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WC water team offers one-stop shop

AS South Africa comes to terms with a water-scarce future, SRK Consulting is consolidating its extensive water-related expertise in the Western Cape into a one-stop shop.

"Growing concerns about the country's water security are demanding changes in the ways that industry and government tackle water challenges," says Cape Town-based SRK principal hydrogeologist Leon Groenewald. "To respond more effectively to client needs, SRK has integrated our groundwater and surface water departments in the province to offer a wider range of scientific and engineering solutions."

The new water group will consolidate and extend its services beyond traditional groundwater supply services into surface water services like water treatment, stormwater and flood design, and advisory services, with a full range of borehole-to-tap services available.

"This includes everything from groundwater feasibility studies to pump, pipeline and water treatment plant designs or drought relief projects, as well as our specialist Environmental Impact Assessment and Water Use Licence applications expertise," he said.

Experience in the group includes drought relief projects for municipalities, private property owners, developers and industrial clients, including siting, drilling and testing of boreholes, wellfield monitoring and flood line determinations.

"Our expertise equips us to conduct work ranging from borehole pump specification to pipeline and water treatment designs," said SRK principal engineer Xanthe Adams. "We have assisted municipalities with tender processes and supervised their contractors."

In the mining sector, the group's integrated approach includes groundwater and surface water impact assessments - to local rivers, for example – as well as flood risk assessments and improved accuracy of predicted groundwater recharge from rainfall percolation, particularly in the context of climate change. Numerical modelling is one of the main surface and groundwater tools to quantify the baseline, predict impacts and guide water management.

"Our modelling work of tailings dams considers issues like transient drain flows – which is critical for water engineering design – and pore pressures for factor-of-safety slope stability assessment to prevent tailings dam failure," said principal hydrogeologist and numerical groundwater modeller Sheila Imrie.

Assessing pollution and contamination are also important areas of work, including groundwater pollution studies at landfill sites, analysis of contaminant plume footprints and remediation assessments. Multidisciplinary teams that tackle these projects comprise professional hydrogeologists, water treatment engineers, water engineers, hydrologists and hydraulic engineers.

Back Row From Left: Seabelo Seroalo (engineering intern), Shuaib Dustay (hydrogeologist), Des Visser (principal hydrogeologist), Chris Dalgliesh (partner), Leon Groenewald (principal hydrogeologist)
Front Row From Left: Sheila Imrie (principal hydrogeologist), Annalisa Vicente (hydrogeologist), Masibulele Fubesi (GIS technician), Xanthe Adams (principal engineer).