Via Edgar

Securities and Exchange Commission Division of Corporate Finance One Station Place 100 F Street, NE Washington, D.C. 20549-4561 Attention: Kari Jin

Re: Aspen Technology, Inc.

Item 4.02 Form 8-K Filed on February 12, 2009

File No. 0-24786

Ladies and Gentlemen:

Set forth below please find the responses of Aspen Technology, Inc. (the "Company") to the comment of the staff (the "Staff") of the Securities and Exchange Commission (the "SEC") set forth in the letter, dated February 17, 2009, from Kari Jin, Staff Accountant of the SEC, to Bradley T. Miller, Senior Vice President and Chief Financial Officer of the Company, with respect to Item 4.02 of the Form 8-K referenced above.

For convenient reference, the Company has set forth below in italics the Staff's comments set forth in the comment letter.

Form 8-K filed February 12, 2009

1. We note that the Company has determined that the financial statements for the three months ended September 30, 2007 and 2006 should no longer be relied upon. Tell us how you determined whether the Company's December 31, 2006, March 31, 2007 and June 30, 2007 financial statements were also impacted by the errors noted in your cash flow statements and tell how you determined that an Item 4.02 Form 8-K is not required with regards to the financial statements included in your December 31, 2006 and March 31, 2007 Forms 10-Q and June 30, 2007 Form 10-K.

In the Form 8-K originally filed on February 12, 2009, we reported that the financial statements for the three months ended September 30, 2007 and 2006 should no longer be relied upon. We will file an amendment to our report on Form 10-Q for the quarter ended September 30, 2007 in order to make available restated financial statements for the three months ended September 30, 2007 and 2006 that will correct the errors previously disclosed. We intend to file this amendment as soon as practicable.

In addition, we previously reported in a Form 8-K filed on June 11, 2007 that, among other items, our quarterly filings on Form 10-Q for each of the quarters ended December 31, 2006 and March 31, 2007 should not be relied upon. In our Form 10-K for the year ended June 30, 2007, filed on April 11, 2008, we included restated consolidated statements of operations for each of the quarters within fiscal 2007.

For purposes of clarity, we will shortly file a Form 8-K/A to reaffirm that the previously filed financial statements for each of the fiscal quarters ended on December 31, 2006 and March 31, 2007, respectively, should not be relied upon. In lieu of filing amended quarterly reports on Form 10-Q for the fiscal quarters ended on December 31, 2006 and March 31, 2007, we will correct the statement of cash flows errors associated with these Quarterly Reports in the condensed consolidated financial statements for these two prior quarters in the Forms 10-Q for the quarters ended December 31, 2007 and March 31, 2008, which we intend to file as soon as practicable. Such amended Quarterly Reports on Form 10-Q will provide a description of the items and amounts being restated for the periods affected.

With respect to the consolidated statement of cash flows included in our June 30, 2007 annual report on Form 10-K, we have performed an analysis pursuant to the requirements of SAB 99 and SAB 108, and have that determined the effects of the unadjusted differences on the statement of cash flows are not material. As a result, the Company concluded that a restatement of the consolidated statements of cash flows and related disclosures included on Form 10-K for the fiscal year ended June 30, 2007 is not necessary.

* * *

The Company acknowledges that:

- the Company is responsible for the adequacy and accuracy of the disclosure in each of its filings with the SEC, including the Form 8-K to which the above comment and response relate;
- · Staff comments or changes to disclosure in response to Staff comments do not foreclose the SEC 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 SEC or any person under the federal securities laws of the United States.

Please do not hesitate to contact the undersigned at (617) 221-5235 with any questions regarding this response letter.

Very truly yours,

/s/ Bradley T. Miller