

### UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549-4631

December 3, 2010

Mr. James R. Buscemi Chief Financial Officer Hudson Technologies, Inc. 1 Blue Hill Plaza, Suite 1541 Pearl River, New York 10965

> RE: Hudson Technologies, Inc. Form 10-K for the Year Ended December 31, 2009 Forms 10-Q for the Periods Ended March 31, 2010, June 30, 2010 and September 30, 2010 File No. 1-13412

Dear Mr. Buscemi:

We have reviewed your filings and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the Year Ended December 31, 2009

Item 1. Business

Products and Services

### RefrigerantSide® Services, page 4

1. Your disclosure under this heading that you have "been awarded four United States patents for [your] Performance Optimization System" appears inconsistent with your statement on page eight under the heading "Patents and Proprietary Information" that you "hold[] a United States patent...." Please revise your disclosure accordingly in future filings.

Mr. James R. Buscemi Hudson Technologies, Inc. December 3, 2010 Page 2

### Management's Discussion and Analysis of Financial Condition and Results of Operations

### Liquidity and Capital Resources, page 15

- 2. In future filings, please consider revising your contractual obligations table to separately disclose the amounts of your estimated interest payments for each period presented. Please show us in your supplemental response what the revisions will look like.
- 3. In future filings, please disclose whether you were in compliance with your debt covenants as of December 31, 2009. Please disclose the specific terms of any material debt covenants with any required ratios/amounts. For any material debt covenants for which it is reasonably likely that you will not be able to meet, such as your minimum EBITDA covenant that you required a waiver for violating in July 2009, please also disclose the actual ratios/amounts as of each reporting date and reconcile them to US GAAP amounts. If EBITDA as defined in the credit facility is not computed as commonly defined, please also retitle this measure to better convey that additional adjustments are included. One choice may be to call it Adjusted EBITDA. See Sections I.D and IV.C of the SEC Interpretive Release No. 33-8350 and Compliance and Disclosures Interpretation 102.09 which is available on our website at <a href="http://www.sec.gov/divisions/corpfin/guidance/nongaapinterp.htm">http://www.sec.gov/divisions/corpfin/guidance/nongaapinterp.htm</a>. Please show us in your supplemental response what the revisions will look like.

# Item 9A (T). Controls and Procedures

### Disclosure Controls and Procedures, page 19

4. We note your statement that "any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives...." Please confirm to us, and revise accordingly in future filings to indicate, that your disclosure controls and procedures are effective at the reasonable assurance level. Alternatively, please remove the reference to the level of assurance of your disclosure controls and procedures.

### Item 11. Executive Compensation

### Summary Compensation Table, page 22

5. Please confirm, if true, that the option awards disclosed in your summary compensation and director compensation tables reflect the aggregate grant date fair value computed in accordance with FASB ASC Topic 718. See Items 402(n)(2)(vi) and (r)(2)(iv) of Regulation S-K.

Mr. James R. Buscemi Hudson Technologies, Inc. December 3, 2010 Page 3

Item 15. Exhibits, Financial Statement and Schedules, page 31

- 6. We note that you have not filed or incorporated by reference any of the items listed below.
  - Exclusive global technology and marketing agreement with The Linde Group, referenced on page five.
  - Separate supplemental agreements with certain Linde affiliate companies covering the United Kingdom and the Republic of South Africa, referenced on page five.
  - Strategic alliance agreement with EOS Climate, Inc., referenced on page five.
  - First Amendment to Restated Employment Agreement with Mr. Zugibe dated December 29, 2008, referenced on page 22.
  - First Amendment to Amended and Restated Loan Agreement with Keltic Financial Partners, L.P.

In future filings, please file or incorporate by reference each of these agreements in accordance with Item 601(b)(10) of Regulation S-K, or explain to us why you believe each is not required to be filed.

7. It appears that you have omitted the schedules and exhibits referenced in your Amended and Restated Loan Agreement between Hudson Technologies and Keltic Financial Partners, L.P. dated June 26, 2007, incorporated by reference as exhibit 10.16. Please file with your next Exchange Act report a complete copy of this credit agreement, which should include all schedules and exhibits referenced therein. See Item 601(b)(10) of Regulation S-K.

# Exhibits 31.1 and 31.2

8. In future filings, please file your certifications as exactly set forth in Item 601(b)(31)(i) of Regulation S-K, without modifying the language in paragraphs 4(a), (b), and (d).

# Form 10-Q for the Period Ended September 30, 2010

# General

9. Please address the comments above in your interim filings as well.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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 responding to our comments, please provide a written statement from the company acknowledging that:

Mr. James R. Buscemi Hudson Technologies, Inc. December 3, 2010 Page 4

- 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.

You may contact Hagen Ganem, Staff Attorney, at (202) 551-3330 or Pamela Long, Assistant Director at (202) 551-3760 if you have any questions regarding legal matters. Please contact Ernest Greene, Staff Accountant at (202) 551-3733 or me at (202) 551-3769 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

Rufus Decker Accounting Branch Chief