## **News Release**

**DuPont Clean Technologies** 



## Zhejiang Petroleum & Chemical Co. Awards DuPont Contract for MECS<sup>®</sup> Sulfuric Acid Regeneration Unit

WILMINGTON, Del., April 12, 2017 – Zhejiang Petroleum and Chemical Co. (ZPC) in China has awarded and signed contracts for the engineering, technology license and proprietary equipment for a MECS<sup>®</sup> sulfuric acid regeneration (SAR) unit, licensed by DuPont Clean Technologies.

ZPC is constructing a greenfield refinery and petrochemical project on Dayushan Island, just off the coast of eastern China, near Shanghai and Ningbo. The USD 15 billion project is the largest privately led petrochemical and refining project in China's history. The project will be executed in two phases with the first phase coming online in late 2018. After completion, the complex will have a refining capacity of 40 million tonnes/year, or 800,000 barrels per day.

The MECS<sup>®</sup> SAR unit for the ZPC petrochemical complex will have a capacity to regenerate 858 metric tons of spent sulfuric acid. The unit will produce a combination of products consisting of 98.3 wt% sulfuric acid, 99.2 wt% sulfuric acid, and 20% oleum. Furthermore, the MECS<sup>®</sup> SAR unit is designed to meet the Chinese Ministry of Environmental Protection's current emission requirements for SO<sub>2</sub>, NO<sub>x</sub> and sulfuric acid mist. Jason Hartman, global market specialist for the MECS<sup>®</sup> SAR technology said, "China's Ministry of Environmental Protection has enacted some of the most stringent point source emission requirements in the world. DuPont Clean Technologies is uniquely positioned to meet these new standards through enhancements to our MECS<sup>®</sup> SAR technology. These enhancements include the MECS<sup>®</sup> Vectorwall<sup>TM</sup> furnace, DynaWave<sup>®</sup> scrubbing and Brink<sup>®</sup> mist eliminators. When built, the SAR unit at ZPC's petrochemical complex will achieve world-class environmental emissions, reliability and on-stream time."

MECS<sup>®</sup> SAR technology is the leading technology for sulfuric acid regeneration in the market. This reliable, dry gas technology produces the desired sulfuric acid products for upstream alkylation, acrylonitrile and methyl methacrylate unit performance. Reliability, on-stream time and emission performance are the most important considerations when selecting SAR technology. Since the SAR unit supplies fresh sulfuric acid products to upstream units, MECS<sup>®</sup> SAR plants are designed for a high on-stream time to avoid disrupting the upstream unit's operation and production schedule while also providing noxious emission abatement in compliance with local and country environmental requirements.

Specific to the oil and gas industry, MECS offers unique solutions for treating sour offgas from amine treaters and sour water strippers to achieve ultra-low emissions specifications. In place of or in addition to traditional Claus SRU / TGTU facilities, these solutions can incorporate wet gas scrubbing (DynaWave<sup>®</sup>), direct wet gas conversion to sulfuric acid (SULFOX<sup>TM</sup>), and/or regenerative recovery of SO<sub>2</sub> (SolvR<sup>®</sup>). In support of our extensive customer base, DuPont Clean Technologies offers a comprehensive suite of technical services, including plant troubleshooting, turnaround support, maintenance strategy development, and plant assessments for improved operations and mechanical integrity. Our customers value our state-of-the-art products which include: Brink<sup>®</sup> mist eliminators, highperformance catalyst, DynaWave<sup>®</sup> scrubbers, MECS-ThermoZ<sup>TM</sup> air preheaters, and ZeCor<sup>®</sup> corrosionresistant alloy piping systems and equipment for sulfuric acid plants.

The DuPont Clean Technologies division applies real-world experience, history of innovation, problem-solving success, and strong brands to help organizations operate safely and with the highest level of performance, reliability, energy efficiency and environmental integrity. The Clean Technologies portfolio includes STRATCO<sup>®</sup> alkylation technology for production of clean, high-octane gasoline; IsoTherming<sup>®</sup> hydroprocessing technology for desulfurization of motor fuels; MECS<sup>®</sup> sulfuric acid production and regeneration technologies; BELCO<sup>®</sup> air quality control systems for FCC flue gas scrubbing, other refinery scrubbing applications and marine exhaust gas scrubbing; MECS<sup>®</sup> DynaWave<sup>®</sup> technology for sulfur recovery and tail gas-treating solutions; and a comprehensive suite of aftermarket service and solutions offerings. Learn more about DuPont Clean Technologies at <u>www.cleantechnologies.dupont.com</u>.

DuPont (NYSE: DD) has been bringing world-class science and engineering to the global marketplace in the form of innovative products, materials and services since 1802. The company believes that by collaborating with customers, governments, NGOs and thought leaders we can help find solutions to such global challenges as providing enough healthy food for people everywhere, decreasing dependence on fossil fuels, and protecting life and the environment. For additional information about DuPont and its commitment to inclusive innovation, please visit <u>http://www.dupont.com</u>.

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