



UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549

DIVISION OF  
CORPORATION FINANCE

June 28, 2012

Via E-mail

Mr. David Suleski  
Chief Financial Officer  
Rare Element Resources Ltd.  
225 Union Blvd, Suite 250  
Lakewood, CO 80228

**Re: Rare Element Resources Ltd.  
Form 10-K for Fiscal Year Ended June 30, 2011  
Filed September 28, 2011  
Form 10-Q for Fiscal Quarter Ended March 31, 2012  
Filed May 10, 2012  
File No. 001-34852**

Dear Mr. Suleski:

We have reviewed your filings and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for Fiscal Year Ended June 30, 2011

Report of Independent Registered Chartered Accountants, page 64

1. Please confirm that in future filings and amendments you will include an audit report, or combination of audit reports, that opines on all periods presented, including the cumulative period from June 3, 1999 (beginning inception of exploration stage) to the current fiscal year-end. Please also ensure the auditors provide a currently dated consent in connection with their audit reports, as appropriate.

Consolidated Statements of Operations and Comprehensive Loss, page 67

2. We note that your stock-based compensation expense is presented as a separate line item in your statement of operations. Please confirm you will modify your presentation in future filings and amendments to present stock-based compensation in the same line or lines as cash compensation paid to the same employees, or tell us why you believe your current presentation is appropriate.

Consolidated Statements of Stockholders' Equity, page 69

3. We note you have not presented a statement of shareholders' equity for the fiscal year ended June 30, 2009. Please ensure your future filings and amendments include a statement of shareholders' equity for all periods required to be presented by Rule 3-04 of Regulation S-X.

Exploration and development costs, page 71

4. We note you disclose that further exploration costs related to proven and probable reserves will be capitalized. It does not appear to us that exploration costs, regardless of the existence of reserves, provide sufficient certainty of future benefits and would qualify for capitalization under US GAAP. Please confirm you will modify your accounting policy in future filings or tell us why you believe no modification is necessary.

Stock-based compensation, page 72

5. We note you recognize share-based payments to non-employees based on the fair value of the stock options issued. Please tell us how you have considered FASB ASC 505-50-30-6, which requires measurement of share-based payments to non-employees be measured at either the value of goods or services received or the fair value of the equity instruments issued, whichever is more reliable.

Form 10-Q for Fiscal Quarter Ended March 31, 2012

Mineral Reserves and Resources page 17

6. We note your statement that for the mineral reserves at March 31, 2012 there is no difference between the mineral reserves disclosed under NI 43-101 and those disclosed under Industry Guide 7. Prior to declaring a reserve under Industry Guide 7, the United States Securities and Exchange Commission has generally required the completion of a final, bankable feasibility study using the 3-year average commodity price and that a company has demonstrated that the mineral property will receive its governmental permits; including the submission of the primary environmental document with the appropriate governmental authorities. Please explain how you have made the

determination that your National Instrument 43-101 pre-feasibility study meets these requirements.

7. Please provide to us the information that you used to determine your 3-year average pricing. This information should include the specific data used to calculate your 3-year average price including monthly prices, source, and location. In addition, please provide a comparison of the grade distribution of your planned rare earth concentrate versus the grade distribution and pricing of referenced concentrates.

#### Closing Comments

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact James Giugliano at (202) 551-3319 or Jamie Kessel at (202) 551-3727, if you have questions regarding comments on the financial statements and related matters. You may contact John Coleman, Mining Engineer, at (202) 551-3610 with questions about engineering comments. Please contact me at (202) 551-3871 with any other questions.

Sincerely,

/s/Tia L. Jenkins

Tia L. Jenkins  
Senior Assistant Chief Accountant  
Office of Beverages, Apparel, and  
Mining