



PRESS RELEASE

CRITICAL ELEMENTS STARTS FEASIBILITY STUDY AND APPOINTS PAUL BONNEVILLE AS PROJECT MANAGER

JANUARY 17, 2012 – MONTREAL, QUEBEC – **Critical Elements Corporation** (TSX.V: CRE) (US OTCQX: CRECF) (FSE: F12) is pleased to announce that based on the robust PEA published December 21, the Company has decided to bypass prefeasibility and start the feasibility study immediately. The Company is presently in the tendering process for the various aspects of the feasibility study.

Critical Elements Corporation has appointed Paul Bonneville, mining engineer, as the project manager. Mr. Bonneville will be responsible for overseeing the Critical Elements Rose Deposit feasibility study and the subsequent construction and development of the project.

Paul Bonneville

Paul Bonneville has over 30 years of experience in the mining industry in Canada. A Mining Engineering graduate from Queen's University, he was Vice President Operations for Scorpio Mining and Vice President Mines for Cadiscor Resources. He worked for Dumas Contracting as Project Manager at the Lapa and Goldex shaft projects and for Ross-Finlay Ltd., where he held a range of positions, including Project Manager at the Bell-Allard shaft project and the Silidor project, and at Pan American Silver Corp. Mr. Bonneville has also managed a number of overseas operations.

"With his many years of experience, Paul Bonneville add solid mine management expertise and a broad set of mining contacts to Critical Elements Corporation," said Jean-Sébastien Lavallée, Company President and CEO. "His mining industry experience will contribute greatly the Company's growth."

The Board of Directors has granted Mr. Bonneville 200,000 stock options at a price of \$0.15 per share for a five-year period.

ABOUT CRITICAL ELEMENTS CORPORATION

Critical Elements is actively developing its 100%-owned Rose lithium-tantalum flagship project located in Quebec.

A recent financial analysis of the Rose Project based on price forecasts of US\$260/kg (\$118/lb) for Ta₂O₅ contained in a tantalite concentrate and US\$6,000/t for lithium carbonate (Li₂CO₃) show an after-tax Internal Rate of Return (IRR) of an estimated 25% for the Rose Project, with an estimated Net Present Value (NPV) of CA\$279 million at an 8% discount rate. The payback period is estimated at 4.1 years. The pre-tax IRR is estimated at 33% and the NPV at \$488 million at a discount rate of 8%. (Mineral resources that are not mineral reserves do not have demonstrated economic viability).

The project hosts a current NI 43-101-compliant **Indicated resource of 26.5 million tonnes of 1.30% Li₂O Eq. or 0.98% Li₂O and 163 ppm Ta₂O₅ and an Inferred resource of 10.7 million tonnes of 1.14% Li₂O Eq. or 0.86% Li₂O and 145 ppm Ta₂O₅.**

Critical Elements has commissioned Genivar to complete an environmental impact study of Rose deposit and Acme Metallurgical Ltd. of Vancouver is carrying out project metallurgy.

Critical Elements' portfolio also includes rare-earth and tantalum-niobium projects in the Rocky Mountains of British Columbia and in Quebec, as well as a 50% interest in the Croinor project, which is located in Quebec and hosts a current NI 43-101-compliant measured and indicated resource of 814,228 tonnes at 9.11 g/t Au, for 238,414 ounces of gold at a 5 g/t cut-off.

Jean-Sébastien Lavallée (OGQ #773), geologist, shareholder and president and chief executive officer of the Company and a Qualified Person under NI 43-101, has reviewed and approved the technical content of this release.

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