



PRESS RELEASE

Black & Veatch and Ostara to Design-Build New Nutrient Recovery System for World's Largest Water Reclamation Plant

System to benefit Chicago area waterways, produce valuable fertilizer product

CHICAGO, IL (12 September 2013) – The Metropolitan Water Reclamation District of Greater Chicago (MWRD) has selected Black & Veatch and Ostara Nutrient Recovery Technologies to design and build a new nutrient recovery system at its Stickney Water Reclamation Plant in Cicero, IL. The facility will improve water quality in local rivers, lakes and streams. It will also produce commercial fertilizer from recovered resources.

“The MWRD’s mission is to protect the source of our drinking water, improve the quality of area waterways, and manage water as a vital resource for the Greater Chicago area,” said Patrick D. Thompson, MWRD Commissioner and Chairman of the Monitoring and Research Committee. “The Stickney project achieves these goals and enables us to recover phosphorus and nitrogen from waste streams that can be converted into fertilizer. In addition, the sale of this product will help offset the cost of operating and maintaining the new facility.”

Advising the project team is Dr. James L. Barnard, Water Global Practice and Technology Leader and winner of the Lee Kuan Yew Water Prize. Known to the water industry as “The Father of Biological Nutrient Removal,” Dr. Barnard is credited with developing the nutrient removal process used in many wastewater treatment plants worldwide.

“Phosphorus is a non-renewable resource that is critical to farming and food production. Nothing grows without it but too much of it can negatively impact water quality,” said Dr. Barnard. “Biological nutrient removal enables us to address water quality challenges and recover this precious nutrient for beneficial reuse purposes.”

“With this new facility, the District is transforming a water challenge into a sustainable solution,” said F. Phillip Abrary, Ostara president and CEO. “Removing nutrients from where they shouldn’t be – in our waterways – and using them to create a new generation of slow-release fertilizers is the smart thing to do economically and the right thing to do environmentally.”

Black & Veatch is providing [design](#), [procurement](#) and [construction services](#). Ostara will provide the nutrient recovery system, including equipment. Ostara will also provide operations and maintenance assistance to the District once the project is completed.

Editor's Notes:

- The MWRD, which serves more than 10 million constituents, desired a phosphorus management strategy based on anticipated changes to regulatory limits affecting its effluent discharge permits. In addition, the MWRD's wastewater system was experiencing an accumulation of the mineral in its struvite form, which can be damaging to pipes and equipment.
- The Stickney Water Reclamation Plant is the largest facility of its kind in the world. It serves 2.2 million people, treats a 260 square mile area including the central part of Chicago and 43 suburban communities, and covers 413 acres.
- Construction of the new stand-alone phosphorus recovery facility will not interrupt the plant's operations and will connect to the existing treatment plant requiring only short-duration shutdowns of ancillary processes.
- Ostara will contract with the District to purchase the recovered nutrients, which it markets to commercial fertilizer blenders and distributors in the agriculture, turf and ornamental sectors.
- Black & Veatch Construction Inc. will perform the construction work. The new facility is scheduled for completion in 2015.

About Black & Veatch

Black & Veatch is an employee-owned, global leader in building Critical Human Infrastructure™ in Energy, Water, Telecommunications and Government Services. Since 1915, we have helped our clients improve the lives of people in over 100 countries through consulting, engineering, construction, operations and program management. Our revenues in 2012 were US\$3.3 billion. Follow us on <http://www.bv.com/> and in social media.

About Ostara Nutrient Recovery Technologies Inc.

Ostara designs, builds and markets a proprietary nutrient recovery technology that transforms phosphorus and nitrogen recovered from municipal and industrial water treatment facilities into a high-value, eco-friendly fertilizer, sold and marketed as Crystal Green®. Ostara currently operates five nutrient recovery facilities in North America and will launch two additional plants later in 2013, including its first European site in the UK. Crystal Green is the first plant-activated, nutrient technology to offer plant-available, slow-release nutrients sustainably made from a renewable source of phosphorus. Crystal Green offers more consistent, plant-available nutrients than conventional fertilizers, resulting in greater efficiency, lower application rates, and reduced nutrient loss, while lowering the risk of leaching and runoff. Headquartered in Vancouver, Canada, Ostara is the recipient of numerous awards including the 2011 Technology Pioneer by the World Economic Forum, and being named to the Global Cleantech 100 for the past four years. For more information visit www.ostara.com and www.crystalgreen.com

About the Metropolitan Water Reclamation District of Greater Chicago

Established in 1889, the Metropolitan Water Reclamation District of Greater Chicago (www.mwrd.org) is an award-winning, special purpose government agency responsible for wastewater treatment and stormwater management in a 883.5 square mile service area in Cook

County, Illinois. The MWRD's mission is to protect the health and safety of the public in its service area, the quality of the water supply source (Lake Michigan), improve and protect the quality of water in watercourses, protect businesses and homes from flood damages, and manage water as a vital resource. The MWRD is committed to achieving the highest standards of excellence in fulfilling its mission.

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