

PRESS RELEASE

THE ENVIRONMENTAL ASSESSMENT OF CRITICAL ELEMENTS LITHIUM CORPORATION'S ROSE LITHIUM-TANTALUM PROJECT ON ITS WAY TO BEING COMPLETED

January 20, 2021 – Montréal, Québec – Critical Elements Lithium Corporation (the "Corporation" or "Critical Elements") (TSX-V: CRE) (US OTCQX: CRECF) (FSE: F12) is pleased to announce that the Joint Assessment Committee established by the Impact Assessment Agency of Canada and the Cree Nation Government (the "Committee") confirmed on January 14, 2021, having received all information required to allow the Committee to complete the environmental assessment of the Rose Lithium-Tantalum Project ("Rose Lithium-Tantalum Project" or the "Project") and prepare the draft environmental assessment report. This is a significant step in the federal process of obtaining the authorization for the Project, which runs parallel to the provincial process updated in the news release of January 18, 2021. We are grateful to the governmental employees involved in both the federal and provincial permitting processes for their ongoing efforts through this difficult COVID-19 impacted work environment.

The Rose property (where the Rose Lithium-Tantalum Project is proposed) is located in northern Québec's administrative region, on the territory of Eeyou Istchee James Bay. It is located on Category III land, on the Traditional Lands of the Cree Nation of Eastmain.

"The economy of tomorrow will be driven by strategic sectors, like the electric vehicles and batteries sectors. This vision aligns perfectly with our vision to become a large responsible supplier of lithium to the flourishing electric vehicle and energy storage systems industries. We represent perfectly sustainable development with our project that is, not only good for the environment, but that is good for the development of local communities," stated Jean-Sébastien Lavallée, Critical Elements' Chief Executive Officer.

Critical Elements' President, Dr. Steffen Haber, noted that: "Our Rose Project features one of the purest lithium deposits globally. Quebec is strategically well-positioned regarding the critical transitioning energy and e-mobility markets in Europe and the United States and boasts excellent infrastructure and human capital. Our cooperative relationship with the Cree Nation of Eastmain, the Grand Council of the Crees (Eeyou Istchee), and the Cree Nation Government has been formalized through the Pikhuutaau Agreement signed in July 2019. We are excited by the anticipated receipt of Provincial and Federal Phase 1 permitting, detailed engineering and financing for the construction of the Rose mine and concentrator, and the delivery of engineering studies for Phase II (a chemical plant for conversion of Rose spodumene concentrate to high quality lithium hydroxide for use in lithium-ion batteries")."

ABOUT CRITICAL ELEMENTS LITHIUM CORPORATION

Primero Group recently completed the first phase of its Early Contractor Involvement agreement with the Corporation and provided a Guaranteed Maximum Price for the engineering, procurement and construction of the wholly-owned Rose Lithium-Tantalum project on a lump sum turnkey basis that is in line with the Project's feasibility study published November 29, 2017. The project feasibility study is based on price forecasts of US \$750/tonne for chemical-grade lithium concentrate (5% Li2O), US \$1,500/tonne for technical-grade lithium concentrate (6% Li2O) and US \$130/kg for Ta2O5 in tantalite concentrate, and an exchange rate of US \$0.75/CA \$. The internal rate of return ("IRR") for the Rose Lithium-Tantalum project is estimated at 34.9% after tax, and net present value ("NPV") is estimated at CA \$726 million at an 8% discount rate. The

estimated payback period is 2.8 years. The pre-tax IRR for the Rose Lithium-Tantalum Project is estimated at 48.2% and the pre-tax NPV at CA \$1,257 million at an 8% discount rate (see press release dated September 6, 2017). The financial analysis is based on the Indicated mineral resource. An Indicated mineral resource is that part of a mineral resource for which quantity, grade or quality, densities, shape and physical characteristics can be estimated with a level of confidence sufficient to allow the appropriate application of technical and economic parameters, to support mine planning and evaluation of the economic viability of the deposit. The life-of-mine (LOM) plan provides for the extraction of 26.8 million tonnes of ore, 182.4 million tonnes of waste, and 11.0 million tonnes of overburden for a total of 220.2 million tonnes of material. The average stripping ratio is 7.2 tonnes per tonne of ore. The nominal production rate is estimated at 4,600 tonnes per day, with 350 operating days per year. The open pit mining schedule allows for a 17-year mine life. The mine will produce a total of 26.8 million tonnes of ore grading an average of 0.85% Li2O and 133 ppm Ta2O5, including dilution. The mill will process 1.61 million tonnes of ore per year to produce an annual average of 236,532 tonnes of technical and chemical grade spodumene concentrate and 429 tonnes of tantalite concentrate.

FOR MORE INFORMATION:

Jean-Sébastien Lavallée, P.Geo. Chief Executive Officer 819-354-5146 jslavallee@cecorp.ca www.cecorp.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 release.