



## **FIRST ENERGY COMMENCES METALLURGICAL TESTWORK FOR AUGUSTUS LITHIUM PROPERTY**

Vancouver, B.C. (February 9, 2022) – **First Energy Metals Ltd.** (CSE: FE, OTCBB: FEMFF) ("**First Energy**" or the "**Company**") is pleased to announce that it has engaged SGS Lakefield located in Ontario, Canada to perform a metallurgical testwork on the Augustus Lithium Property. The goal of the testwork is to develop a preliminary process to treat the spodumene bearing lithium mineralized rock to conceptualize a flowsheet, produce lithium oxide concentrate, and generate a high-purity lithium carbonate product.

The Company has shipped to SGS Lakefield, a 200-kilogram sample which includes a 50/50 mixture of drill core and surface samples with visible spodumene bearing lithium oxide mineralization.

The testwork approach will be to first develop a beneficiation process on the composite samples with the goal of generating a 6% Li<sub>2</sub>O beneficiated concentrate at maximum recovery. Dense media separation (DMS) and flotation will be the main two processes examined. Beneficiated concentrates from this work will be combined for extractive metallurgical evaluation. The main goal of this part of the scope will be to generate a high-purity lithium carbonate product.

The following are the highlights of the metallurgical testwork steps:

- i. The head sample will be submitted for lithium oxide (Li<sub>2</sub>O), total sulphur, whole rock analysis (WRA), a suite which includes SiO<sub>2</sub>, Al<sub>2</sub>O<sub>3</sub>, Fe<sub>2</sub>O<sub>3</sub>, MgO, CaO, Na<sub>2</sub>O, K<sub>2</sub>O, TiO<sub>2</sub>, P<sub>2</sub>O<sub>5</sub>, MnO, Cr<sub>2</sub>O<sub>3</sub>, V<sub>2</sub>O<sub>5</sub>, and loss on ignition (LOI), and a multi-element ICP scan.
- ii. X-ray Diffraction (XRD) mineralogy will be completed on the head sample, while more detailed QEMSCAN mineralogy will be completed on flotation feed (expected to be DMS middlings).
- iii. Grindability Testing – will determine the hardness of the mineralized rock and will include Bond Rod Mill Grindability Test, Bond Ball Mill Grindability Test, and Bond Abrasion Test.
- iv. Beneficiation Testing to produce 6% lithium oxide concentrate – which will include Heavy Liquid Separation Testwork, Dense Media Separation Testing, Stage-Grinding and Desliming for Flotation, Magnetic separation Testing, and Flotation Testing.
- v. Hydrometallurgical testing to produce high purity lithium carbonate – will include Sample Preparation and Characterization, Calcination – Phase Transformation, Acid Roasting of Beta spodumene, Water Leach and Primary Impurity Removal (PIR), Secondary Impurity Removal (SIR), Ca/Mg Removal by Ion Exchange (IX), Lithium Carbonate Precipitation, and Lithium Carbonate Purification.

The program is scheduled to be completed in 28 weeks' time period. As the testwork includes several stages, the Company will keep track of progress on each stage and will release interim results as they are received from the laboratory.

Afzaal Pirzada, P.Geo., Geological Consultant of the Company, and a "Qualified Person" for the purposes of National Instrument 43-101 - *Standards of Disclosure for Mineral Projects*, has reviewed and approved the scientific and technical information contained in this news release.

#### About SGS

SGS is the world's leading testing, inspection and certification company. SGS is recognized as the global benchmark for quality and integrity. With more than 96,000 employees, SGS operates a network of over 2,600 offices and laboratories around the world. SGS is constantly looking beyond customers' and society's expectations in order to deliver market leading services wherever they are needed. Working together to make the world a better, safer place.

ON BEHALF OF THE BOARD OF  
**FIRST ENERGY METALS LTD.**

*"Gurminder Sangha"*

Gurminder Sangha  
CEO & Director

For further information, please contact the Company at: [gsangha@firstenergymetals.com](mailto:gsangha@firstenergymetals.com) or (604) 375-6005

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*The forward-looking information in this news release reflects the current expectations, assumptions and/or beliefs of the Company based on information currently available to the Company. In connection with the forward-looking information contained in this news release, the Company has made assumptions about the Company's ability to obtain required approvals. The Company has also assumed that no significant events occur outside of the Company's normal course of business. Although the Company believes that the assumptions inherent in the forward-looking information are reasonable, forward-looking information is not a guarantee of future performance and accordingly undue reliance should not be put on such information due to the inherent uncertainty therein.*