Critical Elements Awards Primero Group Early Contractor Involvement Contract to Advance Detailed Engineering and Determine a Lump Sum Cost Estimate for the Rose Processing Plant and Associated Infrastructure

written by Raj Shah | March 27, 2019

March 27, 2019 (Source) – **Critical Elements Corporation** (the "Corporation" or "Critical Elements") (TSX-V: CRE) (US OTCQX: CRECF) (FSE: F12) is pleased to announce an additional significant step forward in becoming a significant lithium producer by awarding Primero Group ("Primero") with the Early Contractor Involvement contract (the "ECI") for the Rose Lithium-Tantalum project. Primero Group is an industry leader in the assessment and development of global mineral processing projects.

"*Primero is looking forward to working with the Critical Elements team on the development of the Rose project in Northern Quebec. The award of this work demonstrates the growing capacity and capability of Primero 's North American team and also confirms our reputation as a prominent leader in hard rock Lithium projects*", stated Cameron Henry, managing director of Primero Group.

"We are very excited to award the ECI contract to Primero, an industry leader in the engineering and construction of spodumene processing plants as evidenced by their quality and efficient construction of Tawana Resources' Bald Hill mine as well as their involvement in projects successfully developed by Pilbara Minerals, Galaxy Resources and Altura Mining. With our recent announcement that the Impact Assessment Statement for the Rose Lithium-Tantalum Project has been deemed complete by the Canadian Environmental Assessment Agency and continued interest in our strategic partner process, Critical Elements is on track in its permitting and project development timelines", stated Jean-Sébastien Lavallée, Chairman & CEO of Critical Elements.

A summary of the recommended ECI approach is included below:

- ECI Phase I – Guaranteed Maximum Price ("GMP"):
  - Review and assimilate all of the existing design and data
  - Stress test and optimize the design through reviews, specific value engineering and trade-off studies
  - Reconfirm quantities and pricing
  - Initiate selected engineering deliverables to achieve nominally 25% engineering definition
  - Formulate a GMP for the process plant and associated process supporting infrastructure
  - Submit a proposal and schedule to progress to the next phase
- ECI Phase II – Front End Engineering Design ("FEED"):
  - Progress and finalise a selected set of engineering deliverables to achieve nominally 40% engineering definition
  - Advance long lead and critical equipment packages to "Ready for Award" status
  - Complete the contracting strategy and partnership for construction

        - Optimise and reduce contingency applied to the GMP in order to formulate a Lump Sum (the “LS”) cost estimate for the Engineering, Procurement and Construction (the “EPC”) of the process plant and associated process infrastructure
        - Submit a complete and firm proposal with schedule to Critical Elements for the EPC-LS contract (the Corporation expects the lump sum cost estimated to be in line with the feasibility study (Rose Lithium-Tantalum project feasibility study, WSP, October 20, 2017)
    - Execution of the EPC-LS
    - Operation and maintenance support throughout scope of services

The following includes some of the many benefits to approaching project delivery in this manner:

- ECI Phase I – GMP will allow Critical Elements further input into the final design, as well as confirming adequacy of the design, efficiency and overall de-risking of the project
- Critical Elements will be financially protected due to the final lump sum nature of the EPC-LS for the process plant and associated process infrastructure
- Primero will perform all construction activities associated with the process plant and infrastructure, thereby reducing time spent negotiating with subcontractors
- Reduction of interfaces, associated Extension of Time and variations resulting from multiple subcontractors (eg. concrete, structural, mechanical, piping, electrical and instrumentation)
- Reduction in subcontractor mark-ups

- Smooth transition to the operations phase, should Primero be chosen to perform such services
- Reduction in upfront capital associated with early value engineering and trade-offs within ECI Phase I – GMP and ECI Phase II – FEED
- Common safety systems across the site

Jean-Sebastien Lavallée (OGQ #773), geologist, shareholder, Chairman & CEO of the Corporation and a Qualified Person under NI 43-101, has reviewed and approved the technical content of this release.

About Critical Elements Corporation

The Corporation recently released a feasibility study for Critical Elements' wholly-owned Rose Lithium Tantalum project (Rose Lithium-Tantalum project feasibility study, WSP, October 20, 2017), which is based on price forecasts of US $750/tonne for chemical-grade lithium concentrate (5% Li_2O), US $1,500/tonne for technical-grade lithium concentrate (6% Li_2O) and US $130/kg for Ta_2O_5 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% Li_2O and 133 ppm Ta_2O_5, 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.

About Primero Group

Primero provides engineering design, construction and operational services to the minerals, energy and infrastructure sectors. Primero has specialist expertise in project implementation and delivery with a complementary service offering comprising civil, structural, mechanical and electrical solutions. Primero provides these services to a diverse client base, ranging from mid-sized companies through to international mining and energy houses.

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