



DIVISION OF  
CORPORATION FINANCE

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

May 4, 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**  
**Form 10-Q for the Quarter Ended December 31, 2010**  
**File No. 1-14643**

Dear Mr. Tokich:

We have reviewed your letter dated April 15, 2011 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 amending your filing, 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 any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

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

1. We note your response to prior comment 1. We are unable to agree with your analysis regarding the need to amend each of your June 30, September 30 and December 31, 2010 Forms 10-Q. Specifically, we believe that the presentation in those filings presents the non-GAAP measures with greater prominence than the corresponding GAAP measures, which is not permitted by Item 10(e) of Regulation S-K as further discussed in the Staff's Non-GAAP Financial Measures Compliance and Disclosure Interpretation 102.10.

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Please amend each of your June 30, September 30 and December 31, 2010 Forms 10-Q to remove the non-GAAP income statement presentation and include a discussion of your results of operations that presents the GAAP results with equal or greater prominence.

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