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Press

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# Siemens to deliver complete wastewater treatment system for new propylene oxide-styrene monomer plant in China

Siemens Water Solutions received an order for a complete wastewater treatment system for Tianjin Bohua Chemical Development's (a subsidiary of Bohai Chemical Group) new propylene oxide-styrene monomer (POSM) plant. The plant, located at the Nangang Industrial Zone in northern China's Tianjin, will have a production capacity of 200,000 tons per year of propylene oxide (PO) and 450,000 tons per year of styrene monomer (SM).

Tianjin Bohua Chemical is building the grassroots petrochemical plant using technology licensed from REPSOL in Spain, for which Siemens Water Solutions previously provided a complete wastewater treatment system that included a Zimpro® WAO system; and PACT® and WAR systems. Siemens will supply two Zimpro® wet air oxidation (WAO) systems; a true 2-stage (T2S) PACT® membrane bioreactor (MBR); ozone oxidation; and wet air regeneration (WAR) systems on the Nangang Industrial Zone project. Effluent from the wastewater treatment system will be discharged into Bohai Bay, which is the subject of water quality improvement initiatives by the Chinese government, limiting the allowable chemical oxygen demand (COD) concentration in the discharge to less than 30 parts per million. This project demonstrates the effective integration of Siemens Water Solutions core technologies to deliver one of the more advanced wastewater treatment systems in the world, and comply with new water quality initiatives applied to Bohai Bay.

"After the customer carefully considered all available technologies in terms of both capital and operating expenditures, Siemens' proprietary WAO, PACT MBR, and WAR systems were the top choice to meet the project's regulatory and reuse

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requirements," said Anthony Pink, CEO of Siemens Water Solutions. "Key factors in the selection process included the ease of operation, lowest overall cost of ownership, and perhaps, most importantly, the confidence Tianjin Bohua Chemical has in Siemens to provide the full wastewater treatment solution – something no competitor currently offers using their own core in-house technology."

**Above: Siemens will provide two Zimpro® Wet Air Oxidation (WAO) systems; a True 2-stage (T2S) PACT® Membrane Bioreactor (MBR); ozone oxidation; and Wet Air Regeneration (WAR) systems to the grassroots propylene oxide-styrene monomer (POSM) plant being built by Tianjin Bohua Chemical Development. Similar equipment is pictured.**

This press release and press picture are available at
www.siemens.com/press/PR2018100011PDEN

For further information on water and wastewater treatment in the oil and gas industry, visit http://www.siemens.com/water-solutions

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