

Another water treatment contract for VWS Envig

Specialised water treatment company VWS Envig has been awarded a contract to supply a 2 400 m³/day desalination plant to Transnet.

The turnkey project involves the design, manufacture, installation and commissioning of a reverse osmosis (RO) desalination plant for use at Transnet's iron-ore terminal at the Port of Saldanha. The harbour is South Africa's only iron-ore handling port, and this contract forms part of a larger upgrade and expansion project.

Project manager Thys Els says the plant will be able to be upgraded to a capacity of 3 600 m³/day if necessary. The project will be executed in two phases, namely a design phase and supply phase, with the latter depending on approval of the Record of Decision.

"The plant will process seawater to potable standards to be used for dust suppression in the iron-ore terminal. The company is using municipal water for this purpose at



A water treatment plant employing the patented Actiflo clarification process.

present," explains Els.

The new plant will comprise a seawater intake, RO units, a clean-in-place system, energy recovery system and a storage tank. "The energy recovery system is a key element of the plant's design. In the desalination process, a higher pressure, and thus more power, is needed to reject the salt. Based on specialised technology that has only become available in recent years, the recovery system

directs unused energy from the RO process to the beginning of the process, thus saving on power consumption" notes Els. In other news, the company is to provide a complete water treatment plant to an African gold mine to remove arsenic and other contaminants from mine-water.

According to Francois Gouws, Director: Design and Build Projects, the company will be drawing on the success and expertise of its Australian sister company. The 7 000

m³/day plant will use a number of processes to remove salt, dissolved iron, heavy metals, manganese, and other contaminants from the water.

It is expected that the plant will make use of the patented Actiflo clarification process. Other treatment steps will include filtration, potassium permanganate dosing and reverse osmosis. Treated water from the process will be used for irrigation purposes.

Cash injection for KZN water infrastructure

The country's second-largest water board, Umgeni Water, will spend R1,8-billion over the next five years on infrastructure projects through its Capital Works Programme.

This is as a response to economic growth and to meet the national water targets, the company said in its latest *Annual Report*. During the past year Umgeni Water continued with the planning, design and implementation of water supply infrastructure projects that focused on the augmentation of the water board's existing bulk infrastructure as well as the extension of bulk supply networks into previously unserved areas. Major projects included the upgrade of at least seven large pipelines as well as the construction of two booster pump stations.

Umgeni Water's most significant construction project during the past year was the construction of a new pipeline

along the South Coast from Amanzimtoti to Park Rynie to supply areas within eThekweni Metro and Ugu District Municipality. The pipeline is capable of delivering an average

annual daily demand of 65 Mℓ/day. The project comprises 40 km of pipeline, three service reservoirs and two booster pump stations.

WATER ON THE WEB (CONTINUED)

www.remunicipalisation.org

This website was set up as an initiative of the activist-scholar network Transnational Institute and social justice lobby group Corporate Europe Observatory. The website cites a number of high-profile private water company failures, where water services have been taken back into public management. It also provides case studies of cities that have successfully taken back control of water services from private companies and information of present campaigns tackling privatisation issues.

www.toxipedia.org

Toxipedia is a free toxicological encyclopedia written by experts and edited for accuracy. It is also a resource centre that provides a place for people to discuss numerous topics, and find educational materials. Water-related topics include endocrine disruptors, environmental justice, environmental laws, nanotechnology, pesticides, and persistent environmental contaminants.