



DIVISION OF
CORPORATION FINANCE

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

May 9, 2013

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. 18 to Registration Statement on Form S-1
Filed May 9, 2013
File No. 333-177917**

Dear Mr. Huc:

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

Prospectus Summary, page 1

Overview, page 2

1. Please revise your disclosure on page two to clearly state that you will be relying on additional loans, including the proposed credit facility with Hercules Technology Growth Capital, to fund the completion of the initial phase of the Sarnia facility. In this regard, we note the disclosure on page three. As currently drafted, the disclosure suggests that you will be relying only on equity contributions, proceeds from the offering, government grants and interest-free loans.

Use of Proceeds, page 43

2. Please clarify whether the \$80.4 million that will be used to complete the construction of the initial phase of the Sarnia facility will be made up entirely of the net proceeds of the offering. As currently drafted, it is unclear whether the \$80.4 million includes financing from other sources, or whether the other sources will provide funds needed to complete the Sarnia facility that are in addition to the \$80.4 million. We note that elsewhere in your prospectus you state that total cost of the initial phase of the planned facility is expected to cost \$125.0 million. We further note that on page 55 you state that you will make a capital contribution of \$63.0 million and on page 68 you state that you will be funding \$45.5 million of the total cost. Please revise your disclosure in the Use of Proceeds and elsewhere as appropriate to clearly present the total cost of the initial phase and the total amount that you will be funding,

including the amount that will be funded by proceeds of the offering and the amount that will come from other sources.

3. To the extent you will be using a material amount of the proceeds to make payments on the government loans and the proposed credit facility, please disclose the interest rate and maturity of such loans and credit facility. We note the disclosure on page eight that you intend to use some of the proceeds of this offering to pay interest and principal payments as they come due under the proposed credit facility with HTGC. See Instruction 4 to Item 504 of Regulation S-K.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 53

Liquidity and Capital Resources, page 67

4. Please disclose the conditions that must occur for interest-only payments to continue for 12 months.

Exhibits

General

5. Please file the commitment letter, or similar agreement, with Hercules Technology Growth Capital, as an exhibit to the registration statement.

Exhibit 4.7

6. The Form of Unit Certificate states that each warrant will become exercisable during the period commencing on August 2017. We believe this should be August 2013. Please file a new Form of Unit Certificate as appropriate.

Exhibit 5.1

7. Please have counsel revise its legal opinion to remove the word "and" that appears before counsel's opinion that the Warrants will be valid and binding obligations of the company. As currently drafted, this could be read as counsel assuming that the Warrants are valid and binding obligations of the company.

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.

Jean-Francois Huc
BioAmber Inc.
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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