



DIVISION OF
CORPORATION FINANCE

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

March 19, 2015

Via e-mail

Jeffrey T. Slovin
President and 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 Fiscal Year Ended September 30, 2014
Filed November 21, 2014
File No. 000-22673**

Dear Mr. Slovin:

We have limited our review of your filing to the financial statements and related disclosures 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 these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended September 30, 2014

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 27

1. We note that you present certain non-GAAP financial measures, including constant currency revenues, gross profit excluding the impacts of the MDP transaction and the exchange, SG&A expense excluding certain costs as a percentage of revenue, and consolidated adjusted EBITDA. Please revise future filings to include all of the disclosures required by Item 10(e)(1)(i) of Regulation S-K for all non-GAAP measures included in your presentation.

Revenue, page 32

2. We note that you list several factors as contributing to changes in revenue and cost of goods sold. When you list two or more factors as contributing to a material change,

please revise future filings to quantify the extent of the contribution of each as necessary to provide an understanding of a material change. Refer to FRR 501.04.

Item 8. Financial Statements

Note 2. Basis of Presentation and Summary of Significant Accounting Policies

Foreign Currency, page 68

3. We note that you conduct a majority of your operations outside the U.S. Please revise future filings to describe the methods used to translate the financial statements of your foreign operations. Refer to FASB ASC 235-10-50-1, 235-10-50-3, and 830-30-45-3.

Note 8. Income Taxes, page 81

4. We note that you present a table of net deferred tax asset (liability). In future filings please disclose the components of the net deferred tax liability or asset showing the total of all deferred tax liabilities and the total of all deferred tax assets as required by FASB ASC 740-10-50-2. Also disclose the net change during the year in the total valuation allowance as required by FASB ASC 740-10-50-2.

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.

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You may contact David Burton at (202) 551-3626 or Kate Tillan, Assistant Chief Accountant, at (202) 551-3604 if you have questions regarding comments on the financial statements and related matters. You may also contact me at (202) 551-3671.

Sincerely,

/s/ Kate Tillan for

Martin James
Senior Assistant Chief Accountant

cc (via e-mail): Michael Friedlander, Associate General Counsel