



DIVISION OF
CORPORATION FINANCE

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

October 18, 2013

Via E-mail

David E. Whittle
Chief Financial Officer
Alexco Resource Corp.
Suite 1150-200 Granville Street
Vancouver, British Columbia
Canada V6C 1S4

**Re: Alexco Resource Corp.
Form 40-F for the Year Ended December 31, 2012
Filed March 28, 2013
File No. 001-33621**

Dear Mr. Whittle:

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 filing, 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 filing and the information you provide in response to these comments, we may have additional comments.

Form 40-F for the Year Ended December 31, 2012

Exhibit 99.2 Consolidated Financial Statements

Notes to Consolidated Financial Statements

Note 3. Summary of Significant Accounting Policies
(e) Mineral Properties

1. We note your disclosure that depletion of mineral production properties is calculated on the units-of-production basis, using estimated mineable resources.” To enhance our understanding of your accounting policy, please:

- Please explain to us how you define mineable resources (i.e., whether it includes indicated and inferred resources);
- Tell us the percentage and amount of measured, indicated and inferred resources that you include in your depletion calculation;
- Explain to us why and how you determined that your estimates of resources, such as inferred mineral resources, used to calculate your units of production depreciation are reliable, as contemplated by paragraph 4.41 of the Conceptual Framework for Financial Reporting issued by the International Accounting Standards Board;
- Tell us whether you include the future capital expenditures necessary to access the mineral resources in your depletion calculation; and
- Provide us with the amount of depletion expense for each period presented if (i) only proven and probable reserves is included in the depreciable base (i.e., excluding all measured and indicated and all inferred mineral resources from the depreciable base), and (ii) only proven and probable reserves plus the measured and indicated resources expected to be converted to mineral reserves (i.e., excluding all inferred mineral resources from the depreciable base).

(h) Silver Streaming Interest

2. We note your accounting policy that the advance payments received under the silver streaming interest have been deferred and recognized on a units-of-production-sold basis as a component of the cost of sales for that production. You also recognize within cost of sales each period the actual or estimated market price of the silver ounces delivered or deliverable under the streaming interest on account of silver production sold that period, less the related per-ounce cash amount received or to be received from Silver Wheaton on such delivery. Please address the following issues:

- Please explain to us as silver is delivered each period how your recognition of a proportionate portion of the advance payments received under the silver streaming interest as cost of sales vs. revenue is appropriate and provide us the specific accounting literature that supports your accounting;
- Show us how your disclosures in Note 16 and Note 19 are consistent with your accounting policy. In this regard, specifically address how the two transactions recorded in cost of sales in Note 19 regarding silver streaming interest complies with your accounting policy; explain where the corresponding side is recorded and how it is appropriate; and
- Tell us how you estimate the total ounces of silver that remain to be delivered under the streaming contract.

(j) Revenue Recognition

3. We note you generate revenue from sale of silver, lead and zinc. Provide us and disclose in future filings how you account for and classify the income from silver, lead and zinc. Your disclosure should include how you account for each of these products (i.e., by-

product accounting or co-product accounting etc.). In addition, please tell us and include in your future management's discussion and analysis (a) whether you expect historic trends of your non-silver revenue to continue, and (b) identify and discuss the factors that have an impact on the amount of revenue from non- silver sales (e.g., commodity prices, etc.).

Note 12. Mineral Properties

4. We note your disclosure of your mineral properties. To enhance reader's understanding of your mineral properties and related disclosures, please address the following issues:
- We note that you reported expenditures incurred as additions to your mineral property costs. Provide us and disclose in future filing the nature of the expenditures that you recorded as assets i.e. exploration, development costs etc.; and
 - Provide us and disclose in future filings, the exploration and evaluation assets recorded as a separate class of assets and provide the disclosures required by IFRS 6, paragraph 25.

26. Segmented Information.

5. We note you generate revenue from sale of silver, lead and zinc. To enhance investors understanding of your business please provide us with and confirm that you will include in future filings amount of revenues derived from Silver, Lead and Zinc for each of the periods presented.

Exhibit 99.3 Management's Discussion and Analysis

Non-IFRS Measure – Cash Costs of Production Per Ounce of Payable Silver

6. We note you present the non-IFRS measure cash cost of production per ounce of payable silver computed by deducting by-product lead and zinc sales. To enhance the disclosures regarding the non-IFRS measure, please provide us and confirm that in future filings you will revise to provide the following:
- Disclose cash cost both before and net of by-product revenue;
 - Make the titles used for the non-IFRS measures more transparent, such as cash costs before by-product revenue and cash costs net of by-product revenue.;
 - Present the individual by-product revenue attributable to lead and zinc on both a dollar and per ounce basis and reconcile these amounts to total by-product revenue;
 - Disclose the reasons why lead and zinc are considered by-products; and
 - Explain why presenting a cost measure net of revenue is useful to management and to investors. In addition, explain what the measure is intended to depict.

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

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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 Suying Li at (202) 551-3335 or Raj Rajan at (202) 551-3388 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

/s/ Rufus Decker for

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