## press release



New Orleans, October 1, 2018

## CITY OF BARRIE, ONTARIO, SELECTS SUEZ TECHNOLOGY TO MEET WASTEWATER EFFLUENT LIMITS FOR PHOSPHOROUS

- SUEZ's ZeeWeed\* 500D Membrane Bioreactor (MBR) Technology Will Help Barrie Protect the Environment and Lake Simcoe
  - Once Completed, Project Will Be Among the Largest MBRs in Canada
    SUEZ to Upgrade Within the Existing Plant's Footprint

Faced with the challenge of meeting recent stringent total phosphorus effluent limits, the city of Barrie, Ontario, needed to upgrade its wastewater treatment facility. Today, SUEZ, through its Water Technologies & Solutions Business Unit, announced that it has been selected through an open competition as the membrane bioreactor (MBR) system supplier for this project, which will become one of the largest MBR plants in Canada.

SUEZ will provide its ZeeWeed\* 500D MBR technology, as well as engineering design support and on-site commissioning, to help the city of Barrie protect the environment and Lake Simcoe, where the plant discharges its treated effluent.

"SUEZ's cost-effective MBR solution will be retrofitted into our existing tanks, which will not only allow us to meet these stringent requirements, but will also reduce installation costs by using existing infrastructure," said John Thompson, director of Environmental Services, city of Barrie. "The SUEZ MBR solution also gives us the added ability to potentially expand within the existing footprint to achieve an ultimate capacity of 180 MLD (millions of liters per day). This will enable us to meet future growth and increased water demands."

The plant's total capacity is currently rated at 76 MLD average daily flow. The MBR is being sized to treat 55 MLD with the remaining portion to be treated through the conventional system already in place. The two effluent streams will then be blended and will meet the tighter effluent phosphorus limit. The overall project predesign is continuing with the city and its consultants (STANTEC), and now with SUEZ. The team is working collaboratively to ensure a value-focused design and end product. The equipment is expected to be delivered in 2021 with anticipated overall project construction and operation in 2022-2023.

"Our ZeeWeed 500D MBR system is specifically designed for difficult-to-treat water sources like the city of Barrie's wastewater and helps environmentally conscious facilities better protect sensitive ecosystems. With more than two decades of membrane design experience, SUEZ has optimized the ZeeWeed 500 membrane to improve flux, achieve greater permeability, reduce energy consumption and increase membrane lifespan, all within a smaller footprint,

making retrofits like this one a very viable option," said Kevin Cassidy, global leader – engineered systems, SUEZ—Water Technologies & Solutions.

The City of Barrie Wastewater Treatment Facility is a tertiary treatment plant that uses ultraviolet disinfection to treat all wastewater before sending the treated wastewater to Lake Simcoe. The facility receives domestic, commercial and industrial wastewater and provides a level of treatment to meet the water quality standards of Lake Simcoe. Overall, the entire treatment process can be described as the transformation of wastewater into three useful products—treated effluent, an agricultural crop fertilization supplement, and energy in the form of heat and electricity. The recent changes in provincial legislation that have lowered the Lake Simcoe effluent phosphorous concentrations require that the city of Barrie invest in upgrading its treatment technology to continue meeting these new requirements while accommodating growth.

Today's announcement was made at WEFTEC 2018, taking place October 1-3 in New Orleans.

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\*Trademark of SUEZ; may be registered in one or more countries.

Press contacts: Renee Twardzik SUEZ Water Technologies & Solutions +1 215 942 3288 renee.twardzik@suez.com

## **Beth Coffman**

Soteryx Corp. +1 518 886 1076 beth.coffman@soteryx.com

## About SUEZ

With 90,000 people on the five continents, SUEZ is a world leader in smart and sustainable resource management. We provide water and waste management solutions that enable cities and industries to optimize their resource management and strengthen their environmental and economic performances, in line with regulatory standards. To meet increasing demands to overcome resource quality and scarcity challenges, SUEZ is fully engaged in the resource revolution. With the full potential of digital technologies and innovative solutions, the Group recovers 17 million tons of waste a year, produces 3.9 million tons of secondary raw materials and 7 TWh of local renewable energy. It also secures water resources, delivering wastewater treatment services to 58 million people and reusing 882 million m<sup>3</sup> of wastewater. SUEZ generated total revenues of 15.9 billion euros in 2017.

