



DIVISION OF
CORPORATION FINANCE

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

February 24, 2012

Via E-mail

Mr. Jost Fischer
Chief Executive Officer
Sirona Dental Systems, Inc.
30-30 47th Avenue
Suite 500
Long Island City, New York 11101

**Re: Sirona Dental Systems, Inc.
Form 10-K for the Fiscal Year Ended September 30, 2011
Filed November 21, 2011
File No. 000-22673**

Dear Mr. Fischer:

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.

Form 10-K for the Fiscal Year Ended September 30, 2011

Notes to Consolidated Financial Statements, page F-10

Note 1 – The Company and its Operations, page F-10

Foreign Currency, page F-10

1. We note the significant fluctuations year-over-year in the (gain)/loss on foreign currency transactions, net in the Consolidated Statements of Income. Please tell us if any rate changes have occurred after the date of your financial statements and, if so, whether the

effect on unsettled balances pertaining to foreign currency transactions is significant. Refer to paragraph 830-20-50-2 of the FASB Accounting Standards Codification.

Form 8-K Filed February 3, 2012

2. We note your disclosure of non-GAAP operating income, excluding amortization in the summary bullet points in the introduction to your press release. In future filings, please include a presentation, with equal or greater prominence, of the most directly comparable financial measure or measures calculated and presented in accordance with GAAP in accordance with Regulation G.
3. We note that you present forward-looking non-GAAP measures. However, we do not see where you have provided a reconciliation of these forward-looking non-GAAP financial measures with the corresponding forward-looking GAAP financial measures as required by Regulation G or otherwise provided the disclosures required by Regulation G for forward-looking non-GAAP financial measures. Please revise future filings by providing reconciling information that is available without unreasonable effort. As applicable, include clear disclosure of why any forward-looking GAAP information is not accessible. Identify such information that is unavailable and disclose its probable significance. Refer to the guidance in Regulation G.

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.

Mr. Jost Fischer
Sirona Dental Systems, Inc.
February 24, 2012
Page 3

You may contact Gary Newberry at (202) 551-3761 or Lynn Dicker, Reviewing Accountant, at (202) 551-3616 if you have questions regarding comments on the financial statements and related matters. In this regard, do not hesitate to contact me at (202) 551-3643.

Sincerely,

/s/ Lynn Dicker for

Kevin L. Vaughn
Accounting Branch Chief