



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

DIVISION OF
CORPORATION FINANCE

April 30, 2013

Via E-mail

Lane J. Castleton
Chief Financial Officer
Abtech Holdings, Inc.
4110 N. Scottsdale Road, Suite 235
Scottsdale, AZ 85251

**Re: Abtech Holdings, Inc.
Amendment No. 4 to Registration Statement on Form S-1
Filed April 18, 2013
File No. 333-180721**

Dear Mr. Castleton:

We have reviewed your response letter and the amendment to your registration statement, and we have the following comments.

Amendment No. 4 to Registration Statement on Form S-1

Management's Discussion and Analysis . . . , page 20

Gross Margins, page 21

1. In the first paragraph, you state that you anticipate excess capacity will continue to adversely affect gross margins for at least a portion of 2013. This statement appears to indicate that the adverse effects of excess capacity may be resolved in the near-term. However, your disclosure that you operated at approximately 3% capacity in 2012, along with your disclosures regarding the factors that hampered anticipated significant sales growth for 2012 and your expectations of significant sales growth over the *long-term*, suggests that excess capacity is an issue that will continue to affect your results of operations beyond the near-term. If this is the case, please revise your statement to remove any indication that excess capacity is less of an issue than it actually is, or tell us why you believe your current statement is appropriate in light of the factors addressed in this comment. In particular, please appropriately qualify or remove your statement that you "estimate that this amount of Smart Sponge material could generate \$10-20 million in revenue per year at current product prices."

Research and Development Expenses, page 22

2. Please disclose an estimate of the total amount spent during each of the last two fiscal years on research and development activities.

Critical Accounting Policies, page 25

Fair Value of Warrant Liability and Note Discount, page 25

3. We refer to the warrants that were reclassified to additional paid-in capital because they no longer meet the characteristics of a derivative. Please expand your narrative to disclose the specific factors and/or conditions that the warrants are no longer subject to, such that they no longer qualify as a derivative.

Executive Compensation, page 49

2012 Executive Compensation Components, page 49

4. We note your statement here that the main elements of 2012 compensation included stock options. Further, we note your statement on page 20 of your definitive proxy statement filed on April 23, 2013 that a significant portion of the annual long-term incentive award in 2012 was in the form of stock options. However, based on your summary compensation table, with the exception of Jonathan Thatcher, none of your named executive officers appear to have received stock options. Please advise.

2013 Executive Compensation Components, page 49

5. Please revise “2012” in the first sentence to “2013.”

Consolidated Financial Statements, page F-1

Note 17 – Subsequent Events, page F-26

6. Please revise your footnote to disclose the April 11, 2013 transaction whereby you assigned to new investors your right to purchase convertible promissory notes issued by AbTech Industries and address your accounting for the transaction.

Recent Sales of Unregistered Securities

7. Please ensure that you include all of the disclosures required by Item 701 of Regulation S-K. In this regard, we note there appear to be some relevant transactions identified on pages F-19, F-20, F-21, F-24, and F-26 that are not discussed in this section.

Form 10-K for the Fiscal Year Ended December 31, 2012

Exhibit 31

8. We note that your Section 302 certifications do not contain all of the required disclosures. Please amend your Form 10-K to provide the full certifications of your Chief Executive

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and Chief Financial Officers. Refer to Item 601(b)(31)(i). We remind you that your certifications in the amended document should refer to Form 10-K/A.

You may contact Dale Welcome, Staff Accountant, at (202) 551-3865 or Anne McConnell, Staff Accountant, at (202) 551-3709 if you have questions regarding comments on the financial statements and related matters. Please contact Jessica Dickerson, Staff Attorney, at (202) 551-3749 or Craig Slivka, Special Counsel, at (202) 551-3729 with any other questions.

Sincerely,

/s/ Craig Slivka, for

Pamela Long
Assistant Director

cc: Jaime Brennan, Squire Sanders LLP (*via e-mail*)