PRESS RELEASE - Mining And Quarrying

500 words

## Save energy, save money

Energy expenses are among the main costs facing quarries today and initiatives that reduce consumption can have far reaching and positive benefits across the board.

According to Nico Pienaar of the Aggregate and Sand Producers Association of Southern Africa (Aspasa), the cost of electricity has gone up four fold in recent years and rising fuel prices are adding an extra burden in terms of machinery and generators on site. As a result of the high input costs even comparatively small saving of just a few percent can save money and depending on the size of the operation these savings may amount to tens of thousands of Rands on monthly energy bills.

He explains, "Unfortunately Eskom is the sole supplier of electricity in South Africa so there is little we can do to save purchase price costs. But, we can save on the demand side, study our usage and devise ways of using electricity wisely. There are many ways to do this including limiting machine operations to run only when required, using efficient drives and monitoring devices, as well as undertaking regular maintenance of capital equipment such as crushers, screen, conveyors etc to ensure they are running optimally at all times.

## **Optimising processes**

"In fact, it is prudent to look at the entire upstream process and ensure that rock sizes to the crusher are optimal, things like liners not worn out, chutes are clear of build-up, screens are cleaned regularly etc. These are good housekeeping issues that should be done regularly (but often aren't done adequately). Old inefficient equipment should also be replaced with more efficient alternatives.

"Diesel and petrol motors on the other hand should be properly specified for the job at hand whether it be for process equipment or plant equipment, pumps etc. The use of the right equipment for the job is imperative as two passes may be required from a small loader which may burn 1.8 times the amount of diesel as a single pass with a bigger one.

"Finding the sweet spot is imperative to save money and doing your research upfront will save a lot of effort and money in future. Buy the right machine for the job and speak to manufacturers and distributors to find the machines that deliver the best performance and running cost ratios. Also ensuring operators are trained and that machines are used more productively contributes to lower fuel bills," says Nico.

## Alternative energy

Fortunately, there are ways of mitigating rising energy costs which in light of climbing energy costs are becoming more affordable and viable. For example, the use of solar energy to run peripheral equipment and supplement electricity is an attractive option in most parts of the country where 300 days of sunshine throughout the year is not uncommon. Likewise, wind energy or combinations of wind and solar in certain areas is a viable alternative as is the burning of waste in kilns and the recycling of heat from certain processes. Similarly, biofuels are available in certain areas and are a cheaper source of fuel for certain motors.

"Even if we just start with the small things like turning off the office lights when nobody is in it, or using energy efficient lights, showers, solar geysers, turning motors off when not in use and a myriad of other small things - is a good start to conserving energy. Once these savings are realised it will be easier to justify further initiatives and really begin saving money, "concludes Nico.

Aspasa, Nico Pienaar, Tel: (011) 791 3327, Fax: 086 647 8034, Email: nico@aspasa.co.za, Web: www.aspasa.co.za

Caption

Nico Pienaar is the director of Aspasa

Issued on behalf of **Aspasa, Nico Pienaar**, Tel: (011) 791 3327, Fax: 086 647 8034, Email: nico@aspasa.co.za, Web: www.aspasa.co.za

By Media Savvy Communications, Raymond Campling, Tel: (011) 979 7207, Cell: 076 297 2775, Email: media@mediasavvy.biz, Web: www.mediasavvy.wozaonline.com