Defense Metals Completes Hydrometallurgical Pilot Plant Testing and Initiates Pre-feasibility Study Design Work

News Release - Vancouver, British Columbia – June 6, 2023: Defense Metals Corp. (“Defense Metals” or the “Company”; TSX-V:DEFN / OTCQB:DFMTF / FSE:35D) is pleased to announce the completion of Phase II hydrometallurgical pilot plant test work for its wholly-owned Wicheeda Rare Earth Element (“REE”) Project and commencement of Pre-Feasibility Study (PFS) work.

John Goode, Defense Metals’ metallurgical consultant, noted:

“With the completion of the recent beneficiation testwork and hydrometallurgical testwork and pilot plant operations, we are now ready to provide our engineering consultants, with the metallurgical test data necessary for them to commence the design work that forms a critical part of the Wicheeda project Pre-feasibility Study.”

Defense Metals intends to complete the PFS during H1-2024.

As reported on April 25, 2023, Defense Metals completed a Phase I (5 day) hydrometallurgical pilot plant operation in April 2023 and used data generated during that test work to design an expanded Phase II (10 day) pilot plant operation. Phase II operations were performed by SGS Canada Inc. at Lakefield, Ontario and were completed on May 3, 2023, after processing 370 kg of flotation concentrate produced in an earlier flotation pilot plant operation (see Defense Metals’ news release dated September 23, 2020).

The results of the Phase II pilot plant operation confirm the Phase I results achieving extraction of Pr (praseodymium) and Nd (neodymium) from the acid bake calcine of more than 90%. Significantly, the mixed rare earth product generated by the Phase II operation was markedly higher in purity than that of the Phase I operation because of a change to oxalate precipitation.

Based on the results of the Phase I and Phase II pilot plants Defense Metals believes it now has all metallurgical test data necessary to support the Pre-feasibility Study.

Qualified Person

The scientific and technical information relating to metallurgy that is contained in this news release was provided, reviewed and approved by John Goode, P. Eng., metallurgical consultant to Defense Metals and who is a Qualified Person (“QP”) as defined by National Instrument 43-101.
About the Wicheeda Rare Earth Element Property

Defense Metals 100% owned, 4,262-hectare (~10,532-acre) Wicheeda REE Project is located approximately 80 km northeast of the city of Prince George, British Columbia; population 77,000. The Wicheeda property 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% IRR. This PEA contemplated an open pit mining operation with1.75:1 (waste:mill feed) strip ratio providing a 1.8 Mtpa ("million tonnes per year") mill throughput producing an average of 25,423 tonnes of Rare Earth Oxides ("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 focused on the development of its 100% owned Wicheeda REE Project with a goal of producing Rare Earth Elements that are commonly used in the production of defense and green energy technologies, such as rare earths magnets used in wind turbines and in permanent magnet motors for electric vehicles.

Defense Metals Corp. trades in Canada under the symbol “DEFN” on the TSX Venture Exchange, in the United States, under “DFMTF” on the OTCQB, and in Germany on the Frankfurt Exchange under “35D”.

Defense Metals is a proud member of Discovery Group. For more information please visit: www.discoverygroup.ca.

For further information, please visit www.defensemetals.com or contact:

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1 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).
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 completion of the PFS and the expected timelines, advancing the Wicheeda REE Project, 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 forward-looking 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 to perform their contractual obligations. The Company does not undertake to update forward–looking statements or forward–looking information, except as required by law.