Cobalt Blue Holdings Limited: Mt Isa City Council Sulphuric Acid Supply Solution MOU

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Sydney, Australia - Cobalt Blue Holdings Ltd. (ASX:COB) (FRA:COH) (OTCMKTS:CBBHF) is pleased to announce the signing of a Memorandum of Understanding (MOU) with the Mount Isa City Council (MICC) to assess solutions to the looming sulphuric acid supply shortage in North West Queensland.

KEY POINTS

- Cobalt Blue Holdings Limited (COB) and Mount Isa City Council (MICC) have announced the signing of a Memorandum of Understanding (MOU) to assess solutions to the looming sulphuric acid supply shortage in North West Queensland.

- This shortage, caused by the imminent closure of Mount Isa Mines' copper smelter, will create a significant deficit in the market and jeopardise a significant proportion of the region's industrial employment base.

- COB has developed and patented a minerals processing technology for treating pyrite and demonstrated the potential economic recovery of elemental sulphur and metals from pyrite deposits.

- This MOU sets out a partnership in which COB will provide advice to MICC on the requirements, challenges and barriers to a potential pyrite tailings re-processing operation to produce sulphuric acid.

- COB has previously demonstrated its proprietary technology at its Broken Hill based demonstration facility with large scale operations over the last 5 years producing around 10 tonnes of high purity elemental sulphur from pyrite feedstocks.

The looming sulphuric acid shortage

The announced 2030 closure of the Glencore Mount Isa copper smelter will create a critical shortfall of sulphuric acid, a vital resource for numerous industries in the region, including the fertiliser, metallurgical, and chemical sectors. This shortage threatens to impact thousands of jobs and hinder economic growth. To mitigate this challenge, COB and MICC have agreed to collaborate on the assessment and feasibility of a potential Mt Isa-centred pyrite tailings re-processing operation to produce sulphuric acid.

COB's ReMine+ technology is poised to play a crucial role in the collaboration. By reprocessing pyrite and other sulphide-rich mine tailings, ReMine+ can recover valuable metals (including gold, cobalt, nickel, and copper) while simultaneously generating either elemental sulphur or sulphuric acid. COB has successfully evaluated the application of ReMine+ to pyrite feedstocks from various regions, including in Queensland and Canada.

A signing ceremony was held at Council Chambers in Mount Isa this morning, Monday, 9 December 2024.

Peta MacRae, Mayor of Mount Isa, said: "This MOU with Cobalt Blue aligns with Council's commitment to a sustainable future for our industries, economy, environment, and communities. It demonstrates our commitment to developing a locally-made solution to the looming sulphuric acid shortage that will otherwise have a huge negative impact on many of our largest industries. Mount Isa already has expertise in the production of sulphuric acid and has existing air monitoring systems in place to ensure community safety. Cobalt Blue's technology solves the issue of dealing with old tailings as well as reinforcing the economics of the supply chain for the whole of Australia. It also reduces the sovereign risk of relying on international sulphuric acid supply."

Joe Kaderavek, CEO of Cobalt Blue, added: "Queensland's North West Minerals Province offers a wealth of opportunity for sustainable mining and resource recovery. Our ReMine+ technology can unlock the value of these resources and produce essential commodities, like sulphuric acid, which is critical across several industries in the region. This MOU underscores the resilience and innovation that prevails in Australian mining communities."

Next steps in the partnership

The next steps include assessing the commercial and operational viability of different technologies,

feedstocks, and outputs.

COB will aim to complete proof of concept testwork within 16 weeks of receipt of sample, with MICC assisting, where possible, to source samples. COB will also advise MICC on the requirements, challenges, and barriers to a potential pyrite tailings reprocessing operation in the region to produce sulphuric acid.

During the assessment process, MICC intends to set aside land upon which to build and operate a pilot-scale plant that would evaluate the amenability of technologies to process pyrite into sulphur and sulphuric acid and create associated business and community benefits. COB will provide advice and detailed information on the construction, power and other consumables required for the plant.

By combining MICC's local knowledge and infrastructure with COB's advanced technology, this collaboration aims to deliver a sustainable and economically viable solution to the sulphuric acid supply challenge in North West Queensland. Developing a commercially viable, low impact solution to acid supply, whilst alleviating long term environmental liabilities and generating critical and other metal revenue through tailings re-processing is in the interest of all stakeholders.

This video summarises COB's the patented process to extract valuable metals and sulphur from mine waste to minimise environmental risks:
https://www.youtube.com/watch?v=jV2LSHHFYw4

The MOU shall remain in force until 31 December 2029 unless terminated earlier by a party. A party has the right to terminate the MOU with written notice.

Cobalt Blue expertise - high purity elemental sulphur

COB has previously designed, built and operated a demonstration facility utilising its proprietary technology. Over the last five years a series of large scale testwork programs have been executed with around 10 tonnes of high purity elemental sulphur produced utilising available pyrite concentrate feedstock from the Broken Hill Cobalt Project. The sulphur was produced via a commercial rotary kiln typically operating at 150-300kg/hr throughput capacity.

Samples from the testwork were then shared with potential customers to gauge the quality of the resulting elemental sulphur, with positive assessments underpinning the viability of the technology.

Elemental sulphur is a clean, low hazardous product used as a precursor to manufacture sulphuric acid, providing industry with significant advantages in handling, storage and transport and allowing sulphuric acid to be produced directly at the customer site driven by local production requirements. COB's technology, focusing on elemental sulphur production, was included as a solution in the "Queensland Sulphuric Acid Study (August 2024)" (Core Resources Ltd) delivered to the Queensland Government for further assessment.

COB's decision to focus on elemental sulphur production, rather than sulphuric acid, for the Broken Hill Cobalt Project was driven by the low local sulphuric acid demand profile. This demand profile is in sharp contrast to that of Queensland's North West Minerals Province, which the 2024 Sulphuric Acid Supply Study estimates to grown from 1.30Mt/year to 2.8-5.0Mt/year in the future. A focus for work under the MOU with MICC will be to demonstrate the flexibility of COB's process for direct production of sulphuric acid.

The benefit of the COB process is that sulphur gas excess to acid requirements can be cooled and prilled as elemental sulphur for safe storage against future acid deficit, ensuring security of supply for the region.

*To view tables and figures, please visit:
https://abnnewswire.net/lnk/F5VD0XX7

About Cobalt Blue Holdings Limited:

Cobalt Blue Holdings Ltd (ASX:COB) (FRA:COH) (OTCMKTS:CBBHF) has a strategic approach that positions us to be among the first wave of new entrants into the allied battery materials supply chain. We are committed to playing a leading role in securing a stable and sustainable future for critical minerals.

Source:
Cobalt Blue Holdings Limited

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