

MINING INFRASTRUCTURE

# GreenBit overcomes all obstacles

With environmental compliance and water security rivalling cost as key issues for mines and municipalities, I-CAT's GreenBit serves as an effective, low-cost solution for dust suppression.

**I**N ORDER TO comply with safety and occupational and environmental guidelines and legislation, dust suppression has evolved from being a recommendation to a mandatory obligation. I-CAT director of environmental solutions Lourens Jansen van Rensburg reveals that GreenBit offers the perfect solution to dust control.

GreenBit is a natural binding agent that produces durable, smooth, and dust-free gravel road surfaces



results, which have exceeded their expectations of durability.”

He indicates that I-CAT has been supplying GreenBit to a large mining group in the Northern Cape since November 2014, with excellent results. “Our contract with

“GreenBit combines a natural binding agent with an emulsified bituminous product to create a durable gravel road sealant. It is an environmentally safe alternative to purely chemical-based products for permanent gravel roads on mines and in residential areas,” he explains.

Manufactured locally by I-CAT, GreenBit contains around 70% all-natural binders, derived from wood extracts – a by-product of the paper and pulp industry, which has a negative carbon footprint due to carbon sequestration by the trees.

The balance contains emulsified bitumen and natural polymers, making the product far less environmentally risky than any alternative on the market. GreenBit is also diluted with between 80% and 99.75% water, depending on road and soil conditions, before application by spray trucks.

Jansen van Rensburg notes that GreenBit produces a durable, smooth, and dust-free surface that eliminates the need for frequent maintenance. “Our product has been extensively tested on both public and mine haulage roads. It produces a strong base with a smooth and durable surface. Our clients are highly satisfied with the

this mine was extended by five years, which we attribute to the success and cost-effectiveness of the product. We have also secured a contract in the DRC for the product and are currently busy with a six-month paid trial at this mine.”

I-CAT is also focusing on municipalities and road agencies for application in residential and rural areas. Jansen van Rensburg continues, “The need for dust suppression here is great, and municipalities are keen to comply with regulations. Our solution is cost-effective and, more importantly, reduces the health hazards associated with dust for people living in these regions.”

According to Jansen van Rensburg, the demand for GreenBit will continue to grow as more companies implement best practice with regard to the air quality and dust regulations specified by occupational health standards. “GreenBit is a water-soluble and easy-to-apply product that improves tyre grip, while reducing the need for constant grading and watering of the roads, thereby saving on precious water resources and overall costs,” he concludes. **35**