

# Scandium International Issues Update on CMR Development Program with Phoenix Mine

written by Raj Shah | November 8, 2021

November 8, 2021 ([Source](#)) – Scandium International Mining Corp. (TSX:SCY) (“Scandium International” or the “Company”) has now begun work with Phoenix Mine staff on an agreed joint technical program to determine both technical and economic feasibility of a critical metals recovery (“CMR”) project at the mine site. Early work on the development program has now confirmed the presence of significant aluminum content in both the Phoenix Mine copper oxide ore and raffinate. This contained aluminum represents a suitable feedstock for high purity alumina (HPA) product manufacture, and is now anticipated to play a significant role in overall CMR project economics.

## HIGHLIGHTS – HPA INCLUDED AS CMR PRODUCT TARGET

- Aluminum ore grades at Phoenix Mine indicate HPA feedstock suitability.
- HPA is now a key product target in the joint development program.
- An HPA circuit would locate inside the mine gate, and generate a final product.
- The full HPA circuit is covered by a US Patent application, filed by the Company.
- No change to US\$2.7M joint development budget or timetable for HPA addition.

Key details of our Letter of Intent, outlining this joint development program, were previously announced in a joint news release from Nevada Gold Mines (NGM) and Scandium International,

issued on June 28, 2021. That initial June news release did not specifically identify HPA as a CMR project target, alongside other named critical metals targets, but it is now included as a central part of the technical development work program.

The Phoenix Mine is a gold-copper producer owned and operated by Nevada Gold Mines, near Battle Mountain, Nevada. The mine produces a copper/gold concentrate, copper cathode and gold dore. Nevada Gold Mines is operated by Barrick Gold Corporation, and is a joint venture between Barrick (61.5%) and Newmont (38.5%).

**George Putnam, CEO of Scandium International Mining Corp. commented:**

“The specific introduction of HPA into the Phoenix CMR work plan is a very positive development for the overall project. It is an advancement of an attractive product alternative we all knew was in our future, now brought forward in time to meet an attractive HPA market opportunity that exists today. While we do have development work to do, we have a great partner with us, and we believe this focus on HPA will improve the economics and the resilience of the project.”

**DISCUSSION:**

The Company has had a longstanding interest in oxide copper project sources for HPA manufacture. They tend to present aluminum-containing solutions in relatively pure form and at high enough grades to form an advantageous low-cost HPA feedstock. Our project discussions with Phoenix Mine/NGM have always included a possible HPA opportunity, so this is not a new idea, rather one brought forward in timing. In fact, the term critical metals effectively includes HPA, as the US Commerce 35 Critical Metals list (alphabetical) begins with aluminum.

The addition of HPA to the target product list for the Phoenix CMR Project is well accommodated by the existing LOI and development program parameters.

- The partners' development budget of US\$2.7M is unchanged, and still shared 50:50.
- Any HPA project located fully inside the Phoenix Mine site will be shared 50:50, with Phoenix as operator, similar to earlier agreements.
- HPA will likely become the primary pay-metal for the project.
- Economic recovery of available nickel, cobalt and scandium remains a part of the development program work.
- Phoenix CMR product customers will continue to be battery metals customers.
- Phoenix Mine advantages from a CMR project that now includes HPA will remain in place, including improved mine valuations, reserve life extensions, cleaner tailings, and potentially lower reclamation expenses.

The HPA addition is also well supported by two recent patent filings by the Company that are directly relevant to HPA production from mine sources like Phoenix Mine. On May 27, 2021, the Company announced that it had filed a final patent application with the US Patent Office pertaining to the manufacture of high purity alumina products. That final patent application specifically covered aluminum-containing solution feedstocks sourced from oxide copper projects, along with other feedstock sources. Further detail on HPA products, markets, and opportunities can be found in that previous May 2021 news release as well.

#### **ABOUT SCANDIUM INTERNATIONAL MINING CORP.**

The Company is currently pursuing a critical metals recovery opportunity under an LOI with Nevada Gold Mines, specifically at

the Phoenix Mine, where SCY proposes to employ both ion exchange and solvent extraction technology to extract unrecovered critical metals from existing mine process streams. This program represents a fast-track concept to make battery-grade metals products, scandium master alloy product, and other critical metals, from North American sources.

The Company also continues to work on scandium product marketing, as required for its Nyngan Scandium Project, located in NSW, Australia. The Company filed a NI 43-101 technical report in May 2016, titled **“Feasibility Study – Nyngan Scandium Project.”** The project has received all key approvals, including a development consent and a mining lease, necessary to proceed with project construction.

Willem Duyvesteyn, MSc, AIME, CIM, a Director and CTO of the Company, is a qualified person for the purposes of NI 43-101 and has reviewed and approved the technical content of this press release on behalf of the Company.

***For inquiries to Scandium International Mining Corp, please contact:***

Edward Dickinson (CF0)

Tel: (775) 233-7328

George Putnam (CE0)

Tel: (925) 208-1775

Email: [info@scandiummining.com](mailto:info@scandiummining.com)

### **Cautionary Statement on Forward-Looking Information**

*Certain information contained or incorporated by reference in this press release, including any information as to the Company’s strategy, projects, plans or future financial or operating performance, constitutes “forward looking statements”. All statements, other than statements of historical fact, are*

forward-looking statements. The words “pursue”, “anticipate”, “intend”, “partnership”, “opportunity”, “envision”, “potential”, “can”, “will”, “ambition”, “become”, “vision”, “expect”, “could”, “would” and similar expressions identify forward-looking statements. In particular, this press release contains forward-looking statements including, without limitation, with respect to: the Company and its business and the potential for the Company to develop a critical metals recovery project at NGM’s Phoenix mine pursuant to the LOI; the potential economic and environmental benefits of this project for NGM and its applications in transportation and communications; and the potential for the project at the Phoenix mine to demonstrate the technology and economic viability of CMR in the copper business.

Forward-looking statements are necessarily based upon a number of estimates and assumptions including material estimates and assumptions related to the factors that, while considered reasonable by the Company as at the date of this press release in light of management’s experience and perception of current conditions and expected developments, are inherently subject to significant business, economic and competitive uncertainties and contingencies. Known and unknown factors could cause actual results to differ materially from those projected in the forward-looking statements and undue reliance should not be placed on such statements and information. These risks, uncertainties and other factors include, without limitation: risks related to uncertainty in the demand for various critical metals and potentially other metals or products produced using the Company’s proprietary technologies such as HPA, the possibility that results of test work will not fulfill expectations, or not realize the perceived market utilization and potential; risks associated with projects in the early stages of evaluation and for which additional engineering and other analysis is required; diminishing quantities or grades of

*reserves; increased costs, delays, suspensions and technical challenges associated with the construction of capital projects; operating or technical difficulties in connection with mining or development activities, including geotechnical challenges and disruptions in the maintenance or provision of required infrastructure and information technology systems; and failure to comply with environmental and health and safety laws and regulations.*

*Many of these uncertainties and contingencies can affect our actual results and could cause actual results to differ materially from those expressed or implied in any forward-looking statements made by, or on behalf of the Company. Readers are cautioned that forward-looking statements are not guarantees of future performance. All of the forward-looking statements made in this press release are qualified by these cautionary statements. Specific reference is made to the most recent Form 40 F/Annual Information Form of the Company for a more detailed discussion of some of the factors underlying forward-looking statements and the risks that may affect the Company's ability to achieve the expectations set forth in the forward-looking statements contained in this press release. We disclaim any intention or obligation to update or revise any forward-looking statements whether as a result of new information, future events or otherwise, except as required by applicable law.*

**SOURCE:** Scandium International Mining Corp