

Mail Stop 6010

December 28, 2006

Harold Blomquist  
Chief Executive Officer and President  
Simtek Corporation  
4250 Buckingham Drive #100  
Colorado Springs, CO 80907

**Re: Simtek Corporation  
Amendment No. 1 to Registration Statement on Form S-1  
And Documents Incorporated by Reference Therein  
Filed December 11, 2006  
File No. 333-138097**

Dear Mr. Blomquist:

This is to advise you that we are monitoring the above-captioned registration statement only for resolution of the following comment that we have on certain of the filings that have been incorporated by reference into your registration statement. No further review of the above registration statement has been or will be made.

Form 8-K dated July 28, 2006; and  
Form 8-K dated December 4, 2006

1. We note your response to prior comment 3. In light of your determination that the prior financial statements required a restatement, it is not clear to us how the previously issued financial statements could continue to be relied upon. The determination that the previously issued financial statements required a restatement appears to be akin to a determination that the prior financial statements can no longer be relied upon. As such, we continue to believe that you should file an Item 4.02 Form 8-K to address the non-reliance on the previously issued financial statements and revise the Form S-1 to incorporate that Form 8-K by reference. Please note this comment also applies to your Form 8-K dated December 4, 2006.

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As appropriate, please amend your filings in response to these comments. You may wish to provide us with marked copies of any amendments to expedite our review. Please furnish a cover letter with your responses and any amendments that keys your

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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 and any amendments.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Kevin Vaughn at (202) 551-3643 or Brian Cascio at (202) 551-3676 if you have questions regarding comments on the financial statements and related matters. You may contact Tim Buchmiller at (202) 551-3635 or me at (202) 551-3800 with any questions.

Sincerely,

Peggy A. Fisher  
Assistant Director

cc (via fax): Hendrik F. Jordaan, Esq.  
Garth B. Jensen, Esq.