***Blueprint shapes up for Talisman gold project***

***Ross Louthean —*** *3 August 2012*

*[](http://nzresources.com/articleimages/3566/rosslouthean.jpg)  
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The blueprint for reviving gold mining at the historic Talisman mine at Karangahake would involve a small-scale underground facility operating with a mining rate of about 150,000 tonnes per annum of ore.

This was revealed in the June quarter report of New Talisman Gold Mines Ltd (ASX & NZX: NTL) which said the company was looking at new technology that would have both lower environmental and lower operating costs.

Tunnel sizes at Talisman would be 3 metres by 3m with small loaders and trucks to suit. Development tunnels would be located wherever possible on the many vertical gold-bearing reefs in the mine, minimising the non-payable development.

“Cemented backfill will be integral to the mining method, and will also be used to restore haulage access where the ore is mined,” the company said.

“The high grade shoots will be identified and prioritised for production, and the mining plan being developed is to target the best zones for primary stopes in the first stage of production.

“After a primary stope is mined, the resulting void will be back-filled with cemented materials so the next adjacent secondary stope zones can be efficiently mined.”

The company said the concept for processing ore could involve gravity and flotation concentration with a gold and silver rich sand concentrate produced -- about one-third of the tonnage mined -- to be transported elsewhere for sale or toll-based processing.

“This approach avoids cyanide based processing and apart from perceived environment benefits, it saves the capital and operating costs of fine grinding and attendant tailings storage.” The company said.

The remaining two-thirds of “non-valuable residue” will be returned underground using concrete pumps as cemented backfill.

The processing plant would have a throughput of about 20 tonnes/hour using transportable modules housed in a single storey shed -- a secure facility because of the high-grade being processed.

Cost-saving options being investigated include:

* Using renewable and biodegradable 100% biofuel in the underground equipment for benefits of lower fire hazard, lower exhaust toxicity, and zero nett carbon emissions.
* Underground monorail train haulage, compatible with the small truck haulage, which has productivity suited to the mine output, and can provide economic vertical haulage capacity using a rack and pinion drive.

The June quarter report also revealed New Talisman has reached terms for the next work programme on the Rahu exploration licence near Talisman with New Zealand Petroleum and Minerals (NZPAM).

“Extension of this permit is anticipated in due course,” the company said.

A two-year programme of work on Rahu would include completing at least 2,500m of drilling to verify the 3D resource models; updating resource estimates to a standard suitable for independent verification; and completion of a mine pre-feasibility study.

Fully owned and unlisted subsidiary Coromandel Gold Ltd has been granted an exploration permit for base and precious metals in Northland by NZPAM. The permit for five years covers 1,188 hectares and is 30 kilometres west of Whangarei.

Coromandel Gold subsidiary Northland Minerals holds the permit.