

Holistic approach for real change



It's no secret that the poor operation and maintenance of wastewater treatment works (WWTWs) remains a major problem. New plants, refurbishments and upgrades are expensive, costing government and the taxpayer millions but there are all too rarely good, feasible long-term plans for the operation and maintenance of existing infrastructure.

"The above is largely due to poor leadership and a lack of technical capacity of the people who are tasked to be stewards over these assets by the municipality. Sewer treatment does not seem to be a priority amid a list of other responsibilities these managers have within the municipality," says Xoliswa Motsohi, business development consultant, Headstream Water Holdings.

Turning the problem around

According to Motsohi, the starting point for improving the situation is for municipalities to do an audit of what is working and what's not, what needs to be done to restore these plants, how to develop concrete annual plans, and to ring-fence funding for operation and maintenance.

Human capital is municipalities' most important asset. Organisations need to take a holistic approach to provide support to people who work at these plants, mentor them and develop them so that they can feel like their work is noticed and appreciated by management.

Role of technology

For Motsohi, people come first in a comprehensive plan for making WWTWs

work better, but selecting innovative and reliable technology also plays an important role.

"Innovation is key, given the existing problem of scarce government funding; for example, installing a technology like Headstream Water Holdings' HYBACS for wastewater treatment will not only reduce municipalities' capital spend by up to 30% or more, it will also make available these funds for operational expenditure or other vital new projects," she says.

"Innovation not only saves on capital expenditure but also reduces operation costs while being geared to conserve the environment. This is achieved through reducing land and resource footprints, and promoting waste recycling," concludes Motsohi. **35**



HYBACS is an international award winning innovative wastewater treatment technology ideally suited to upgrade existing Sewage Treatment Plants cost effectively and reduce ongoing energy use

Recently selected by ERWAT for the increase in treatment capacity at Tsakane STP from 11MI/d 20MI/d

HYBACS (HYBrid ACTivated Sludge) is a proven and innovative biological wastewater treatment technology ideally suited to increasing the capacity of Activated Sludge Sewage Treatment Plants and improving overall treatment performance.

Doubling of treatment capacity can be achieved within the existing STP footprint with limited civil works leading to significant cost and time savings.

- ✓ CAPEX savings of up to 50% on upgrades to existing STPs
- ✓ Ideal retrofit to existing STPs with no disruption to treatment
- ✓ Up to 30% reduction in energy use per MI/d treated
- ✓ Simple operation and maintenance
- ✓ Fast and simple installation and commissioning
- ✓ Scalable: small scale on site package plants to >100ML/d

Supplied exclusively in South Africa by Headstream Water Solutions.

9MI/d increase in treatment capacity with minimal civil construction and no increase in plant footprint.

Minimal plant disruption as HYBACS SMART reactors manufactured and tested off site to be installed on site over a 3 week period.

