



DIVISION OF  
CORPORATION FINANCE

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

**Via Fax (781) 221-5215**

July 27, 2010

Mark P. Sullivan  
SVP and Chief Financial Officer  
Aspen Technology, Inc.  
200 Wheeler Road  
Burlington, MA 01083

**Re: Aspen Technology, Inc.  
Form 10-K and 10-K/A for the Fiscal Year Ended June 30, 2009  
Filed November 9, 2009 and April 22, 2010, respectively  
Form 10-Q for Fiscal Quarter Ended December 31, 2009  
Filed on February 9, 2010  
File No. 000-24786**

Dear Mr. Sullivan:

We have reviewed your letter dated July 21, 2010 in connection with the above-referenced filings and have the following comments. In our comment, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comment applies to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to this comment, we may have additional comments. Unless otherwise noted, where prior comments are referred to they refer to our letter dated July 13, 2010

Form 10-Q for the Fiscal Quarter Ended December 31, 2009

Management's Discussion and Analysis of Financial Condition and Results of Operations

General

1. We note from your response to prior comment 1 that the company applies the VSOE of fair value of SMS from your legacy term license arrangement to your new point

product arrangements pursuant to the guidance in ASC 985-605-55-67. We further note from our conversation with the company on July 26, 2010 that because you no longer offer the legacy term license arrangements there may come a point in time where you are unable to establish VSOE for your new point product arrangements and accordingly, such arrangements may become subject to ratable revenue recognition. Please confirm that, if material, you will enhance your disclosures (i.e. business overview, results of operations, risk factors, etc.) in future filings to address how the accounting for these arrangements may change if you are no longer able to establish VSOE of fair value for SMS and the impact of such change on your financial condition and results of operations. Also, to the extent material, please confirm that you will enhance your critical accounting policy disclosures to address the risks and assumptions involved in accounting for your point product arrangements.

New Licensing Model, page 20

2. We note your discussion regarding your transition to a new term licensing subscription model in fiscal 2010 (the aspenONE license model), which appears to be the focus for a significant source of the company's future revenue stream. We further note that as a result of movement to the aspenONE license model, part of the focus in analyzing your business will now be on the change in the value of your installed customer base and software license bookings. To the extent these arrangements are firm commitment orders, tell us what consideration you gave to disclose the total contract value of your term license subscription arrangements (i.e. backlog) pursuant to Item 101(c)(viii) of Regulation S-K. In addition, please clarify that you will provide a quantified discussion of regarding your installed customer base and license bookings in future filings. In this regard, to the extent that revenues recognized from your subscription arrangements are expected to have a significant impact on the variability of your results, you should discuss and analyze changes in your bookings and customer base as part of your MD&A. We refer you to Section III.B of SEC Release 33-8350.

You may contact Melissa Feider, Staff Accountant, at (202) 551-3379 if you have any questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3499 with any other questions.

Sincerely,

Kathleen Collins  
Accounting Branch Chief