



DIVISION OF
CORPORATION FINANCE

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

September 27, 2017

Mail Stop 4631

Via E-Mail

BioAmber Inc.
Mr. Mario Settino
Chief Financial Officer
1250 Rene Levesque West, Suite 4310
Montreal, Quebec, Canada H3B 4W8

**Re: BioAmber Inc.
Form 10-K for Fiscal Year Ended December 31, 2016
Filed March 16, 2017
Form 10-Q for the Fiscal Quarter Ended June 30, 2017
Filed August 4, 2017
Form 8-K
Filed August 3, 2017
File No. 1-35905**

Dear Mr. Settino:

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 these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended December 31, 2016

Long-lived asset impairment, page 49

1. You indicate that at the end of each reporting period you assess the fair value of your long-lived assets in accordance with ASC 360. Please tell us whether there was objective evidence of events or changes in business conditions that suggested your long-lived assets may be impaired as of December 31, 2016. In regard to your analysis, please tell us how you considered Deloitte LLP's audit report covering your 2016 financial statements which raised "substantial doubt" about your "ability to continue as a going concern." Refer to ASC 360-10-35-21.

Results of Operations, page 51

2. Throughout MD&A, you identify various factors as being responsible for changes in your results of operations between periods, including changes in volume, decreases in pricing and Sarnia facility ramp-up costs. Please revise your disclosures to quantify the impact of each material factor. Refer to Item 303(a)(3) of Regulation S-K and SEC Release No. 33-8350. Please address this comment as it relates to your quarterly reports.
3. Please disclose your manufacturing plant capacity and utilization for each period presented and discuss how changes in these metrics impacted your results of operations between periods. Refer to Section 501.12.b.1 of the Financial Reporting Codification. Please address this comment as it relates to your quarterly reports.

Form 10-Q for the Fiscal Quarter ended June 30, 2017

4. We note that the difference between your market capitalization and net asset value continued to decrease through June 30, 2017 and, although sales were higher than the same quarter in the prior year, there was a decrease in the average selling price of your products. We also note your disclosure regarding the potential end of U.S. government policies that would help pay for your planned \$500M facility to produce 200K metric tons/year of bio-succinic acid. Please address whether these factors represented objective evidence of events or changes in business conditions that indicated your long lived assets may be impaired as of June 30, 2017. If so, please provide us with the details of your interim impairment assessment for your property, plant, and equipment. Please provide a robust discussion of your critical estimates that focuses on the assumptions and uncertainties that underlie your impairment analysis. Please quantify, where material, and provide an analysis of the impact of critical accounting estimates on your financial position and results of operations for the periods presented. If reasonably likely changes in inputs to estimates would have a material effect on your financial condition or results of operations, please quantify and disclose the impact that could result given the range of reasonable outcomes. If you did not perform an interim impairment assessment, please explain why no such assessment was necessary. Refer to ASC 360-10-35-21 as well as SEC Release No. 33-8350.

Item 1.01 Form 8-K dated August 1, 2017

5. We note that you entered into a Share Purchase Agreement (the “Share Purchase Agreement”) pursuant to which you acquired Mitsui’s entire 38.9% interest in the BioAmber Sarnia joint venture and Mitsui was released from its obligations and liabilities under the joint venture arrangement. We have the following comments:
 - We note that although the joint venture arrangement contained a put option that would have required BioAmber to purchase Mitsui’s interest for a purchase price of

50% of Mitsui's equity in the joint venture, the purchase price paid by BioAmber for Mitsui's 38.9% interest was CAD \$1.0. We also note your second quarter 2017 earnings transcript stated this arrangement "...allowed Mitsui to achieve its corporate objectives". Please explain this statement and specifically address why Mitsui would invest an additional \$17.7 million in BioAmber Sarnia during 2016 and then forgo its right to exercise the put option valued at \$27.1 million as of June 30, 2017; and

- Please address the current status of your EDC Loan Agreement and SJIF Loan Agreement, including whether or not it was probable that Mitsui would have had to make payments under their guarantees. In this regard, we note that as further consideration for Mitsui's sale of its interest in BioAmber Sarnia, BioAmber and BioAmber Sarnia agreed to indemnify Mitsui for any payments made by Mitsui pursuant to its guarantee of BioAmber Sarnia's obligations under these loans.

We remind you that the company and its management are responsible for the accuracy and adequacy of their disclosures, notwithstanding any review, comments, action or absence of action by the staff.

You may contact Tracey McKoy, Staff Accountant, at (202) 551-3772 or, in her absence Jeanne Baker, Assistant Chief Accountant, at (202) 551- 3691 or, the undersigned Accounting Branch Chief at (202) 551-3355 with any questions. Please contact Sherry Haywood, Staff Attorney at (202) 551-3345 or, Asia Timmons-Pierce, Staff Attorney, at (202) 551-3754 with any other questions.

Sincerely,

/s/ Terence O'Brien

Terence O'Brien
Accounting Branch Chief
Office of Manufacturing and
Construction