

Trevose, Pennsylvania, July 16, 2019

SUEZ

SUEZ E.C.O.FILM NON-PHOSPHATE COOLING WATER TREATMENT ENTERS MARKET AFTER SUCCESSFUL PILOT SAVED CUSTOMER \$5 MILLION

SUEZ has developed a new corrosion and scale control chemistry for cooling water. E.C.O.Film, which stands for Engineered Carboxylate Oxide, relies on SUEZ's proprietary engineered film technology to eliminate the need for phosphorus, and other anti-corrosion solutions that employ EPA priority pollutant metals. With wide applicability across cooling systems, E.C.O.Film is a socially responsible product that removes the risk of costly phosphate deposition, and meets regulatory requirements in environmentally restricted and phosphorus restricted applications. In a pilot study, E.C.O.Film helped a large gas plant reduce phosphate discharges by more than 80%, enabling them to comply with new regulations while avoiding the need for a \$5 million capital equipment expenditure.

"E.C.O.Film is a complete cooling water treatment solution that uses no phosphate and requires no metal additives," said Hoshang Subawalla, executive vice president of Chemical & Monitoring Solutions for SUEZ – Water Technologies & Solutions. "It's the perfect solution for systems with calcium phosphate deposition challenges, those facing tightened environmental restrictions, and customers that want to meet sustainability goals."

Since the 1970s, phosphorus-based corrosion inhibitor programs have provided a costeffective method of protecting industrial assets such as cooling towers, chillers, and heat exchangers. When discharged into natural water bodies however, the phosphorus contributes to eutrophication and algae blooms due to the increased nutrient pollution.

SUEZ's proprietary E.C.O.Film technology can eliminate deposition issues related to calcium phosphate, zinc phosphate, and other phosphate salts. E.C.O.Film technology can help customers improve operational efficiency and increase time between cleanings and turnarounds.

In a pilot study at a large gas plant, treatment with E.C.O.Film reduced phosphorous content in the cooling tower discharge by more than 80% while achieving the targeted mild steel corrosion rates. As a result, the plant will meet pending phosphorous discharge regulations and avoid capital costs of approximately \$5MM for a phosphorus removal system, including associated operational costs and complexity of running such a system.

"The industry has struggled to find a replacement for phosphate corrosion inhibitors that performed adequately," said Robert Hendel, senior technical advisor for SUEZ – Water Technologies & Solutions. "Not only does E.C.O.Film allow customers to meet upcoming regulations, but it also helps our customers reduce their capital and operating expenses."

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

Cassie Olszewski

Gregory FCA for SUEZ Water Technologies &Solutions +1 610 228 2099 cassie@gregoryfca.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 m³ of wastewater. SUEZ generated total revenues of 17.3 billion euros in 2018.

