

September 12, 2006

Mail Room 4561

Mark Fusco
President and CEO
Aspen Technology, Inc.
Ten Canal Park
Cambridge, MA 02141

**Re: Item 4.02 Form 8-K
Filed on September 6, 2006
File No. 0-24786**

Dear Mr. Fusco,

We have reviewed your filing and have the following comment. Where indicated, we think you should revise your document in response to this comment. 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.

From 8-K filed September 6, 2006

1. We note the disclosures in your Form 8-K regarding questions over back-dating of stock options. Please tell us the current status of your review and explain what consideration you have given to the accounting and disclosure implications of SFAS No. 5, "Accounting for Contingencies" and FIN 14, "Reasonable Estimation of the Amount of a Loss." In this regard, tell us what consideration you gave to including disclosure and discussion of this issue's potential impact on the qualification of the Company's stock option plan, claims or litigation by affected option and stockholders, and possible legal or

Mr. Fusco
Aspen Technology, Inc.
September 12, 2006
Page 2

regulatory action by the Internal Revenue Service or other regulatory bodies.

As appropriate, please amend your filing and respond to these comments within five business days or tell us when you will provide us with a response. You may wish to provide us with marked copies of 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.

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 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.

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 contact Tom Ferraro, Senior Staff Accountant at (202) 551-3225.

Sincerely,

Tom Ferraro
Senior Staff Accountant