



DIVISION OF  
CORPORATION FINANCE

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

December 6, 2012

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. 2 to Registration Statement on Form S-1  
Filed November 9, 2012  
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.

General

1. Please provide updated financial statements and related disclosures as required by Rule 8-08 of Regulation S-X.

Recent Developments, page 4

2. We note you completed a private offering on September 12, 2012. It appears as though you have relied on the safe harbor provided by Rule 506 of Regulation D to engage in the private offering concurrently with the offering contemplated by this registration statement. Given that your registration statement is a publicly filed document, please provide us with your analysis of your ability to rely on Regulation D in view of the limitations set forth in Rule 502(c) of Regulation D. Your analysis should include a discussion of how the investors in the private offering became interested in the private offering.

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

Investing Activities, page 25

3. We note your response to comment 16 of our letter dated August 10, 2012. Additionally, we note your disclosure on page 22 that production increased in the first half of 2012 as well as your statement on page 25 that you still expect to exceed manufacturing capacity in the second half of 2012 if you achieve significant sales growth. Please disclose at

what percentage of manufacturing capacity you operated during any interim periods presented in the registration statement. Finally, please revise your disclosures to reflect your current expectations regarding sales growth. In this regard, we note disclosure from your Form 10-Q for the quarterly period ended September 30, 2012 that sales have decreased in the second half of 2012, that sales growth is taking longer than previously expected, and that the company's ability to generate significant sales growth in the short term cannot be determined at this time.

Our Business, page 29

Technologies, page 30

Smart Sponge, page 30

4. Please ensure that you disclose the material information relevant to your products. For example, we note from your Form 10-Q for the quarterly period ended September 30, 2012 that your Smart Sponge technology is not a stand-alone treatment solution. Please provide similar disclosure in your registration statement.

Sales, Distribution, and Marketing Support, page 38

5. We note your response to comment 19 of our letter dated August 10, 2012. Specifically, we note your statements in your response that you have not yet formed additional strategic alliances and that you are seeking to form strategic alliances. In order to provide a better sense of your state of development, please revise your disclosure in numeral two of this section to state that the company is seeking to develop strategic working relationships rather than that the company is developing strategic working relationships.

Regulatory, page 45

6. We note your response to comment 21 of our letter dated August 10, 2012. On page 45, you now state that if data is not submitted to the EPA on time, the Smart Sponge registration will expire. Please briefly discuss the material consequences of such expiration. Additionally, please revise the risk factor referenced in your response to include a brief discussion of the Smart Sponge registration status and the specific material risks to the company and investors associated with such registration.

Consolidated Statements of Cash Flows, pages F-6 and F-31

7. Please revise your statements of cash flows such that your reconciliations to net cash used in operating activities begin with the line item, "net loss." Refer to FASB ASC 230-10-45-28.

Note 14 – Private Placements, page F-25

8. We note your response to comment 24 of our letter dated August 10, 2012 and your statement that that you could not conclude definitively that the valuation of the warrants would be significantly different between two valuation models because you had not performed both calculations. In this regard, please quantify and demonstrate to us that the difference in the value of the warrants by using the Black-Scholes model, rather than a lattice pricing model, is not material to your financial statements for each applicable period.

Signatures

9. We note that Lane J. Castleton appears to have signed the registration statement on behalf of Steven W. Kohlhagen. Please file the applicable power of attorney as an exhibit to the registration statement. In this regard, we note that Mr. Kohlhagen joined the board of directors in August 2012 and did not execute the power of attorney filed with the initial registration statement.

Exhibit 5.1

10. Please file a revised legal opinion that references the number of shares to be offered pursuant to the registration statement. In this regard, we note that counsel's legal opinion references the proposed issuance and sale of up to 16,335,245 shares of the company's common stock rather than the 14,845,354 shares to be offered under the amended registration statement.

Exhibit 23.2 – Consent of Independent Registered Public Accounting Firm

11. We note that your auditor's consent refers to "Note 18, as to which the date is July 23, 2012." However, the report of independent registered public accounting firm refers to the same note, "as to which the date is July 24, 2012." Please have the auditors revise their consent to conform the dates.

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

Lane J. Castleton  
Abtech Holdings, Inc.  
December 6, 2012  
Page 4

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