# DEFENSE METALS

Suite 228-1122 Mainland St. Vancouver, BC V6B 5L1 (DEFN:TSXV) www.defensemetals.com

# Defense Metals starts construction of Hydrometallurgical Pilot Plant with commissioning at SGS Lakefield scheduled for March 2023

News Release - Vancouver, British Columbia - February 21, 2023: Defense Metals Corp. ("Defense Metals" or the "Company"; TSX-V:DEFN / OTCQB:DFMTF / FSE:35D) is pleased to announce that construction of the hydrometallurgical pilot plant has started and commissioning is scheduled to start in the second half of March.

Craig Taylor, CEO of Defense Metals, stated:

"We are excited to enter this important milestone of building and running the hydrometallurgical pilot plant, which is scheduled to be commissioned in late March. Pilot operations will be done in two segments and should be completed by the end of April. A successful pilot plant program will be essential for the completion of the engineering design and economics of the planned prefeasibility study."

Following the successful completion of laboratory flotation and acid bake tests from December 2021 to date, Defense Metals is now ready to build a hydrometallurgical pilot plant. It is important to note that the Independent Preliminary Economic Assessment<sup>1</sup> was based on a different hydrometallurgy flowsheet, the gangue-leach – caustic-crack process (see the Company's March 31, 2022 news release). However, after numerous laboratory tests the Company decided to pursue piloting of the less complex acid bake process, which has, in initial test-work, yielded better recovery rates, is an industry standard, and has the potential for improved economics.

The objective of the pilot plant is to demonstrate at a larger scale, and with continuous operation, the processing of Wicheeda flotation concentrate to produce rare earths using the acid bake flowsheet, to help confirm the quality of the project, and to gather data required for the prefeasibility study.

The pilot plant will be configured to produce a high-purity rare earth precipitate suitable as feed for a separation plant. Samples produced from the pilot plant will also be shared with potential end-users for product development and qualification.

### Methodology

The plant is being built at SGS Lakefield, Ontario and will run in two segments for approximately two weeks. The feed for the plant will total approximately 600 kg of mineral concentrate that was generated from a flotation pilot plant operated on a bulk sample from the Wicheeda deposit.

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### **Qualified Person**

The scientific and technical information contained in this news release, as it relates to the Wicheeda Rare-Earth Project, has been reviewed and approved by John Goode, P. Eng., a metallurgical consultant to the Company, and who is a Qualified Person as defined by National Instrument 43-101 and who has provided the technical information relating to metallurgy in this news release. Kristopher J. Raffle, P.Geo. (BC), a director of the Company, is the Qualified Person as defined in National Instrument 43-101 for the information relating to resources in this news release.

## **About the Wicheeda REE Property**

Defense Metals 100% owned, 4,262-hectare (~10,532-acre) Wicheeda REE property is located approximately 80 km northeast of the city of Prince George, British Columbia; population 77,000. The Wicheeda REE Project is readily accessible by all-weather gravel roads and is near infrastructure, including hydro power transmission lines and gas pipelines. The nearby Canadian National Railway and major highways allow easy access to the port facilities at Prince Rupert, the closest major North American port to Asia.

The 2021 Wicheeda REE Project Preliminary Economic Assessment technical report ("PEA") outlined a robust after-tax net present value (NPV@8%) of \$517 million and an 18% IRR¹. This PEA contemplated an open pit mining operation with a 1.75:1 (waste:mill feed) strip ratio providing a 1.8 Mtpa ("million tonnes per year") mill throughput producing an average of 25,423 tonnes REO annually over a 16 year mine life. A Phase 1 initial pit strip ratio of 0.63:1 (waste:mill feed) would yield rapid access to higher grade surface mineralization in year 1 and payback of \$440 million initial capital within 5 years.

#### **About Defense Metals Corp.**

Defense Metals Corp. is a mineral exploration and development company focused on the acquisition, exploration and development of mineral deposits containing metals and elements commonly used in the electric power markets, defense industry, national security sector and in the production of green energy technologies, such as, rare earths magnets used in wind turbines and in permanent magnet motors for electric vehicles. Defense Metals owns 100% of the Wicheeda Rare Earth Element Deposit located near Prince George, British Columbia, Canada. Defense Metals Corp. trades in Canada under the symbol "DEFN" on the TSX Venture

<sup>1</sup> Independent Preliminary Economic Assessment for the Wicheeda Rare Earth Element Project, British Columbia, Canada, dated January 6, 2022, with an effective date of November 7, 2021, and prepared by SRK Consulting (Canada) Inc. is filed under Defense Metals Corp.'s Issuer Profile on SEDAR (www.sedar.com).

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Exchange, in the United States, under "DFMTF" on the OTCQB and in Germany on the Frankfurt Exchange under "35D".

#### For further information, please contact:

Todd Hanas, Bluesky Corporate Communications Ltd. Vice President, Investor Relations
Tel. (778) 004 8072

Tel: (778) 994 8072

Email: todd@blueskycorp.ca

Neither the TSX Venture Exchange nor its Regulation Services Provider (as that term is defined in the policies of the TSX Venture Exchange) accepts responsibility for the adequacy or accuracy of this news release.

#### Cautionary Statement Regarding "Forward-Looking" Information

This news release contains "forward-looking information or statements" within the meaning of applicable securities laws, which may include, without limitation, statements relating to advancing the Wicheeda REE Project, starting and completing the hydrometallurgical pilot plant including anticipated timeline and expected results and outcomes, the Company's plans for its Wicheeda REE Project, expected results and outcomes, completion of the PFS, the technical, financial and business prospects of the Company, its project and other matters. All statements in this news release, other than statements of historical facts, that address events or developments that the Company expects to occur, are forward-looking statements. Although the Company believes the expectations expressed in such forwardlooking statements are based on reasonable assumptions, such statements are not guarantees of future performance and actual results may differ materially from those in the forward-looking statements. Such statements and information are based on numerous assumptions regarding present and future business strategies and the environment in which the Company will operate in the future, including the price of rare earth elements, the anticipated costs and expenditures, the ability to achieve its goals, that general business and economic conditions will not change in a material adverse manner, that financing will be available if and when needed and on reasonable terms. Such forward-looking information reflects the Company's views with respect to future events and is subject to risks, uncertainties and assumptions, including the risks and uncertainties relating to the interpretation of exploration and metallurgical results, risks related to the inherent uncertainty of exploration and development and cost estimates, the potential for unexpected costs and expenses and those other risks filed under the Company's profile on SEDAR at www.sedar.com. While such estimates and assumptions are considered reasonable by the management of the Company, they are inherently subject to significant business, economic, competitive and regulatory uncertainties and risks. Factors that could cause actual results to differ materially from those in forward looking statements include, but are not limited to, continued availability of capital and financing and general economic, market or business conditions, adverse weather and climate conditions, failure to maintain or obtain all necessary government permits, approvals and authorizations, failure to maintain community acceptance (including First Nations), risks relating to unanticipated operational difficulties (including failure of equipment or processes to operate in accordance with specifications or expectations, cost escalation, unavailability of personnel, materials and equipment, government action or delays in the receipt of government approvals, industrial disturbances or other job action, and unanticipated events related to health, safety and environmental matters), risks relating to inaccurate geological, metallurgical and engineering assumptions, decrease in the price of rare earth elements, the impact of Covid-19 or other viruses and diseases on the Company's ability to operate, an inability to predict and counteract the effects of COVID-19 on the business of the Company, including but not limited to, the effects of COVID-19 on the price of commodities, capital market conditions, restriction on labour and international travel and supply chains, loss of key employees, consultants, or directors, increase in costs, delayed results, litigation, and failure of counterparties



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to perform their contractual obligations. The Company does not undertake to update forward-looking statements or forward-looking information, except as required by law.