

Mail Stop 6010

May 8, 2007

VIA U.S. MAIL AND FACSIMILE

Walter C. Ogier
Chief Executive Officer
Arbios Systems, Inc.
1050 Winter Street, Suite 1000
Waltham, MA 02451

**Re: Arbios Systems, Inc.
Item 4.02 Form 8-K
Filed April 24, 2007
File No. 000-32603**

Dear Mr. Ogier:

We have reviewed your response and related filings and have the following 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 more information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 8-K dated April 17, 2007 (filed on April 23, 2007)

Item 4.02. Non-Reliance on Previously Issued Financial Statements or a Related Audit Report

1. We refer to your response to prior comment one in our letter dated April 27, 2007. We note that the restatement adjustments for the quarters ended March 31, 2006, June 30, 2006 and September 30, 2006 are material the balance sheet and income

statement for the respective period. Additionally, the disclosure in the Form 8-K states that the previously filed quarterly financial statements can no longer be relied upon. Accordingly, please file an amendment to your Forms 10-QSB for the quarters ended March 31, 2006, June 30, 2006 and September 30, 2006 to reflect the adjustments to the warrant liability valuation.

As appropriate, please respond to these comments within five business days or tell us when you will provide us with a response. 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 responses to our comments.

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 all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 connection with responding to our comments, please provide, in writing, a 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.

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In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

If you have any questions, please call me at (202) 551-3664 or Brian Cascio, Accounting Branch Chief, at (202) 551-3675

Sincerely,

Kristin Lochhead
Staff Accountant