

## For Immediate Release

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## Severn Trent Services Desalination Plant for Chilean Mine Features Novel Design, Cost-effective Operation

**FORT WASHINGTON, Pa. – March 15, 2010** – [Severn Trent Services](http://www.severntrentservices.com) has been awarded a contract to provide a [seawater desalination](#) plant that will serve the potable and process water needs of the Minera Esperanza copper and gold mine in Antofagasta, Chile. The plant will draw seawater from the Pacific Ocean, which will be treated using ultrafiltration (UF) and [reverse osmosis](#) (RO) systems. The seawater will be pumped 145 km to the mine located at 2,200 meters above sea level. In the mine site, part of the seawater (five percent) will be processed to obtain the product water. Construction of the 634,000-gpd plant, which is owned by Antofagasta PLC of London (70 percent) and Marubeni Corporation of Tokyo (30 percent), is expected to be completed in the fourth quarter of 2010. The equipment will be installed and commissioned by Proequipos Ltda. of Santiago, Chile.

The novel seawater desalination plant design at Minera Esperanza will result in a more cost-effective operation compared to traditional seawater RO systems. The Minera Esperanza project is one of the world's first such projects in which 16-in membranes have been used rather than standard 8-in membranes. By using larger-diameter RO membranes, fewer membranes and pressure vessels are required to produce the same flow of water. Using 16-in membranes also will require fewer pipe connections, shorter pipe runs and a smaller building to house the seawater desalination system.

Two Severn Trent Services UAT™ 705,000-gpd (2,671 m<sup>3</sup>/day) UF trains using DOW™ UF membranes and two Severn Trent Services UAT 634,000-gpd (2,400 m<sup>3</sup>/day) RO trains using DOW FILMTEC™ 16-in membranes will be installed at the plant. The UF pretreatment system will not require a coagulant and will operate at 90 percent recovery, while the single-pass RO system will operate at 45 percent recovery, producing water quality below 400 ppm total dissolved solids.

According to Marwan Nesicolaci, vice president of international sales and business development for Severn Trent Services, "The global market for seawater desalination remains strong, and delivering new, more efficient plant designs is becoming increasingly important. Severn Trent's leading technologies and years of diverse water and wastewater experience give us an edge when forward-thinking companies such as Antofagasta PLC and Marubeni Corporation are looking to build new, cost-effective plants."

### About Severn Trent Services

Severn Trent Services ([www.severntrentservices.com](http://www.severntrentservices.com)), with global headquarters in Fort Washington, Pa., USA, is a leading supplier of water and wastewater solutions. The company's broad range of products and services is concentrated around disinfection, instrumentation and

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filtration technologies and contract operating services. Our analytical services group is the United Kingdom's leading environmental testing organization, and our international operating services business provides worldwide contract operation and support for all aspects of water and wastewater utility operational development and business transformation. Severn Trent Services is a member of the Severn Trent Plc (London: SVT.L) group of companies. Severn Trent is a FTSE 100 company.

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