



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

June 22, 2010

Mr. Michael F. Biehl
Chief Financial Officer
Chart Industries, Inc.
One Infinity Corporate Center Drive, Suite 300
Garfield Heights, Ohio 44125

**Re: Form 10-K for Fiscal Year Ended December 31, 2009
Form 10-Q for Fiscal Quarter Ended March 31, 2010
Definitive 14A filed April 13, 2010
File No. 1-11442**

Dear Mr. Biehl:

We have reviewed your filing 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.

General

1. Where a comment below requests additional disclosures or other revisions to be made, these revisions should be included in your future filings, including your interim filings, if applicable.

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

Application of Critical Accounting Policies, page 45

General

2. Sales for 2009 were \$591.5 million compared to sales of \$744.3 million for 2008, reflecting a decrease of 20.5%. Sales for the three months ended March 31, 2010 were \$116.7 million compared to sales of \$180.2 million for the three months ended March 31, 2009, reflecting a decrease of 35.2%. Your end markets were adversely impacted by the global economic crisis including depressed energy prices and weakened credit markets. This impacted orders, particularly in your Distribution & Storage and Energy & Chemical segments. Operating income for both of these segments decreased from the year ended December 31, 2008 to the year ended December 31, 2009. Operating income (loss) for the Energy & Chemical segment decreased from \$25.0 million of income for the three months ended March 31, 2009 to a \$.3 million loss for the three months ended March 31, 2010. Operating income for the Distribution & Storage segment decreased from \$11.0 million for the three months ended March 31, 2009 to \$ 8.9 million for the three months ended March 31, 2010. Given these recent trends, we urge you to find ways to provide additional quantitative disclosures that conveys to investors any current and ongoing risks that charges such as charges related to the write-down of inventory, allowances for doubtful accounts, and restructuring may need to be recorded. In addition, we urge you to fully consider the guidance in SEC Release No. 33-8350. In this regard, please note, in the Critical Accounting Estimates section of the Release, the Staff's view that companies should provide quantitative disclosures when quantitative information is reasonably available and will provide material information for investors. As a result, we caution you that, to the extent you gather and analyze information regarding the risks of recoverability of your assets, such information may be required to be disclosed if it would be material and useful to investors. For example, if you have significant amounts of inventory for which you determine the fair value is close to your book value, you should consider how you can constructively convey the potential risk associated with these inventory amounts. We believe that detailed rather than general disclosures regarding these risks and exposures would provide investors with the appropriate information to make this evaluation.

Goodwill and Other Indefinite-Lived Assets, page 46

3. In the interest of providing readers with a better insight into management's judgments in accounting for goodwill, please disclose the following:
 - The reporting unit level at which you test goodwill for impairment and your basis for that determination;

- How you weight each of the methods used to value goodwill, including the basis for that weighting;
- How the methodologies used for valuing goodwill in the current year have changed since the prior year; and
- To the extent that any of your reporting units have estimated fair values that are not substantially in excess of the carrying value and to the extent that goodwill for these reporting units, in the aggregate or individually, if impaired, could materially impact your operating results, please provide the following disclosures for each of these reporting units:
 - Identify the reporting unit;
 - The percentage by which fair value exceeds the carrying value as of the most-recent step-one test;
 - The amount of goodwill;
 - A description of the assumptions that drive the estimated fair value;
 - A discussion of the uncertainty associated with the key assumptions. For example, to the extent that you have included assumptions in your discounted cash flow model that materially deviates from your historical results, please include a discussion of these assumptions; and
 - A discussion of any potential events and/or circumstances that could have a negative effect to the estimated fair value.

If you have determined that the estimated fair value substantially exceeds the carrying value for all of your reporting units, please disclose this determination. Please also provide the above disclosures, as applicable, for any long-lived assets or asset groups for which you have determined that undiscounted cash flows is not substantially in excess of the carrying value and to the extent that the asset amounts, in the aggregate or individually, could materially impact your operating results or total shareholders' equity. Please refer to Item 303 of Regulation S-K and Sections 216 and 501.14 of the SEC's Codification of Financial Reporting Policies for guidance. Please show us in your supplemental response what the revisions will look like.

Financial Statements

Notes to the Financial Statements

Note A - Nature of Operations and Summary of Significant Accounting Policies, page F-9

General

4. In anticipation of weakening business conditions that began late in the third quarter of 2008, you implemented cost reduction initiatives to align your cost structure with anticipated market conditions. These initiatives included reductions in workforce and other costs as well as the shutdown of the Denver BioMedical facility as the result of

your exit from the Magnetic Resonance Imaging business. Please tell us what consideration you gave as to whether the Magnetic Resonance Imaging business should be reported as discontinued operations pursuant to ASC 205-20.

5. Please disclose the statements of operations line item(s) in which you include depreciation and amortization. If you do not allocate a portion of these amounts to cost of sales, please tell us what consideration you gave to SAB Topic 11:B.
6. Please disclose the types of expenses that you include in the cost of sales line item and the types of expenses that you include in the selling, general and administrative expenses line item. In doing so, please also disclose whether you include inbound freight charges, purchasing and receiving costs, inspection costs, warehousing costs, internal transfer costs, and the other costs of your distribution network in the cost of sales line item. With the exception of warehousing costs, if you currently exclude a portion of these costs from cost of sales, please disclose:
 - in a footnote the line items that these excluded costs are included in and the amounts included in each line item for each period presented, and
 - in MD&A that your gross profit amounts may not be comparable to those of other entities, since some entities include all of the costs related to their distribution network in cost of sales and others like you exclude a portion of them from gross profit, including them instead in a line item, such as selling, general and administrative expenses.

Please show us in your supplemental response what the revisions will look like.

7. Please disclose your accounting policy related to pre-contract costs. In doing so, please disclose whether or not pre-contract costs related to unsuccessful contract bids are written off in the period you are informed you did not get the specific contract. If not, please disclose why not and discuss when they are expensed and your basis for that alternative treatment. Please show us in your supplemental response what the revisions will look like.

Revenue Recognition, page F-13

8. Incentive fee revenue is not recognized until it is earned. The incentive fees can be based on a variety of factors but the most common are the achievement of target completion dates, target costs, and/or other performance criteria. Please expand your disclosures to provide better insight into your revenue recognition policy for incentive fee revenue by clarifying how and when you determine that amounts are fixed and determinable as well as earned. Please disclose whether you have recorded any revenue that is at risk due to future performance contingencies and, if material, the amount of any such revenue recorded. Please show us in your supplemental response what the revisions will look like.

Shipping and Handling Costs, page F-14

9. Amounts billed to customers for shipping and handling and the related costs are classified as sales. Your disclosures indicate that shipping and handling costs are included in sales. Please tell us what consideration you gave to ASC 605-45-45-19 through 21 in determining it was appropriate to include shipping and handling costs in sales or please clarify in your disclosures, if true, that only amounts billed to customers for shipping and handling are included in sales. Please also clarify in your disclosures, if true, that the related costs of shipping and handling are included in costs of sales.

Earnings Per Share, page F-15

10. For each period presented, please disclose separately for each type of security the number of shares that were not included in diluted earnings per share because they were anti-dilutive. Refer to ASC 260-10-50-1(c). Please show us in your supplemental response what the revisions will look like.

Note E - Acquisitions, page F-19

11. On November 27, 2009, you completed the acquisition of the liquid oxygen therapy business, a non-core asset of Covidien plc. The acquisition included the design, manufacturing, and worldwide sales and service functions for \$9.0 million in cash in the initial closing. In addition, you are required to purchase Covidien's remaining liquid oxygen therapy assets located in Japan for approximately \$1.1 million once Japanese regulatory approval is obtained. The fair value of the net assets acquired of \$16.0 million exceeded the cash paid and, accordingly, resulted in a gain on acquisition of business of \$7.0 million. Please help us better understand how you determined that this was a bargain purchase and correspondingly a gain from bargain purchase should be recorded. Your explanation should include the following:
- Please help us understand whether there were any special circumstances associated with the sale and purchase, including whether it was a forced sale;
 - Please provide us with a summary of the purchase price allocation, which should show the specific assets acquired and liabilities assumed;
 - Please tell us what steps you took to perform a reassessment of whether you had correctly identified all assets acquired and liabilities assumed based on the guidance provided in ASC 805-30-30-4 through 6; and
 - Please clarify what consideration was given to the requirement to purchase Covidien's remaining liquid oxygen therapy assets in arriving at the gain amount. Refer to ASC 805-30-25-2 through 4. Please also expand your disclosures to provide a description of the reasons why the transaction resulted in a gain. Refer to ASC 805-30-50-1(f)(2).

Note M – Supplemental Guarantor Financial Information, page F-32

12. Please revise your disclosures to clarify, if true, that your guarantor subsidiaries are 100% owned. In this regard, please note the definition of wholly-owned as set forth in Rule 1-02(aa) of Regulation S-X. If your guarantor subsidiaries are not 100% owned, tell us how you comply with the financial statement requirements set forth in Rule 3-10 of Regulation S-X.

Item 9A. Controls and Procedures

Changes in Internal Control over Financial Reporting, page 51

13. In light of your phased implementation and upgrade of your existing J D Edwards global Enterprise Resource Planning software system (partially occurring in the fourth quarter), which you state will enhance your internal controls, please explain the disclosure that there have been no changes in your internal controls over financial reporting that have materially affected or reasonably likely to materially affect your internal controls over financial reporting.

Item 15. Exhibits and Financial Statement Schedules, page E-2

14. We note that have not filed on EDGAR all of the schedules and exhibits to the document filed as exhibit 10.9 to the Form 10-K. Please file complete copies of this document, including all schedules and exhibits, with your next periodic report or with a current report on Form 8-K. Refer to Item 601(b)(10) of Regulation S-K.

Certifications, Exhibits 31.1 and 31.2

15. Please file the certifications exactly as set forth in Item 601(b)(31) of Regulation S-K. When identifying the individual at the beginning of the certification, please do not also include the title of the certifying individual.

Form 10-Q for Fiscal Quarter Ended March 31, 2010

General

16. Please address the above comments in your interim filings as well.
17. Please tell us what consideration you gave to SEC Release No. 33-9106 in regards to providing disclosures regarding climate change matters.

Definitive 14A filed April 13, 2010

General

18. We note your disclosure in response to Item 402(s) of Regulation S-K. Please describe the process you undertook to reach the conclusion that disclosure is not necessary.

Base Salary, page 20

19. For each named executive officer, please describe the elements of individual performance that are taken into account in determining base salary as well as the factors considered in deciding to increase or decrease compensation materially. See Items 402(b)(2)(vii) and (ix) of Regulation S-K.

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:

- 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 Sherry Haywood, Staff Attorney, at (202) 551-3345 or Craig Slivka, Special Counsel, at (202) 551-3729 if you have any questions regarding legal matters. Please contact Nudrat Salik, Staff Accountant, at (202) 551-3692 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