



DIVISION OF
CORPORATION FINANCE

Mail Stop 3030

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

August 31, 2009

Paul J. van der Wansem
President, Chief Executive Officer and Chairman of the Board of Directors
BTU International, Inc.
23 Esquire Road
North Billerica, Massachusetts 01862-2596

Re: BTU International, Inc.
Form 10-Q for the fiscal quarter ended March 30, 2008
Filed May 9, 2008
Form 10-K for the fiscal year ended December 31, 2008
Filed March 16, 2009
Form 10-Q for the fiscal quarter ended June 28, 2009
Filed August 7, 2009
File No. 000-17297

Dear Mr. van der Wansem:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-Q for the fiscal quarter ended March 30, 2008

1. We see from the Form 8-K filed on February 25, 2008 that your predecessor auditors, Vitale, Caturano & Co., PC, would not stand for re-election as the company's independent registered public accounting firm after completion of the audit of the December 31, 2007 financial statements. We further note that the new audit firm, KPMG, was not hired until June 9, 2008 as disclosed on the 8-K

dated June 10, 2008. Since the Form 10-Q for March 30, 2008 was filed on May 9, 2008, please tell us who performed the review of the financial statements included in the Form 10-Q, as required by Rule 10-01(d) of Regulation S-X.

Form 10-K for the fiscal year ended December 31, 2008

Consolidated Financial Statements

Note 1. Summary of Significant Accounting Policies, page 33

Revenue Recognition, page 35

2. We reference the disclosure on page 36 relating to the application of SAB No. 101 and 104. Please tell us and revise future filings to elaborate on the specific terms of your sales arrangements that may result in deferral of revenue for some equipment sales. Discuss how you are applying the accounting literature.

Note 3. Debt, Capital Leases, Commitments and Contingencies, page 39

3. We see from page 12 that you utilized a waste disposal firm that disposed its solid waste at a site that the EPA has designated a Superfund site and that you have recorded your expected proportionment as a liability for a potential cash payment and settlement. In future filings, please disclose this contingency in the footnotes to your financial statements along with the amount accrued for the liability and how you determined the amount of the accrual. Refer to FASB Accounting Standards Codification 450-20-50-1 and 450-20-50-2.

Item 9A. Controls and Procedures, page 53

4. We note your disclosure that your chief executive officer and chief financial officer concluded that your “disclosure controls and procedures did not operate effectively to ensure that the information required to be disclosed by [you] in the reports [you] file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission’s rules and forms.” Please revise future filings to state whether your officers concluded that disclosure controls and procedures were effective or not effective, rather than whether they “operate[d] effectively.” Further, if you elect to include any qualifying language as to the effectiveness conclusion, in your future filings such language should include, at a minimum, but only if true, that your officers concluded that your disclosure controls and procedures are effective to ensure that information required to be disclosed by you in reports that you file or submit under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms *and* is accumulated and communicated to

your management, including your principal executive officer and principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. See Exchange Act Rule 13a-15(e). Alternatively, if true, your disclosure could simply indicate that your officers determined that your “disclosure controls and procedures are effective” without any further qualifications or attempts to define those disclosure controls and procedures.

Item 11. Executive Compensation, page 56

5. You indicate on pages 4 and 5 of the definitive proxy statement which you incorporated by reference to your annual report that you take into account the salaries paid by other companies when setting the base salaries of your named executive officers, as well as the range of cash compensation paid to executives at other companies in determining the cash portion of your named executive officers’ compensation. Please disclose the names of the companies that you use to make these determinations and how you use the information obtained, such as whether you set your salaries and cash compensation by targeting a certain percentile of compensation at these companies. If any of your named executive officers were compensated at materially different levels from the targeted percentile, please provide discussion and analysis as to why. Finally, also disclose the weight that you attach to this factor in determining base salaries.
6. According to the disclosure on pages 4 and 5 of your proxy statement, you determine the levels of cash and equity incentive compensation based on performance targets such as operating income and “certain other business goals.” Please disclose the operating income targets and the other business goals that your named executive officers must meet to earn their incentive compensation. In addition, disclose the weight you assign to each of these goals in determining the level of incentive compensation for your named executive officers.
7. You disclose on page 5 of your proxy that your Compensation Committee together with your CEO determine the aggregate number of stock options to award in a given year. Please disclose how you arrive at the aggregate number of options to award each year.

Signatures

8. We note that while your annual report is signed on behalf of the registrant by your principal executive officer, principal financial and accounting officer and a majority of the board of directors, it does not appear to have been separately signed by the registrant itself. Please amend your Form 10-K to provide the registrant’s signature. See General Instruction D to Form 10-K.

Form 10-Q for the fiscal quarter ended June 28, 2009

Item 2. Management's Discussion and Analysis, page 14

9. In future filings, to the extent practicable, separately quantify the various components of your line item results to give readers a better understanding of your results. For instance, we note that you attribute the decrease in net sales to a reduction in demand for electronic market products partially offset by increases in your alternative energy product sales, but that neither factor was separately quantified as a portion of the total change. Further, the reason underlying the increase in your alternative energy product sales is not described; it is unclear whether the change was attributable to an increase in volume or price, or another reason. In future filings, please quantify and discuss each individually significant factor contributing to the change in your results.

Liquidity and Capital Resources, page 17

10. We note your disclosure that you are not in compliance with financial covenant regarding debt coverage ratio, and that you have suspended negotiations with your lender "until a return to profitability is at hand." Tell us, and in future filings clarify whether your noncompliance with the covenant precludes any borrowing under the agreement until you have maintained four quarters of compliance, and discuss the impact on your liquidity as a result of any unavailability under the loan agreement.

Item 4. Controls and Procedures, page 18

11. We note your disclosure that there were "no changes in your internal control over financial reporting that occurred during the six months ended June 28, 2009 that have materially affected, or are reasonably likely to materially affect, [y]our internal control over financial reporting." Please reconcile this statement with your disclosure on page 19 that you have undertaken remediation initiatives to correct the material weaknesses in internal control over financial reporting and that you "will *continue* to enhance resources and underlying systems utilization in the area of financial reporting" (emphasis added).

Please respond to our comment within 10 business days or tell us when you will provide us with a response. Please understand that we may have additional comments after reviewing your response to our comment.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings includes all information required under the Securities Exchange Act of 1934 and that they have provided all information

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investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission 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 Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filings or in response to our comments on your filings.

You may contact Kristin Lochhead at (202) 551-3664 or Brian Cascio, Accounting Branch Chief, at (202) 551-3676 if you have questions regarding comments on the financial statements and related matters. Please contact Gabriel Eckstein at (202) 551-3286 or me at (202) 551-3625 if you have questions on other comments.

Sincerely,

Mary Beth Breslin
Senior Attorney