



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-7010

Mail Stop 7010

February 1, 2006

Mr. James R. Buscemi
Chief Financial Officer
Hudson Technologies, Inc.
275 North Middletown Road
Pearl River, New York 10965

**RE: Form 10-KSB for the Fiscal Year ended December 31, 2004
Forms 10-QSB for the Fiscal Quarters ended March 31, 2005, June 30,
2005 and September 30, 2005
File No. 1-13412**

Dear Mr. Buscemi:

We have reviewed your response letter dated January 11, 2006 and have the following additional comments. If you disagree with our comment, 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.

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 on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-KSB for the year ended December 31, 2004

General

1. Where a comment below requests additional disclosures or other revisions to be made, please show us in your response what the revisions will look like. These revisions should be included in your future filings.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 13

2. We have reviewed your response to comment 2. Please show us in your response what the revised management's discussion and analysis will look like with respect to the material fluctuations in revenues in 2004. In addition, please quantify the gross margin amount of the reduction in the cost of refrigerants sold and the reduction in payroll.

Item 8A – Controls and Procedures, page 18

3. We have reviewed your response to comment 3. Please refer to Rules 13a-15(e) and 15d-15(e) of the Exchange Act for the complete definition of disclosure controls and procedures. Please revise your definition in future filings to also clarify, if true, that your disclosure controls and procedures were effective to ensure that information required to be disclosed by you in the reports that you file or submit under the Exchange Act is accumulated and communicated to your management, including your principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. Please also confirm to us that your disclosure controls and procedures were effective as of December 31, 2004, June 30, 2005, and September 30, 2005 when evaluating based on the complete definition of disclosure controls and procedures.

Financial Statements

Consolidated Statements of Operations, page 34

4. We have reviewed your response to comment 5. Given the guidance of paragraph 45 of SFAS 144, it is unclear how you determined it was appropriate to exclude the gain on the sale of fixed assets from operating income (loss). Please advise.

Note 9 – Stockholders' Equity, page 42

5. We have reviewed your response to comment 7. Please tell us more about your consideration of the changes in conversion rates of your convertible notes. Specifically, address the following:
 - You state that the intrinsic value of the beneficial conversion feature upon issuance of the convertible notes in December 2002 was approximately \$157,000. Please tell us how you arrived at this amount;
 - You state that subsequently the holders of a certain amount of convertible notes voluntarily agreed to increase the conversion rate of their notes to \$1.13. Please help us understand why these holders agreed to do this. Please also tell us when this change occurred and the intrinsic value of the beneficial conversion feature at this time;
 - You state upon completion of the Rights Offering the conversion rate of all convertible notes was adjusted downward to \$1.10. Please specifically tell us when this occurred and the intrinsic value of the beneficial conversion feature at this time; and
 - Please help us understand how you determined that the changes in conversion rates did not impact your financial statements. Your explanation should refer to the applicable accounting literature.
6. Please provide us with a detailed explanation as to how you accounted for your Series A Preferred Stock, including the subsequent changes in conversion rates. Specifically, address the following:
 - At the time of issuing the Series A Preferred Stock, tell us the specific conversion terms and what consideration was given as to whether a beneficial conversion features existed. If applicable, tell us the intrinsic value of the beneficial conversion feature;
 - You state that in December 2002, the holders had the right to have the conversion rate of the Series A Preferred Stock adjusted downward to the conversion terms of the convertible notes. Help us understand why the holders waived their right to the downward adjustment and how you accounted for this right;
 - You state that in December 2003 the conversion rate of the Series A Preferred Stock decreased from \$2.375 to \$.79. Given the guidance of EITF 98-5 and EITF 00-27, tell us how you later determined the appropriate accounting of this change in conversion rate, including how you arrived at the deemed dividend amount of approximately \$9,500,000. Tell us how you determined that the only impact to your financial statements was to your presentation of loss per common share; and
 - It is not clear how you determined that any changes to the 2003 EPS presentation would not be material to a reader of your financial statements.

James R. Buscemi
Hudson Technologies, Inc.
February 1, 2006
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Please provide us with the EPS amounts you would have reported if you had appropriately accounted for the change in conversion rates.

Forms 8-K filed on December 19, 2005, January 4, 2006, and January 6, 2006

7. On December 13, 2005 and December 28, 2005, the Board of Directors approved the acceleration of vesting of certain stock options. Tell us how you have accounted for the acceleration of vesting. Refer to the accounting literature used to determine the appropriate accounting.

* * * *

Please respond to these comments within 10 business days, or tell us when you will provide us with a response. Please provide us with a response letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please file your response on EDGAR as a correspondence file. Please understand that we may have additional comments after reviewing your responses to our comments.

If you have any questions regarding these comments, please direct them to Gus Rodriguez, Staff Accountant, at (202) 551-3752 or, in his absence, Nudrat Salik, Staff Accountant, at (202) 551-3692.

Sincerely,

Rufus Decker
Branch Chief