



PROACTIVE MANAGEMENT OF WATER SYSTEMS IN THE WORKPLACE

Multiple provinces in the country are grappling with deteriorating water quality and increasingly frequent and lengthy disruptions to water supply. And as a workplace management solutions provider, Tsebo is tackling this reality head-on.

Most of our customers within the corporate and manufacturing environment are negatively affected by poor water quality and water disruptions. Without access to their own water sources, they struggle with maintaining work output, while keeping staff at work with basic operational hygiene standards. Furthermore, the lack of water poses serious fire safety risks as water is crucial for firefighting, with potential insurance consequences if it is unavailable. As an engineering and energy business, we have developed solutions to assist," says Aubrey McElnea, CEO of Tsebo Facilities Management.

While Tsebo provides services like facilities management, cleaning, catering and security and more, the company is increasingly focusing on water management solutions. Businesses are realising that

expenditure on water solutions have a strong return of investment.

"Businesses need a backup water option, a buffer for when municipalities cannot guarantee supply. Generally, designing and installing water back-up solutions and implementing monitoring systems is a lot more complicated than setting up back up energy solutions," adds Ebrahim Patel, head of engineering at Tsebo Facilities Solutions.

Water solutions

He says that a great deal of due diligence must go into implementing water back up and water monitoring systems. "For instance, in addition to determining the needs of the company, there is a civil engineering component to constructing a water storage solution. Various plans and approvals need to be made. It is also important to have a good overview of the water use in a business's

operations. Very often, companies need less water back up than what they think if they just manage their available water a little better."

There are seldom one size fits all water solutions. Businesses may occupy single-level buildings, multi-level buildings or multiple buildings in office parks. Some companies want water tanks above ground and other companies opt for an underground solution. The amount of backup water needed will vary from one company to another. While it is important to have backup water, the quality of the water needs to reach either potable standards or have a quality that can be used in a company's production processes. "At Tsebo, we are a turnkey business and the utility part of the business can fully engineer a backup water solution; from calculating the quantity of water to be stored, the construction of the tanks, to specifying and installing the pumps, testing



Aubrey McElnea, CEO of Tsebo Facilities Management



Ebrahim Patel, head of engineering at Tsebo Facilities Solutions

and treating the water to applicable standards, consumption analytics, and even treating and recycling the sludge from water and wastewater treatment. Tsebo tackles business continuity and does not merely focus on hardware," states Patel.

Other companies want to reduce water usage by firstly monitoring the amount of water used, followed by identifying and targeting leaks. This is an iterative process where the solution is constantly tweaked based on new data obtained through smart meters.

Tsebo have their own real-time monitoring system that can calculate a number of parameters; from water inflow and outflow at various points, flow rates, water pressure, valve closures to pump and motor performances. "We can not only tell how much water is available in a client's water storage tank but can predict how long that water will last, based on historical data. Alarms can be set based on water pressure, tank levels or pump performance to the requisite people at the requisite management levels. This equips businesses to maintain their continuity, it decreases a business's reaction time and pinpoints the nature of a problem," notes Patel.

Water monitoring systems have been available for many years, but they have become more affordable to the average business. Monitoring can also be easily scaled and does not have to be costly. One issue with the installation of smart meters and other instrumentation is the risk of theft. "Tsebo has its own high-tech security company. It is relatively simple to

remotely monitor a device and create a security response to it. We have two national operating centres – one in Midrand and the other in Cape Town. Tsebo tackles business continuity and does not merely focus on hardware," says McElnea.

Looking at the entire site holistically from a workplace management tool McElnea highlights investment in education and training around the importance of water conservation is as this important as investing in its physical infrastructure.

While most of Tsebo's clients are in the private sector, they have been involved with three successful public-private partnerships (PPP) where they construct and maintain infrastructure and then hand that infrastructure back

to the government after a number of years. "We were one of the first facilities management companies to be involved in a PPP. One of the PPPs we are involved in has been running for 23 years. It is all about directing private sector funding into public infrastructure. PPPs are a strategic model for pooling resources and expertise, accelerating the deployment of innovative solutions and ensuring sustainable management practices. In a country with scarce resources, we should harness skills and funding available in the private sector. We believe that a collaborative approach between the public and private sector is the only way that we can tackle the intermittent water supply and decline in water quality," concludes McElnea. ●

