

PROGRAMME DAY 3

24 March 2017: Facilitated Site Visits

Participants are allowed free of charge access to one of the technical tours.

NAME OF PROJECT	BACKGROUND	TIME OF PROJECT VISIT
<i>Durban Water Recycling</i>	Durban treats in the region of 450 million litres of wastewater daily, and in this context, the Council's eThekweni Water Services (EWS) commenced an investigation into the recycling of treated wastewater. In 1993 EWS developed a reclamation process for the production of high quality reclaimed water. The sewage-to-clean-water recycling plant treats 47.5 million litres of domestic and industrial wastewater to a near potable standard for sale to industrial customers for direct use in their processes.	09:00
		11:00
		13:00
<i>Nano-filtration Membrane Water Purification Treatment Plant</i>	The project entails treating borehole water (from two boreholes located within close proximity of the plant) to a potable standard (SANS 241). The reason for the plant is due to the high fluoride, iron and manganese that have been encountered in the borehole water. The Nanofiltration water purification plant will treat approximately 80 kl/day of water over a 10-hour period which will then be sent to the existing reservoir onsite (Reservoir E5 in the Ekhukhanyeni area) which will then be distributed via the existing reticulation system in the area	09:00
		11:00
		13:00
Remix: Demonstration Plant for Energy Efficient Desalination	The Remix desalination technology is the combination of water reuse process and the reverse osmosis desalination process as indicated in the figure. The remix plant relies on membrane technology for ultrafiltration (UF) and reverse osmosis (RO) treatment units.	09:00
		11:00
		13:00
Western & Northern Aqueduct	The idea behind these flagship project is to improve on the assurance of supply and augment water in the western and northern region. These aqueducts will bring water to the western and northern region under gravity, thus saving on the huge energy cost.	09:00
		11:00
		13:00

