



DIVISION OF
CORPORATION FINANCE

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

April 27, 2012

Via E-mail

Duane Nelson
Chief Executive Officer
Silvermex Resources Inc.
Suite 1210, 885 West Georgia Street
Vancouver, British Columbia
Canada V6C 3G1

**Re: Silvermex Resources Inc.
Registration Statement on Form 40-FR12G
Filed April 2, 2012
File No. 000-50116**

Dear Mr. Nelson:

We have reviewed your filing 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 amending your filings, 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 or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filings and the information you provide in response to these comments, we may have additional comments.

General

1. Please note that your Form 40-F goes effective by lapse of time 60 days after the date filed pursuant to Section 12(g)(1) of the Securities Exchange Act of 1934. At that time, you will be subject to the reporting requirements under Section 13(a) of the Securities Exchange Act of 1934. In addition, we will continue to review your filing until all of our comments have been addressed.

2. Since you appear to qualify as an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act, please disclose in the introductory notes to your Annual Information Form that you are an emerging growth company. In addition, revise your registration statement elsewhere to describe how and when a company may lose emerging growth company status and provide a brief description of the exemption from Section 404(b) of the Sarbanes-Oxley Act of 2002.
3. We note the April 3, 2012 press release on your website, “First Majestic Announces Friendly Acquisition Of Silvermex Resources.” Please update your disclosure regarding the acquisition by First Majestic. Please also address if and how it may affect your future filings.

Mine Operations - Exhibit 99.1, page 4

4. We note your 2011 production and cannot reconcile the production grades with your materials produced for the year 2011. The weighted-average grade of your quarterly production does not agree with your annual average grade. Please modify your filing and correct these production estimates.

History - Exhibit 99.4, page 20

5. Please insert a small-scale map showing the location and access to each material property, as required by Instruction 3(b) to Item 102 of Regulation S-K. Please note the EDGAR program now accepts Adobe PDF files and digital maps, so please include these maps in any amendments that are uploaded to EDGAR. It is relatively easy to include automatic links at the appropriate locations within the document to GIF or JPEG files, which will allow figures and diagrams to appear in the right location when the document is viewed on the Internet. For more information, please consult the EDGAR manual, and if additional assistance is required, please call Filer Support at (202) 551-3600 for Post-Acceptance Filing Issues or (202) 551-8900 for Pre-Acceptance Filing Issues. We believe the guidance in Instruction 3(b) of Rule 102 of Regulation S-K would generally require maps and drawings to comply with the following features:
 - A legend or explanation showing, by means of pattern or symbol, every pattern or symbol used on the map or drawing.
 - A graphical bar scale should be included. Additional representations of scale such as "one inch equals one mile" may be utilized provided the original scale of the map has not been altered.
 - A north arrow.
 - An index map showing where the property is situated in relationship to the state or province, etc., in which it was located.

- A title of the map or drawing, and the date on which it was drawn.
- In the event interpretive data is submitted in conjunction with any map, the identity of the geologist or engineer that prepared such data.

Any drawing should be simple enough or of sufficiently large scale to clearly show all features on the drawing.

Resources and Reserves – Exhibit 99.4, page 26

6. We note your reserve estimates were established as of December 16, 2009. Please update your reserves to reflect deductions due to your production for the last two years and modify your reserve estimate to coincide with your fiscal year ending December 31, 2011

Resources and Reserves – Exhibit 99.4, page 28

7. We note that mineral resources must have reasonable prospects for economic extraction. For both operating mines and undeveloped properties this means that any reportable resource estimates must be delimited using an economically based cutoff to segregate resources from just mineralization or a mineral inventory. Based on the information provided by your table titled as the “Creston Resource by Class and Cut-off” your cutoffs mostly provide an estimate of geologically available mineralization and do not appear to be related to economic conditions at your property. Please remove all resource estimates which are not based on an economically derived cutoff. If you choose to provide us with revised estimates of resources based on an economic cutoff, supplementally provide backup calculations and information sufficient to support your conclusion.

Material Contracts– Exhibit 99.4, page 45

8. Supplementally provide the complete terms and conditions for the smelting agreement between your company and the Compania Minera Pena de Bernal, S.A. de C.V.

Exhibit 99.5 Audited Annual Financial Statements for the years ended December 31, 2011 and 2010

Note 3 Significant accounting policies, page 6

9. Please clarify your accounting policy for stripping costs and whether you have adopted IFRIC 20.
10. We note that you have operations in Mexico. Please tell us if you are required to provide benefits to your employees under Mexican labor laws such as severance or profit sharing benefits. If you are required to provide these benefits to your employees in Mexico,

please tell us how account for them under IFRS and the extent to which it differed from how you accounted for them under your previous GAAP.

(v) Revenue, page 13

11. Please expand your accounting policy to describe how you account for sales arrangements when that sales price is provisional. Additionally explain the aspects of the transaction that are subject to change and how you and when you account for differences between the provisional and final prices. In additional clarify the length of time between the provisional and final sale and whether or not changes in the provisional sales values are made prior to the final sale.

Note 30. Transition to International Financial Reporting Standards, page 35

12. Revise to provide a reconciliation of equity in accordance with paragraph 24 of IFRS 1.
13. We note you have reconciled the entire balance sheet to comply with the reconciliation requirement in paragraph 24 of IFRS 1. We further note certain line items in your financial statements were impacted by more than one adjustment. For example, your property, plant and equipment adjustment of \$20,513,378 includes adjustments for errors found in IFRS transition as well as adjustments made for componentization, accounting for exploration and evaluation costs and a change in foreign currency. Please revise disclosure in your notes to provide more granularity of the adjustments so that a reader can see how you arrived at your total adjustment amounts to the extent a financial statement line item is impacted by more than one transition adjustment.

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.

Duane Nelson
Silvermex Resources Inc.
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You may contact Joanna Lam, Staff Accountant, at (202) 551-3476, or Melissa Rocha, Accounting Branch Chief, at (202) 551-3854, if you have questions regarding comments on the financial statements and related matters. Please contact George K. Schuler, Mining Engineer, at (202) 551-3718, if you have questions regarding the mining engineering comments. Please contact Ronald E. Alper at (202) 551-3329, Staff Attorney, or James Lopez, Legal Branch Chief, at (202) 551-3536 with any other questions.

Sincerely,

/s/ John Reynolds

John Reynolds
Assistant Director

cc: Herbert I. Ono, Esq.