

Water recovery system proves a winner for sand mining company

Stringent governmental restrictions on water licences in the mining industry is as hot a topic as the ongoing drought, so finding sustainable and cost-efficient methods of washing the sand it produces is a high priority for Mission Point Mining.

Mining operator and managing director of [Mission Point Mining](#) in the Free State, Johann Pretorius says: “Although the lack of water remains an ongoing issue for mine and quarry operators who produce specialised sand, there is no denying that the market is now requiring that sand is washed to high quality standards.



But to wash, you need water, and obtaining a water licence from the government to access larger volumes of fresh water is a lengthy and challenging process, so it is up to us to stay competitive by adopting the best water-saving washing solutions.”

He says the mine has bought a [CDE](#) EvoWash 151 coupled with an AquaCycle 400 water recovery system to treat the raw silica sand, a free-dig alluvial deposit, which produces 130 tonnes per hour of 0-1mm fine sand. The product is sold as plaster and building sand, and as foundry sand for instance to the local specialist sand market.

Pretorius continues: “Since we replaced our bucket wheel with a CDE turnkey plant four years ago, we have witnessed a significant increase in the quality of our product and a no less significant decrease in our water consumption.”

“With our previous bucket wheel system, we were lucky if we were getting 90% pure silica sand from our old wash plant. With our new equipment, we now only get 2% impurities in our product.

Smart water management

MPM feeds the plant up to 500,000 litres of water per day for a total running time of 11 hours. To ensure optimal efficiency, the company has put in place highly effective water saving systems benefiting both the business and the environment.

As well as running a CDE AquaCycle that saves up to 90% of waste water, MPM's water recovery system for stockpiles is also instrumental in accelerating the drying process of the end product so that it can be sold quickly to make space for new stockpiles.

Pretorius adds: “Stockpiles used to dry for days before being sold but thanks to the new technology our product can now be sold within hours.”

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