

APRIL 9

InterGroup project to ride 'green' construction wave

IQ INDUSTRY NEWS

A product with great potential to fast-track decarbonisation in the cement and construction industry lies at the heart of InterGroup Mining's hopes for its Brumby project in North Queensland.

The Queensland company has been assessing the potential for kaolin extraction from the site to produce metakaolin suitable as a supplement in making cement and concrete.

Townsville has been earmarked as the base for the metakaolin production facilities.

Kaolin itself is a growth commodity, with usage patterns pointing to a steady 4.5 per cent per annum volume growth between 2020-2025 from existing markets.

"However, they do not take into account the potentially significant impact that metakaolin adoption by the cement and construction industry may have on overall demand; nor its use as an alternative feedstock in HPA production – now classed as a critical mineral in Australia," an InterGroup spokesman said.

"To explain, InterGroup is confident that metakaolin, which is produced from kaolin, will form a major component of the decarbonisation strategies adopted by the cement and concrete sector as it seeks to meet its 2030 and 2050 emission reduction targets.

"This is because metakaolin has already been proven to reduce overall emissions of cement and concrete production by up to 40 per cent and requires minimal change in working practices to implement.

"As such, InterGroup expects to see a significant upward shift in overall kaolin demand growth over the coming years."

In addition to the significant potential carbon reduction benefits, he said metakaolin was known to improve concrete's flexibility and strength whilst reducing its permeability.

Kaolin is also gaining traction as an alternative low-cost feedstock in high purity alumina (“HPA”) production. HPA is an essential mineral for the EV battery market, acting as a separator between cathodes and anodes, and for the LED lighting market.

A recent inhouse study considered a two-stage project starting with a 10 ktpa demonstration metakaolin plant followed by a 300 ktpa production plant.

InterGroup said the kaolinite resource already established for its Surprise and Clydesdale areas within the Brumby project would provide sufficient material to feed such an operation for the first 12 years of operation.

Further drilling, exploration and testwork is needed to develop an ore reserve on which to base feasibility studies, detailed development plans and potential production and commercialisation – the Company believing it could be looking at a multi-generational deposit with a possible 100+yr mine life.

The spokesman said the company had been highly encouraged by the offtake discussions it was already having at what was a very early stage of the project’s development.

The company has announced an inferred resource of white kaolinized granite of 7.7 million tonnes in the Clydesdale area. This resource is estimated to contain 2.8 million tonnes of -45µm recoverable kaolinite.

A subsequent assessment by specialist mining and mineral processing advisory firm Stratum Resources points to a deposit of 47Mt kaolinized granite for 18.2Mt kaolin for 5 per cent of identified kaolinized mineralisation area.

Gold potential in NQ tenement package

And an adjacent tenement which forms part of the overall Brumby Project may add some further shine – offering the potential for a significant gold co-mining opportunity. Brandy Creek lies 5km from what InterGroup refers to as the Brumby Line – a highly prospective area of the 20km corridor of gold-bearing quartz veins that runs SE to NW across the 100sq km Brumby property.

InterGroup has submitted a mining application to proceed with gold mining activities at Brandy Creek, where prior exploration and drilling returned impressive grades as high as 47g/t gold.

“Exploration to date at Brandy Creek indicates that the geology is very similar to that at the Brumby Line,” the spokesman said. “We expect the additional mining licence for Brandy to be granted H1 2022.”

In January, InterGroup reported its initial exploration target for the Brumby and Brandy Creek prospects, with a tonnage of between 0.3 Mt and 1 Mt, and a gold grade range of 1.5 g/t -2.5 g/t.

In addition to Brumby, InterGroup is going through the exploration licence application process for another kaolin target – the Appletree project southwest of Childers.

Source: <https://industryqld.com.au/intergroup-mining-project-to-ride-green-construction-wave/>