



DIVISION OF
CORPORATION FINANCE

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

January 5, 2012

Via E-mail

Jean Francois-Huc
President and Chief Executive Officer
BioAmber Inc.
1250 Rene Levesque West, Suite 4110
Montreal, Quebec, Canada H3B 4W8

**Re: BioAmber Inc.
Amendment No. 1 to Registration Statement on Form S-1
Filed December 22, 2011
File No. 333-177917**

Dear Mr. Huc:

We have reviewed your response letter and the above-referenced filing, and have the following comments.

General

1. We note that in response to a number of our prior comments you state that you intend to file additional agreements as exhibits to subsequent pre-effective amendments. Please note that we will need adequate time to review these agreements prior to effectiveness.

Prospectus Summary, page 1

2. We have reviewed your response to prior comment nine from our letter dated December 9, 2011. We note that you anticipate recording revenue from the sales of your products beyond sales of samples incidental to your research and development efforts and that you will reevaluate your disclosure at that time. Please note that we will not be able to complete our evaluation of your response until you determine whether you will revise your disclosure, and provide us with such revised disclosure. Further, we note that even when you begin recording revenue from the sales of your products, we believe that the disclosure regarding your sales should specify the scope of such sales, including, but not limited to, whether these sales are one-time sales or are pursuant to supply agreements with customers.
3. We note your revised disclosure in response to prior comment 10 of our letter dated December 9, 2011. However, we note that pursuant to the exclusive supply agreement, Mitsubishi Chemical is not obligated to purchase the bio-succinic acid that is subject to this agreement. Accordingly, please revise your disclosure throughout your prospectus to make clear that none of the 84,000 tons of bio-succinic acid contemplated by your supply

agreements may actually be purchased. Further, please disclose the total amount of bio-succinic acid that Mistubishi Chemical has agreed to purchase so that investors may understand the portion of the 84,000 tons that is allocated to Mitsubishi Chemical.

Risk Factors, page 12

We cannot assure you that we will be able to meet the product specification requirements of our customers . . . , page 20

4. We have reviewed your response to comment 15 of our letter dated December 9, 2011. Please note, as specified in our comment above, we will not be able to complete our evaluation of your response until you determine whether you will revise your disclosure and supply us with such revised disclosure.

We are currently dependent on a single manufacturing facility . . . , page 17

A significant decline in the price of petroleum and petroleum-based succinic acid . . . , page 20

5. We note your response to comment 16 of our letter dated December 9, 2011, and your statement that you do not expect to continue producing bio-succinic acid at your facility in France after your planned facility in Ontario is operational. However, we further note that you do not expect that your Ontario facility will be operational until 2013, and it is unclear whether you expect that it will be operating at full capacity at that time. We also note that you expect your facility in France to be operating at full capacity by the second quarter of 2012. Given your current and future dependence on the facility in France, we continue to believe that disclosure relating to the cost of production at this facility is necessary for an investor to understand whether you will be able to manufacture cost-competitive bio-succinic acid. We reissue our prior comment.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 55

Comparison of Six Months Ended June 30, 2010 and Six Months Ended June 30, 2011, page 62

Comparison of the Year Ended June 30, 2010 to the Six Months Ended December 31, 2010, page 64

Comparison of the 258 Day Period Ended June 30, 2009 to the Year Ended June 30, 2010, page 66

6. We note your revised disclosure in response to comment 27 of our letter dated December 9, 2011. However, we note that your revisions specify the amount of the increase or decrease in royalty payments, but do not specify the actual amount of the royalty

payment as you do in your discussion of research and development expenses, net, on page 67. Please revise your disclosure accordingly.

Business, page 77

General

7. We note your reference in this section to the 112% theoretical sugar yield for the production of bio-succinic acid, and that on page 90 you specifically list this as one of the benefits of your process. However, we note that in Response 5.8 provided with your supplemental materials you state that your internal economic models provide a different yield on sugar in your production of bio-succinic acid. Although you state that the 112% yield is a “theoretical sugar yield,” your disclosure currently suggests that this is the yield that you expect to receive in your production process. Please revise accordingly.
8. We have reviewed your response to comment 31 of our letter dated December 9, 2011. Please note that we will not be able to complete our evaluation of your response until you provide the name of your customer as required by Item 101(c)(1)(vii) of Regulation S-K.

Our Products, page 84

9. We note your response to comment 32 of our letter dated December 9, 2011. Your disclosure continues to reference your relationships with third parties, however the extent of such relationships, and whether you have entered into any agreements with such third-parties, is not clear. For example, we note that on page 87 you state that you are “working with third parties to assess [y]our bio-succinate esters and accelerate market development.” This is just one example. Please revise your disclosure accordingly. Please also advise whether you will be filing any of the relevant agreements as exhibits to the registration statement.

Our Technology, page 89

10. We note your revision in response to comment 35 of our letter dated December 9, 2011, however the use of the term “benefits” continues to suggest that your processes are superior to other production processes. Please either clarify specifically how your process compares to other production processes, or revise to clarify that you are not comparing your processes to other production processes.

Our Manufacturing Operations, page 91

11. We note your response to comment 36 of our letter dated December 9, 2011. Please revise your disclosure on page 92 to state specifically that you are only guaranteed 60% of the facility’s capacity beginning on July 1, 2013, but that you do not expect to use the facility after your Ontario facility is operational in 2012.

Our Strategic Relationships, page 94

12. We have reviewed your response to comments 38 and 39 of our letter dated December 9, 2011. Please note that we will not be able to complete our evaluation of your response until you provide additional disclosure relating to the material agreements and file such agreements as exhibits to the registration statement.

Executive and Director Compensation, page 113

Compensation Discussion and Analysis, page 113

13. We have reviewed your response to comments 44 and 45 of our letter dated December 9, 2011. Please note that we will not be able to complete our evaluation of your response until you provide your revised disclosure in a subsequent amendment to the registration statement.

Notes to the Financial Statements

General

14. We note your response to comment 53 in our letter dated December 9, 2011. On October 1, 2011, you entered into an agreement to acquire the remaining 25% of the common shares of Sinoven Biopolymers, Inc. In the financial statements which reflect this acquisition, please include a table to show the effects of changes in your ownership interest in Sinoven Biopolymers, Inc. on the equity attributable to you. Please refer to ASC 810-10-50-1A(d) and ASC 810-10-55-4M for guidance.

Revenue Recognition, page F-16

15. We note your response to comment 54 in our letter dated December 9, 2011. We continue to have difficulty understanding how you determined that the sale of products should be recorded as an offset to research and development expenses rather than as revenues. It is not clear why your inability to manufacture bio-succinic acid in large quantities would preclude you from recording the sales of this product as revenues. In addition, it appears that your planned ongoing major or central operations include the sale of products like bio-succinic acid. Please further advise. Please also tell us when you intend to start recording the sales of these products as revenues.

Research and Development Tax Credits, page F-19

16. We note your response to comment 55 in our letter dated December 9, 2011. Please disclose how these tax credits will be accounted for subsequent to the consolidation of Bioamber S.A.S. and your basis for this pursuant to ASC 740-10-30. It appears that the impact of these credits may no longer be reflected as a reduction in research and

development expenses. In this regard, please also address what consideration you gave to reflecting the change in accounting for these credits in your pro forma financial statements.

Note 4. Acquisition of Bioamber S.A.S., page F-23

17. We note your response to comment 56 in our letter dated December 9, 2011. It remains unclear what happened to the \$5 million euros that was owed to Agro-industrie Recherches et Développements, S.A. after your acquisition of the remaining 50% of Bioamber S.A.S. Please help us understand and revise your disclosures to clarify why the amounts would now be due to you rather than to Agro-industrie Recherches et Développements, S.A.

Exhibits

18. We note that you plan to request confidential treatment for certain exhibits. To the extent that we have comments on your request, please note that we will issue them in a separate letter. Please further note that all comments on your request must be resolved before we will entertain a request to accelerate the effective date of your registration statement.

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

You may contact Nudrat Salik, Staff Accountant, at 202-551-3692, or Rufus Decker, Accounting Branch Chief, at 202-551-3769 if you have questions regarding comments on the financial statements and related matters. Please contact Erin Jaskot, Staff Attorney, at 202-551-3442, or Craig Slivka, Special Counsel, at 202-551-3729 with any other questions.

Sincerely,

/s/ Craig E. Slivka, for

Pamela A. Long
Assistant Director

cc: Michael Minahan, Esq. (*via E-mail*)
Goodwin Procter LLP