

# Knight Piésold builds a sustainable future for the next 95 years

2016 represented a major milestone achievement for Level 2 BBBEE environment consulting specialist **Knight Piésold** having celebrated 95 years in business – making it the oldest consulting engineering company in South Africa. With almost a decade of experience behind its name, the company has retained its strong reputation in the mining, water and hydropower sectors in southern Africa and has further built a strong and growing transportation and pipeline capability as well.

**T**he year also delivered a solid pipeline of water management and protection projects for Knight Piésold in joint venture with other consultants. This includes the first of the Polahali Dam contracts for increasing water supply to Gauteng. The company is also in the process of completing construction supervision for the Ingula hydropower project for Eskom; and has undertaken design and site supervision work for Eskom’s Kusile ash dump in addition to other water management facilities for the new power station.

In the mining sector, Knight Piésold delivered critical services for tailings dam projects, specifically providing design and site supervision for grouting leaking penstocks on tailings dams and also undertaking dam breach assessments using in-house dam breach and flood routing software. Further work in this field saw the company undertake comprehensive seismic stability analyses for tailings facilities on local and regional projects.

“We are also particularly excited after successfully entering a new business

sector – the solar energy field – to provide local mining companies and communities with renewable power,” says mining technical director Andrew Copeland.

### Focused on sustainability

Its focus on helping create a more sustainable mining industry has seen Knight Piésold continue to perform despite the mining sector’s economic struggles. In addition it provided innovative and cost-effective tailings and heap leach design work to protect the water environment through comprehensive lining and seepage control measures. The company promotes thorough geotechnical investigations and testing of tailings such that seepage and stability can be properly analysed. “The mining industry cannot afford another tailings facility failure and Knight Piésold promotes in situ testing of tailings impoundments using piezocone techniques and analysis,” Copeland highlights.

“Further to this, we continue to assist mines with water balances, water quality assessments, sampling,

testing and results analysis to provide guidance on improving mine water management.” Knight Piésold regularly

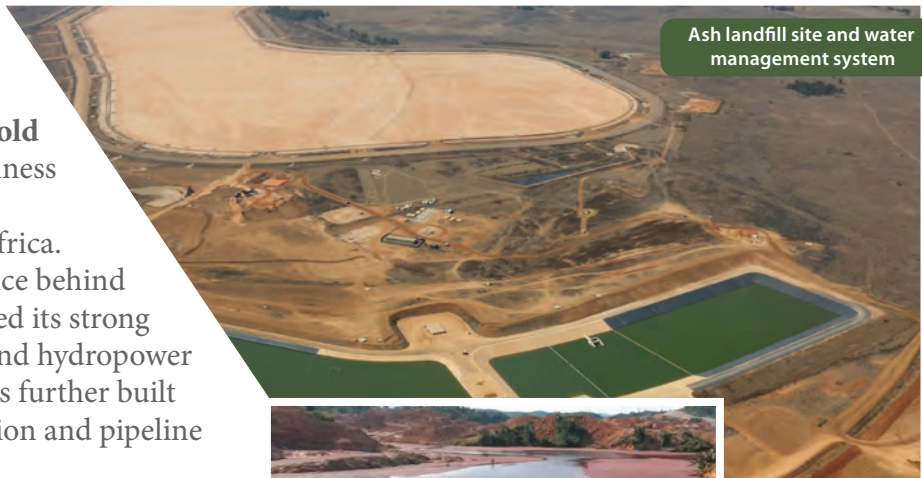
undertakes social impact assessments that assist mines to better understand their communities, stakeholders and the regulations better. The “social licence to operate” has never been greater.

### The differentiating factor

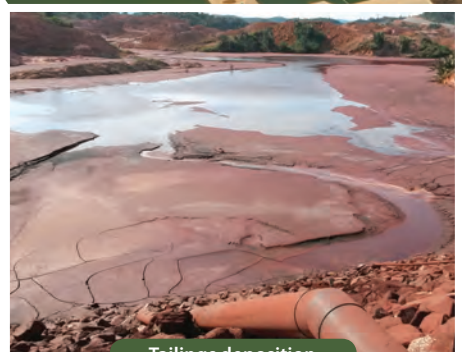
Knight Piésold prides itself on being able to work efficiently on projects and not repeat previous designs, Copeland highlights. “Project brainstorming is done internally on projects to ensure the client’s interests are met through site specific and innovative solutions. We focus on finding simple options that can be easily implemented, while not compromising on safety or stability and minimising impacts on the environment/communities.”

Knight Piésold has built strong client relations, and in these economically tough times has been able to offer value through on-site knowledge, which is an advantage over its competitors.

“We aim to be in business for the next 95 years and strong partnerships, quality work, experts in the field on mine residue, geotechnical engineering and environmental assessments are central to achieving this strategy,” Copeland concludes. **MRA**



Ash landfill site and water management system



Tailings deposition



Heap leach pad lift with new irrigation system