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Reduced Lime Consumption Could Help Miners With Cost Reductions – STT Enviro CEO

By Alex Létourneau of Kitco News Tuesday June 3, 2014 10:36 AM

(Kitco News) - With metals prices trending lower in 2013 and into 2014, mining companies rushed to cut costs across the board in order to remain somewhat profitable.

While many of the cuts came at the corporate level, as well as wiping out a great deal of exploration, STT Enviro Corp. (TSXV:STT) has found a way to reduce costs within mining operations: by reducing lime consumption.

STT focuses on systems designed for environmental cleanups in the mining, gas and oil industry. The company said that through a system optimization study, the company found they could potentially reduce a mine operators lime consumption by up to 40%.

The study also showed they could reduce their carbon footprint by 2,600 metric tons of carbon dioxide and save them \$350,000 per year by implementing the recommendations put forth by STT.

"What we've been working on for a long time has been mapping the reactivity of lime in different circumstances," David Deacon, president and chief executive officer of STT, told Kitco News during a telephone interview.

"The temperature of the water, the quality of the water, the type of lime — because each mine has a different quality of lime — we recorded the effects of slaking in order to get the best reaction," Deacon said. "Every mine is different, every application is different."

Lime is commonly used in acid mine drainage, and is used to treat industrial and mining wastewater. It is also used in the recovery of ores, with gold and silver among the metals that benefits from lime.

Deacon said that the study offers miners dual solutions in today's mining sector as companies are looking to trim costs anywhere they can while respecting growing environmental concern.

"I can think of one major mining company that's spending \$100 million a year on lime consumption at all their various mines," Deacon said. "So, if you can have a 10% to 15% impact on that, that's a major impact.

"Our studies are not expensive and in this instance, one of the other things that was interesting about it, is the solutions that would make the difference are not expensive either," he added.

The product is offered across the Americas and does not have a specific target metal as STT is "targeting anywhere that the ore recovery process would require lime to neutralize the acidity."

Deacon said the company has more tests and studies to run in order to develop and refine the process as it becomes more available for the mining sector.

"Every study allows us to get that much more information on the reactivity mapping that we're doing," Deacon said. "We eventually hope to develop enough information where we'll be able to monitor certain inputs to the slaking process.

"Then get into that remotely so we can keep our clients informed of how their reactivity is going, and on how the operation is going in order to maintain those higher levels," he said.

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