



DIVISION OF
CORPORATION FINANCE

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

February 18, 2011

Michael J. Tokich
Senior Vice President and Chief Financial Officer
STERIS Corporation
5960 Heisley Road,
Mentor, Ohio 44060-1834

Re: STERIS Corporation
Form 10-K for the year ended March 31, 2010
Filed May 28, 2010
File No. 1-14643

Dear Mr. Tokich:

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 or do not believe an amendment is appropriate, 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 March 31, 2010

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 23

Financial Measures, page 23

1. We note your disclosures here regarding your use of free cash flow. Specifically, you state that you "use this measure to gauge [your] ability to fund future growth outside of core operations, repurchase common shares and pay cash dividends." Please tell us how your disclosure considers the guidance in Non-GAAP Financial Measure Compliance and Disclosure Interpretation 102.07, which is available on our website at <http://sec.gov/divisions/corpfin/guidance/nongaapinterp.htm>. Revise future filings as appropriate.

Results of Operations, page 27

Fiscal 2010 compared to Fiscal 2009, page 27

2. We note in your discussion of gross profits that you refer to changes in volume, pricing and mix of sales. Please revise future filings to provide a discussion of the extent to which changes in revenue are attributable to changes in pricing or volume. Refer to Item 303(A)(3)(iii) of Regulation S-K.
3. We note that in fiscal 2010, you settled certain obligations related your fiscal 2009 restructuring plan for less than anticipated. To the extent that the reversal of accruals materially affect your financial statements, please revise future filings to discuss nature of the accruals and the underlying reasons why these liabilities were settled for less than your original estimates. As appropriate, please discuss any modifications to your restructuring plans that resulted to changes to your restructuring accruals.

Form 10-Q for the quarter ended December 31, 2010

Item 2 - Management's Discussion and Analysis of Financial Condition and Results of Operations, page 23

Matters Affecting Comparability, page 25

4. We note your income statement presentations excluding the effect of the SYSTEM 1 Rebate Program and class action settlement. While disclosure and discussion of the effect of the SYSTEM 1 Rebate Program and class action settlement is meaningful, your current presentation results in the presentation of numerous non-GAAP financial measures for which you have not included the disclosures required by Item 10(e) of Regulation S-K. In addition, in Non-GAAP Financial Measures Compliance and Disclosure Interpretation 102.10, which is available on our website at <http://sec.gov/divisions/corpfin/guidance/nongaapinterp.htm>, the Staff has indicated that such a presentation may attach undue prominence to the non-GAAP information. Please revise future filings to remove the non-GAAP income statement and instead provide a clear, separate presentation and discussion of each non-GAAP financial measure presented. Please note this comment also applies to the presentation in your Item 2.02 Form 8-K earnings releases. Please provide us a sample of your proposed revised disclosures.

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 Eric Atallah, Staff Accountant at (202) 551-3663 or me at (202) 551-3643 if you have questions regarding comments on the financial statements and related matters. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant at (202) 551-3643 with any questions.

Sincerely,

Kevin L. Vaughn
Accounting Branch Chief