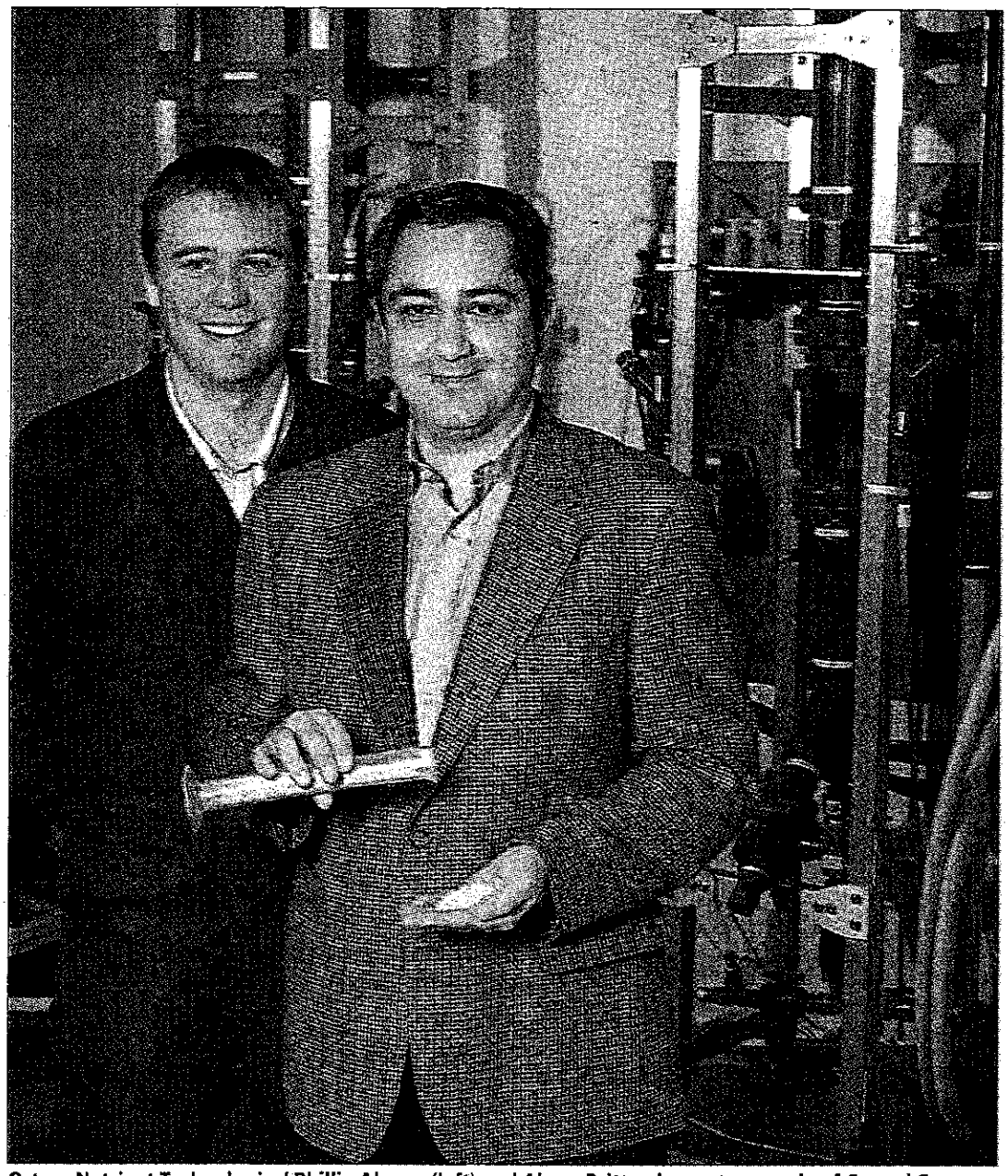
"We have got a tremendous amount of interest out of U.S. cities," he said.

Abrary said the system brings major benefits to municipalities by cutting operating costs, improving efficiency and helping the environment.

The company has also successfully conducted water-treatment pilot projects at the Greater Vancouver Regional District's Lulu Island wastewater treatment plant, the Penticton advanced wastewater treatment plant and at plants in Suffolk, Va., and Portland, Ore.

The company estimates that about 400 plants in North America and 500 in Europe are candidates for its technology.

Most wastewater-treatment plants are effective at removing phosphorus and nitrogen and diverting them into a stream of sludge or bio-solids consisting of liquids and solids, which are then either incinerated or dumped on landfills.



Ostara Nutrient Technologies' Phillip Abrary (left) and Ahren Britton inspect a sample of Crystal Green at the GVRD's Lulu Island wastewater treatment plant in Richmond, where Ostara has a pilot reactor.

But when the Ostara technology is employed, the nutrient liquids are diverted and the reactor processes and recovers phosphorus and ammonia and converts them into a high-quality, environmentally friendly commercial fertilizer.

A reactor costs between $2 million and $4 million and a municipality using the system could retrieve it costs within three to five years by selling the fertilizer.

The technology was developed by a team led by Dr. Don Mavinic at the UBC's environmental-engineering department.

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