

## Press release

Johannesburg, 10 May 2016

## Veolia supplies water treatment plant to Ghanaian Power Plant







Picture 1. Picture 2. Picture 3.

Veolia Water Technologies South Africa was awarded the contract to supply a water treatment plant, including desalination and potable water treatment, for KIPP in Ghana.

Veolia Water Technologies South Africa has been awarded the contract to supply all the mechanical and electrical componentry and equipment for a complete water treatment plant (WTP) for the new Kpone Independent Power Plant (KIPP) in Tema, Ghana. Comprising pre-treatment, two rounds of desalination processes, demineralisation and potable water treatment plants, the WTP will be used within the power station to meet demineralisation water and service requirements, and produce potable water.

Located within 1 km of the Atlantic Ocean, which is the plant's water source, KIPP will be the largest independent power plant in Ghana when operations commence in 2017. It is a 350 MW Combined Cycle Gas Turbine (CCGT) Plant, which will account for approximately 10% of Ghana's total installed capacity.

The project, acquired through an open tender issued by Group 5, was awarded to Veolia in September 2015 with the envisaged WTP commissioning date set for the end of 2016. "Project work is already underway with our engineering team currently conducting the basic engineering design phase," says Jaco Oosthuizen, Technical Manager: Industrial, Veolia Water Technologies South Africa. The hazard and operability study (HAZOP) has been conducted and is now followed by the long lead time item procurement and detailed design, with construction of skid mounted equipment to be carried out in Veolia's Sebenza workshop.

Veolia's full scope of work includes the planning, designing, construction and testing of the skid-mounted plants delivered to Durban port. The skids include seawater pre-treatment comprising clarification and filtration, first pass seawater desalination (with a capacity of 3.1 mega litres per day) and second pass brackish water desalination, a mix bed ion exchange demineralisation plant and a potable water treatment plant. "One of the project's key objectives is to maximise South African content," Oosthuizen points out, "which means that the majority of items required will be manufactured and procured in South Africa."

"The main imported section is the electro chlorination plant, which involves the electro chemical production of sodium hypochlorite solution (NaOCI) by passing a DC current through seawater at a defined flowrate and current," he explains.

The team of specialists, each an expert in a specific discipline, including process, mechanical, electrical and drawing office, as well as project management, planning, procurement and workshop fabrication, will ensure that all skids are delivered by the end of 2016, when Veolia will provide commissioning assistance.

"The experience accrued from having constructed the majority of seawater desalination plants in South Africa," Oosthuizen concludes, "has led to Veolia becoming leaders in this field. This knowledge and competence played a role in securing this contract, and we will ensure that KIPP in Ghana benefit from our experience."

Caption to picture 1: Example of a plant similar to Kpone Independent Power Plant water treatment plant

Caption to picture 2: Diagram of the Kpone water treatment plant reverse osmosis installation

Caption to picture 3: Reverse Osmosis racks in construction

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€25 billion in 2015. www.veolia.com

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