

# GCR puts acid on Copper Hill

**A**ny miner will tell you that his ultimate project would be one where something that provides revenue can be extracted from virtually every ounce of dirt.

While the waste-free mine might remain a pipe-dream, according to managing director Kim Stanton-Cook, Golden Cross Resources Ltd (GCR) has, to mix avian metaphors, got itself a goose that can lay golden eggs, it is just a matter of lining up all of the ducks to make it happen.

"We've found a method of producing from Copper Hill that maximises the use of all of the elements that make up the deposit," Stanton-Cook said.

"We've got copper, gold, sulphur and iron and I can't see the point of digging all of that stuff out and throwing two of those elements away."

Some of those ducks include finding the cash for a \$5.8 million feasibility study, finding enough water near Copper Hill to feed the operation, dealing with two State Government bureaucracies and sourcing an estimated capex of \$420 million to get the whole show on the road.

If all of that can be done – and Stanton-Cook has no doubt that it can, and will be – GCR will have plants in New South Wales and South Australia combining to produce gold bullion, copper concentrate, sulphuric acid and iron

oxide.

GCR will base its feasibility study on a conventional flotation circuit at Copper Hill producing a copper-gold sulphide concentrate, which will then be shipped by rail to a sulphide roaster/sulphuric acid recovery plant/SXEW/CIL complex in South Australia to produce 17,000 tpa copper, 55,000 oz pa gold and 450,000 tpa sulphuric acid.

(Though no locations have been settled on at this early stage, the front-runner for any plant in South Australia is Port Pirie.)

The residue of that process, iron oxide calcine, should also find a place in the steel making industry according to Stanton-Cook.

While Stanton-Cook said that GCR had found a new method, he readily concedes that none of the technology is new.

The "method" refers to the fact that the company has included the capacity to produce sulphuric acid which can be sold on the domestic market, an important tipping point in hopes for developing a large, but ultimately low-grade deposit.

The Copper Hill resource contains more than 421,000t copper and 1.2 moz gold, but that resource comes in at 0.31% copper and 0.28 g/t gold, grades too low to make developing the deposit before now a viable proposition.

The recovering copper price and rising gold price have mitigated that somewhat, but Stanton-Cook said the addition of the sulphuric acid component was a crucial factor.

"We've had it for a long time, more than 12 years, but ultimately

it is a low-grade deposit. With the gold price low, copper price low there was really nothing we could do with it under those circumstances, so it is really a case now of taking a fresh look and saying: 'can we maximise the economic benefits of the resource by utilising all of the elements present and wasting nothing'?

"To get Copper Hill to work we have to extract maximum value from it. The original capital cost has changed (upwards from \$300 million to \$420 million), but we are extracting additional value from the sulphur.

"I'd stop short of saying it is essential, but it is extremely important to the success of the project. Clearly our advice is that the sulphuric acid market in Australia is going to expand dramatically. There are a number of major projects in South Australia that require large quantities of acid at the moment, we anticipate that we could be producing 6,000t sulphuric acid each year and we think that finding a market for that acid, within South Australia in particular, won't be all that difficult."

While finding a market may not be difficult, GCR's first task will be to raise sufficient cash to pay the estimated \$5.8 million price tag for the BFS.

While Stanton-Cook was understandably coy about raising plans, he did say he was confident that when investors looked at the project fundamentals, they would see the value in the project and the company.

Stanton-Cook spoke to **Gold Mining Journal** while on a roadshow around the country to spruik

GCR's plans for Copper Hill. He said the feedback he had received around the country had been very positive.

"I obviously can't go into any details, but it is quite clear that we will need to raise capital. We have \$3 million in cash at the moment and we need \$5.8 million for the BFS, as well as additional funds to fund our ongoing exploration through 2010 so at some stage we will have to embark on a capital raising.

"The feedback I have been getting has been very positive and I don't anticipate any problems at all in us completing a successful capital raising at the appropriate time."

He is equally confident that, if a positive study is completed, capex funding will be sourced through Chinese banks.

Through its Chinese partners, HQ Mining Resources, the investment arm of the China-based CUMIC group of companies in Australia, GCR has formed a relationship with China National Automation Control System Corporation (CACS), which will carry out the feasibility study.

"All of the indications that I have got are that we will be able to secure finance from China. If CACS are able to produce a positive BFS, they have already indicated that there would be banks in China who will support that study and the level of funding."

It would appear, on the surface anyway, that the ducks just might start falling into line sooner rather than later.

– Jason Alexander

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