

RARE ELEMENT RESOURCES LTD  
Form 6-K  
January 12, 2011

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**  
**Washington, D.C. 20549**

**FORM 6-K**

**REPORT OF FOREIGN ISSUER PURSUANT TO RULE 13a-16 AND 15d-16**  
**UNDER THE SECURITIES EXCHANGE ACT OF 1934**

For the month of:

January 2011

SEC File No. 000-53834

**RARE ELEMENT RESOURCES LTD.**

(Exact name of registrant as specified in its charter)

325 Howe St., #410, Vancouver, British Columbia, Canada V6C 1Z7

(Address of principal executive offices)

1. Exhibit 99.1 - Press Release dated January 10, 2011

Indicate by check mark whether the Registrant files annual reports under cover of Form 20-F or Form 40-F

Form 20-F  Form 40-F

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1):

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(7):

Indicate by check mark whether the Registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under Securities Exchange Act of 1934.

Yes  No

**SIGNATURE**

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this Form 6-K to be signed on its behalf by the undersigned, thereunto duly authorized.

Rare Element Resources Ltd. -- SEC File No. 000-53834

(Registrant)

Date: January 12, 2010

/s/ Winnie Wong  
Winnie Wong, Corporate Secretary