



# STELLENBOSCH

STELLENBOSCH • PNIEL • FRANSCHHOEK

MUNISIPALITEIT • UMASIPALA • MUNICIPALITY

04 November 2025

Mr Heindré Rademan  
Chief Executive Officer  
Soldevco (Pty) Ltd  
Cape Town, South Africa

Dear Mr Rademan,

## **RE: RECOGNITION OF ULTRA-OXYGEN™ DEMONSTRATION PROJECT AT KLAPMUTS WASTEWATER TREATMENT WORKS**

On behalf of the Stellenbosch Municipality, I wish to extend our appreciation to Soldevco (Pty) Ltd for its valuable collaboration and contribution to the Ultra-Oxygen™ Micro & Ultrafine Bubble Demonstration Project conducted at the Klappmuts Wastewater Treatment Works (WWTW) in 2024.

The Municipality acknowledges Soldevco's professionalism, technical innovation, and commitment throughout the pilot, which was undertaken as part of the Technology Innovation Agency (TIA) Green Innovation Project (TIA-14727-01). The project aligned strongly with Stellenbosch Municipality's objective to enhance the operational efficiency and environmental performance of our wastewater infrastructure in accordance with national Green Drop standards.

### **Project Overview and Achievements:**

- Site: Klappmuts WWTW (capacity  $\pm$  2.5 ML/day)
- Technology: Soldevco Ultra-Oxygen™ Micro & Ultrafine Bubble Generator, integrated with UO2-Drylet biocatalyst
- Support Partners: Technology Innovation Agency (TIA) and the Global Cleantech Innovation Programme (GCIP-SA)

The demonstration achieved highly positive and measurable outcomes, including:

- Approximately 40 % reduction in energy consumption compared with baseline aeration systems;
- Sludge reduction of 40–60 %, resulting in lower handling and disposal costs;
- COD reduction exceeding 80 % and BOD reduction exceeding 85 % within one month of operation;
- Improved dissolved oxygen levels (up to 1500%) achieved with reduced power input; and
- Noticeable improvements in biological stability, odour control, and settling characteristics.



# STELLENBOSCH

STELLENBOSCH • PNIEL • FRANSCHHOEK

MUNISIPALITEIT • UMASIPALA • MUNICIPALITY

These results clearly demonstrated that Soldevco's technology can deliver substantial operational and environmental benefits for municipal wastewater treatment, while contributing to national climate and energy-efficiency goals.

Kind Regards,

 08/11/2025

**SHANE CHANDAKA**  
**DIRECTOR: INFRASTRUCTURE SERVICES**