

Packaged sewage treatment plants

Designed, built and maintained on the activated sludge process — for municipalities, industrial sites and remote facilities the mains cannot serve.

Activated sludge

Small and large plants

Design, build, maintain

Level 2 B-BBEE | 300+ sites served nationally | Treating industrial water since 1998



Innovative Water Solutions

01

SEWAGE TREATMENT PLANTS

Four sections, one treatment train

Not every site can send its sewage to a municipal works — and in South Africa, plenty of municipal works cannot take what is already arriving. A packaged sewage treatment plant puts the whole treatment train on the site that needs it: collection, aeration, settling and final disinfection, engineered as one compact plant.

The activated sludge process is natural; nature offers a unique solution to treat sewage cost-effectively. What makes a plant reliable is the engineering around it — how each section is arranged, sized and enhanced for the load it will actually carry.

Beyond the network

Remote facilities and industrial sites the mains cannot serve still have to treat their sewage.

Overloaded works

Plenty of South African municipal works cannot take what is already arriving.

Solids left behind

Settled solids that are not returned turn anaerobic and cause foaming, ruining the effluent.

The programme, stage by stage

Stage	What it does
Collection & anaerobic treatment	A primary or interceptor tank evens out the feed, retains large particles, assists denitrification and stores surplus sludge — typically removed at six-monthly or annual intervals.
Aeration	A flat-bottomed aeration tank with an aeration ring at its base. Blowers and diffusers establish intimate contact between the air and the solid matter.
Sludge settling	We only use conical settler tanks — more expensive to manufacture, but no solids collect in the bottom. Settled solids return to the process instead of turning anaerobic.
Polishing & disinfection	Where the outflow feeds dams or rivers, phosphates are removed by ferric chloride dosing and a second settler; a chlorine or ozone contact stage brings the effluent to the standard for discharge or irrigation.

1998

Treating industrial water since

300+

Sites served nationally

132 million

Litres treated daily

Level 2

B-BBEE contributor

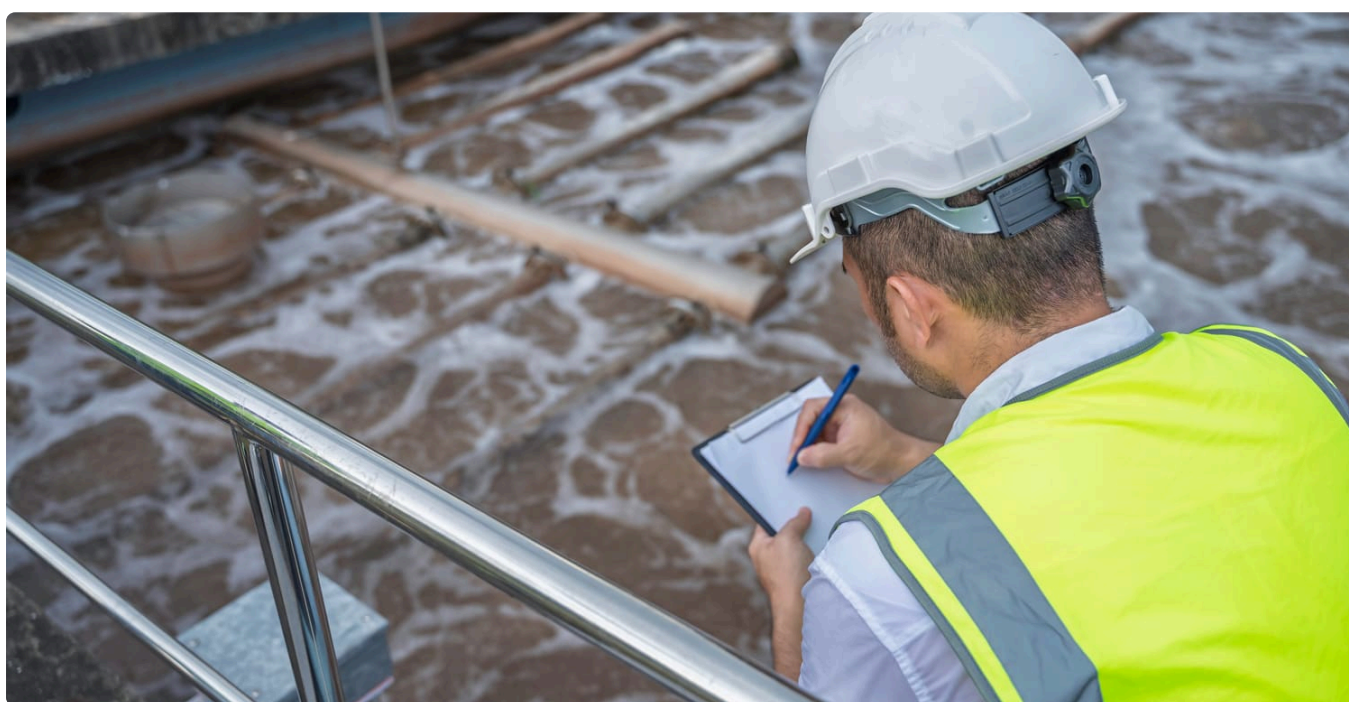
02 PACKAGED SEWAGE TREATMENT PLANTS What a plant includes

Included as standard

- Primary / interceptor tank
- Aeration tank with blowers and diffusers
- Conical sludge settler with solids return
- Chlorine or ozone contact tank
- Commissioning, operator handover and a maintenance schedule

Options

- Phosphate settler with ferric chloride dosing
- Ozone in place of chlorine
- On-site sludge drying beds — a sterile, compostable dry mass
- Treated effluent reused for irrigation



Sized for your site, maintained by the team that built it

Each plant is sized against your measured or design flow and organic load, not a catalogue band — capacity and footprint are stated per site in the proposal. Prosep maintains the plants we build, monitors the biology that does the work, and can assess and take over an existing plant that has been left to drift.

NEXT STEP

Book a site assessment

We survey your systems, sample your water and map the risks to uptime, yield and compliance — then state exactly what we would do, and prove it with your own plant's data.

- 01 We assess the site and take the analyses
- 02 You get an engineered programme, costed before you commit
- 03 We implement, monitor and report against the targets

Have this ready and the first visit goes further

- Number of people or units served, and site hours
- Measured or design sewage flow
- Where the treated effluent will go: discharge, dam, river or irrigation
- Any existing plant, tanks or septic system on site
- Site layout and available footprint
- Discharge or water use licence conditions, if any

Talk to us

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Visit

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