

OTCQB: REEMF
October 18, 2022
Ref: 03-2022**Rare Element Resources announces appointment of Brent Berg
as President and Chief Executive Officer***Randall J. Scott retiring after ten years as CEO*

October 18, 2022 – Littleton, Colorado – Rare Element Resources Ltd. (the “Company” or “RER”) (OTCQB: REEMF) is pleased to announce the appointment of Brent Berg as its President and Chief Executive Officer as Randall Scott retires.

Mr. Berg is a highly qualified mining and mineral processing professional with over 25 years’ experience in the minerals industry, including 16 years in mine management roles and over 11 years working for in-situ recovery operations. His experience includes over 21 years at Cameco Corporation in various roles, including as President of Cameco Resources, where he was responsible for oversight of the company’s operations in Wyoming and Nebraska. Most recently, Mr. Berg was the General Manager of Florence Copper Inc. where he was responsible for leading the team in the successful completion of a production test facility for in-situ copper recovery. Prior to that, he served as the Vice President of Sustainability, Health & Safety for Excelsior Mining Corp. Mr. Berg is a Professional Engineer with a B.A.Sc. in Regional Environmental Systems Engineering from the University of Regina and an MBA from the University of Regina. Mr. Berg will commence his role with the Company effective November 1, 2022.

“Brent is a proven mining professional with extensive experience in the resource sector, including many years developing and operating mining projects in the great state of Wyoming,” stated Gerald Grandey, Chairman of the Board of Directors of the Company. “Following a thorough and rigorous process led by the Board’s Executive Search Committee, we unanimously selected Brent to lead the Company through the upcoming rare earth processing and separation demonstration project and beyond.”

Mr. Grandey added, “The Board would like to especially thank Randall Scott for his long-standing and steadfast leadership of the Company since December 2011, not only as our President and Chief Executive Officer, but also as a valued member of the Board of Directors. Our succession planning was a thoughtful and collaborative process, and we appreciate Randy’s commitment to the Company during the transition that will occur over the month of November. Randy is leaving a solid legacy and foundation for the Company. We wish him the very best in his retirement.”

The Company, along with its strategic partner, General Atomics, an affiliate of the Company’s largest and majority shareholder, Synchron, continues to progress its rare earth processing and demonstration project located in Upton, Wyoming, with planned completion of engineering and design by the end of 2022 and construction commencing in the summer of 2023. Permitting,

licensing, and early procurement of long lead-time equipment are underway. The planned demonstration plant will utilize the Company's proprietary technology and is expected to produce commercial-grade neodymium/praseodymium (Nd/Pr) rare earth high-purity oxide that is used in producing high-strength permanent magnets. These high-strength permanent magnets are a key component in the manufacture of electric vehicles and wind turbines, among other technology uses.

Synchron and General Atomics are privately held companies engaged in the development and production of advanced technology products and systems for the energy and defense sectors. General Atomics is an affiliate of Synchron, the Company's majority shareholder.

Rare Element Resources Ltd. is a publicly traded, strategic materials company focused on delivering rare earth products for technology, energy and defense applications by advancing the Bear Lodge Critical Rare Earth Project in northeast Wyoming. Bear Lodge is a significant mineralized district containing many of the less common, more valuable, critical rare earths that are essential for high-strength permanent magnets, electronics, fiber optics, laser systems for medical technology and defense, as well as technologies like electric vehicles, solar panels and wind turbines.

Contact

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Forward-Looking Statements

This news release contains forward-looking statements within the meaning of securities legislation in the United States and forward-looking information within the meaning of securities legislation in Canada (collectively, "forward-looking statements"). Except for statements of historical fact, certain information contained herein constitutes forward-looking statements. Forward-looking statements are usually identified by our use of certain terminology, including "will," "believes," "may," "expects," "should," "seeks," "anticipates," "plans," "has potential to," or "intends" (including negative and grammatical variations thereof), or by discussions of strategy or intentions. Such forward-looking statements include statements regarding the commencement of Mr. Berg's role as the Company's President and Chief Executive Officer, the rare earth processing and separation demonstration plant, the plans and timing for the engineering, design, permitting, licensing, and construction, of the plant, the expected production from the plant, and the planned incorporation of the Company's proprietary technology. Factors that could cause actual results to differ materially include, but are not limited to, the ability to obtain demonstration plant licensing and permits, inflation and supply chain issues, successful further permitting activities for the Bear Lodge Project, the availability of sufficient capital for the future development and operations of the Company, and other matters discussed under the caption "Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, and our other periodic and current reports filed with the SEC and available on www.sec.gov and with the Canadian securities commissions available on www.sedar.com. There can be no assurance that future developments affecting the Company will be those anticipated by management. Please refer to the discussion of these and other uncertainties and risk factors set out in our filings made from time to time with the SEC and the Canadian regulators, including, without limitation, our reports on Form 10-K and Form 10-Q. Any forward-looking statement made by us in this news release is based only on information currently available to us and speaks only as of the date on which it is made. While we may elect to update our forward-looking statements at any time, we undertake no obligation to publicly update any forward-looking statement, whether written or oral, that may be made from time to time, whether as a result of new information, future developments or otherwise.