

May 25, 2007

Mail Stop 6010

Michael L. Weiner
Chief Executive Officer
Biophan Technologies, Inc.
150 Lucius Gordon Drive, Suite 215
West Henrietta, New York 14586

**Re: Biophan Technologies, Inc.
Amendment No. 4 to Registration Statement on Form S-1
Filed May 24, 2007
File No. 333-138632**

Dear Mr. Weiner:

We have limited our review of your filing to those issues we have addressed in our comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Transactions with Selling Stockholders, page 65

1. It appears that you received the shareholder approval that was a condition to filing another registration statement mentioned on page 66. Please tell us if and when you plan to register additional shares for resale by the selling shareholders. Also tell us whether you would incur any material liability if it is determined that the shares subject to that new registration statement cannot be registered pursuant to rule 415(a)(1)(x) or that the new registration statement casts doubt on the ability to offer the shares on the current registration statement under rule 415(a)(1)(x).

* * * * *

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

Michael L. Weiner
Biophan Technologies, Inc.
May 25, 2007
Page 2

furnish a cover letter with your amendment that keys your responses to our comments and provides any requested supplemental 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.

Please contact Donald C. Hunt at (202) 551-3647 or me at (202) 551-3617 with any questions.

Sincerely,

Russell Mancuso
Branch Chief

cc (via fax): Gregory Sichenzia – Sichenzia Ross Friedman Ference LLP