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CONSTRUCTION MATERIALS & EQUIPMENT

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Cement producer focuses on reducing its environmental footprint

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With the introduction of a new environmental policy, cement producer AfriSam is focusing on reducing its energy use and on using alternative fuels to decrease its overall environmental footprint.

The AfriSam environmental policy was formulated around the adoption of the 16 principles for sustainable development as set out in the International Chamber of Commerce's Business Charter for Sustainable Development.

AfriSam CEO **Charles Naudé** says that there have been significant investments over the past few years to reduce its environmental impacts. "Through these investments, we have maintained our role as a leader in environmental stewardship," he adds.

"We will use four principles to guide our progress. Monitoring management systems, using our resources to their full potential, studying AfriSam's environmental impacts and ensuring a steady relationship with our

stakeholders will help us achieve the goals of our policy," he adds.

Meanwhile, by accelerating the use of extenders, such as AfriSam slag, silica fume, fly ash and limestone in its cement product range, the company has been able to reduce its carbon dioxide (CO₂) emissions and, with the approval of the authorities for the use of selected alternative fuels in cement kilns, AfriSam will be able to further reduce CO₂ emissions.

Naudé adds that the company's operations are run in a way that reduces the potential adverse effects of the cement, aggregate, ready-mix and slag processes and products on the community and its environment.

The company is committed to environmental management systems that comply with the requirements of ISO 14001 and continuous improvement is achieved through the process of risk management, the execution of performance assessments,

benchmarking and the implementation of improvement programmes.

"We are focusing on the rehabilitation of AfriSam's mining sites to a self-sustainable or positively usable land form on the final closure of operations, which, in the near future, will form a large part of AfriSam's programme to provide sustainability for future generations," he explains.

Rehabilitation has many aspects, such as the removal and eradication of alien invader plants and trees, and replacing them with indigenous plants and trees.

AfriSam will be coprocessing waste as an alternative fuel to coal. It also promotes ecoefficiency, conservation of nonrenewable resources and the recycling of secondary materials through pursuing the increased use of renewable resources, reducing waste and the use of fossil fuels in its process.

Gas monitoring systems supplier Opsis' continuous emissions monitoring equipment has been installed in all of the company's kiln stacks, including its Tanga Cement operation, in Tanzania, where the company holds a 62,5% share interest.

"AfriSam is currently the only Southern African cement producer to continuously measure up to 13 gas streams in its kiln stacks emissions, in units as small as mg/Nm³," Naudé adds.

It also conducts yearly discontinuous emission measurements for up to 13 metals, as well as dioxins, furans and polychlorinated biphenyls (PCBs).

These are being measured in micrograms for metals and nanograms for dioxins, furans and PCBs.

"These emission measurements show that AfriSam's kilns can comfortably comply with the European Community 2000/76/EC emission standards for cement kilns coprocessing hazardous waste," he concludes.

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