

Ostara Nutrient Recovery
Technologies Inc.



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Ostara Nutrient Recovery Technologies Inc.: Oregon Wastewater Treatment Plant Is the First in U.S. to Recycle Nutrients Into "Green" Commercial Fertilizer

PORTLAND, OREGON and VANCOUVER, BRITISH COLUMBIA--(Marketwire - Sept. 23, 2008) - A wastewater treatment plant in metropolitan Portland will become the first facility in the United States to incorporate innovative new technology that removes phosphorus and other nutrients from wastewater and recycles them into environmentally safe commercial fertilizer.

The new technology, expected to begin operating in early spring 2009, will bring increases in efficiency and effectiveness to the Durham Advanced Wastewater Treatment Facility in Tigard, Ore., already recognized by the United States Environmental Protection Agency (EPA) as one of the top wastewater treatment facilities in the country. The Durham facility is owned and operated by Clean Water Services, the water resource management utility serving more than 500,000 customers in urban Washington County west of Portland.

The new technology, developed by Ostara Nutrient Recovery Technologies Inc. of Vancouver under license from the University of British Columbia, brings environmental benefits, increases plant capacity and reduces maintenance costs, while also creating a revenue-generating product.

Clean Water Services signed a contract with Ostara on September 8, 2008, for construction of a \$2.5 million multi-reactor Ostara plant at the Durham facility. Clean Water Services will own and operate the reactors and will also share revenue with Ostara from the commercial sale of the fertilizer by-product, to be marketed throughout Oregon and the Pacific Northwest by Ostara under the brand name Crystal Green TM.

Bill Gaffi, General Manager at Clean Water Services, said that partnering with Ostara provides a solid return on investment.

"This technology will save our ratepayers money by extracting nutrients which would otherwise clog our pipes and reduce our plant's treatment capacity, while also creating a unique and environmentally safe commercial fertilizer product," said Gaffi. "We anticipate a net payback of the initial investment within five years."

Phillip Abrary, President and CEO of Ostara, said Clean Water Services' Durham facility is the first in the U.S. to incorporate the Ostara technology, although a commercial reactor has been operating at a municipal plant in Edmonton, Alberta, for more than a year. Several other commercial facilities are in planning and design stages after successful field trials in 2007 by municipalities, ethanol biofuel plants and food processing plants in the United States and Canada. As many as 400 municipalities and industrial plants in North America and 500 in Europe are potential customers for the Ostara process.

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Abrary said treatment systems typically separate sewage sludge solids from liquids. Treated solids can be recycled as soil amendments, as the Durham facility does. Liquids are typically reprocessed back through the wastewater system, which adds costs to the system by clogging pipes with a concrete-like scale called struvite - the result of phosphorus and ammonia (nitrogen) combining with magnesium - and by consuming up to 25 percent of the system's capacity.

"Our technology integrates into the treatment system, processes the sludge liquids and recovers phosphorus and other nutrients - and then converts them into a high-quality environmentally friendly commercial fertilizer that can generate revenue for the local utility," said Abrary.

About Crystal Green TM

When the Ostara reactors begin operating at the Durham facility, they will produce a total of about 40 tons a month of the Crystal Green fertilizer. Crystal Green is the only slow-release fertilizer on the market with a combination of nitrogen, phosphorus and magnesium (5-28-0 +10Mg). Unlike most fertilizers, Crystal Green TM dissolves slowly over a nine-month period and therefore is environmentally safe because it does not leach into the water table.

Crystal Green TM will be dried and bagged at the Durham facility and will be immediately ready for commercial sale. No further processing is required, although for some applications, fertilizer distributors may wish to blend Crystal Green TM with other fertilizer components to match the agronomic needs of the crop. The Oregon Department of Agriculture approved the use of Crystal GreenTM as a fertilizer by issuing a Fertilizer Product Registration License on August 8, 2008. Crystal GreenTM is an ideal product for turf (golf courses) markets, container nurseries, specialty agriculture and other markets that value slow-release fertilizers.

Jim Zablocki, Vice President of Nutrient Operations for Ostara, said "Crystal Green TM is environmentally sustainable, economical for distributors and end- users and proven safe and effective by numerous U.S. universities - including Oregon State University - and commercial leach aid and growing trials."

"Unlike many other fertilizers, Crystal Green is produced without adding greenhouse gases to the atmosphere. Furthermore, the product's slow release characteristics provide a source of phosphorus that will not leach into the water table," said Zablocki.

The production of Crystal Green at Durham means that golf courses, nurseries and specialty agriculture markets may purchase a locally sourced fertilizer product. This helps to reduce transportations costs, and greenhouse gas emissions while reducing a company's overall environmental impact. In the long term, the anti-leaching properties of Crystal Green will have a net positive impact on the watershed in greater Portland.

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About Clean Water Services

Clean Water Services is a water resource management utility for more than 510,000 people in urban Washington County and small portions of Multnomah County, Clackamas County, Lake Oswego, and Portland. Clean Water Services operates four wastewater treatment facilities, constructs and maintains flood management and water quality projects, and manages flow in the Tualatin River to improve water quality and protect fish habitat. Although Clean Water Services maintains a close working relationship with Washington County government, it is a separately managed and financed public utility. For more information, visit the website at www.cleanwaterservices.org.

About Ostara

Ostara Nutrient Recovery Technologies Inc. is a Vancouver-based company commercializing proprietary technologies that recover resources from wastewater and recycle them into valuable products. The struvite recovery process, invented at the University of British Columbia and developed by Ostara, recovers pollutants that would otherwise be released into the environment, helps wastewater treatment plants reduce operating costs and meet environmental regulations, and provides municipalities and utilities with revenue from the sale of the recovered pollutants that are recycled into environmentally safe slow-release fertilizer, called Crystal Green™. Crystal Green provides turf growers (parks and golf courses), commercial nurseries and specialty agricultural markets with a unique fertilizer that is slow release and proven effective, produced without greenhouse gas emissions, and does not leach into and pollute the water table. The Company is backed by Foursome Investments Limited and VantagePoint Venture Partners. For more information on Ostara and Crystal Green, see www.ostara.com and www.crystalgreen.com.

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