Ostara Nutrient Recovery Technologies Inc.

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Ostara Nutrient Recovery Technologies Inc.: Edmonton Reveals World's First Industrial Scale Sewage Treatment Facility to Recycle Nutrients Into Environmentally-Safe Commercial Fertilizer

EDMONTON, ALBERTA and VANCOUVER, BRITISH COLUMBIA--(Marketwire - Dec. 3, 2007) - The City of Edmonton's Gold Bar wastewater treatment plant has met a milestone by successfully operating for over six months as the world's first industrial-size nutrient treatment facility to remove phosphorus and other nutrients from municipal biosolids and recycle them into environmentally-safe commercial fertilizer.

The technology, developed by Ostara Nutrient Recovery Technologies Inc. of Vancouver, will help Gold Bar achieve its nutrient removal goals, increase plant capacity and reduce maintenance costs, while also creating a revenue-producing product in the form of a high value fertilizer.

"Since the Ostara reactor was commissioned last spring, it has extracted more than 80 per cent of the phosphorus on average - achieving the design objective of 75 per cent - and 10 to 15 per cent of the ammonia from a flow of 500,000 litres per day, approximately 20 per cent of the Gold Bar plant's liquid biosolids stream," said Vince Corkery, Director of Wastewater Treatment at the City of Edmonton's Gold Bar treatment facility.

"We have worked closely with Ostara over the past two years toward building this first-of-its-kind commercial scale nutrient recovery facility and we are very pleased with the operating results," said Corkery.

"We have supported this technology because it creates a valuable product from phosphorus and other polluting nutrients, which would otherwise clog our pipes and reduce our plant's treatment capacity. We look forward to continued cooperation with Ostara to add reactors capable of treating 100 per cent of our biosolids stream in the future," said Corkery.

Phillip Abrary, President and CEO of Ostara, said, "the Edmonton plant is Ostara's first commercial-size reactor, however several other commercial facilities are already 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."

"Many wastewater treatment plants, such as Gold Bar, remove phosphorus and other pollutants from waste waters to reduce their nutrient loading on the receiving water environment. These nutrients are extracted from the processes in the form of biosolids. The biosolids are further dewatered. The nutrient rich liquid extracted from these biosolids can add 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 occupying up to 25 - 50 per cent of the system's capacity. The Ostara process treats these liquids.

"Our reactor integrates into the wastewater treatment system, processes the biosolids liquids to recover phosphorus and other nutrients - and then converts them into a high-quality environmentally-friendly commercial fertilizer that can generate revenue for the municipality," said Abrary.

Crystal Green™ fertilizer

The fertilizer by-product from the Ostara process, named Crystal Green™, has a unique and commercially-desirable formulation of nitrogen, phosphorus and magnesium.

Unlike most fertilizers, Crystal Green™ dissolves slowly over a nine-month period and therefore is environmentally safe because it does not leach into the water table. Crystal Green™ is an ideal product for turf (golf courses) markets, container nurseries, specialty agriculture and other markets that value slow release fertilizers.

The Ostara reactor at Gold Bar produces approximately 500 kg of Crystal Green™ per day. The product is sorted, dried and bagged on site and is immediately ready for commercial sale. No further processing is required, although for some applications, fertilizer distributors may wish to blend Crystal Green™ with other fertilizer components to match the agronomic needs of the crop.

As part of the commercial marketing campaign, 50-pound and one tonne samples of Gold Bar's production of Crystal Green™ are being sent to large fertilizer distributors that will conduct large nursery trials in the spring of 2008. Commercial sales are expected to commence later in 2008.

About Gold Bar wastewater treatment plant

Located on 19.5 hectares of land in the North Saskatchewan River Valley, the Gold Bar wastewater treatment plant handles wastewater requirements for over 700,000 people in the greater Edmonton area. Through constant upgrades and innovations, Gold Bar remains at the forefront of wastewater technology. The Gold Bar site is also home to the Edmonton Waste Management Centre of Excellence, a research facility specializing in technology demonstration, research facilitation, and Operator training for the solid waste and wastewater industries.

About Ostara

Ostara Nutrient Recovery Technologies Inc., founded in 2005, is a Vancouver-based company commercializing proprietary technologies that recover resources from sewage and recycle them into valuable products. Ostara's struvite recovery process, developed at the University of British Columbia, recovers pollutants that would otherwise be released into the environment, helps sewage treatment plants reduce operating costs and meet environmental regulations, and provides municipalities with revenue from the sale of the recovered pollutants that are recycled into environmentally-safe slow release fertilizer. More information is available at www.ostara.com.

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