



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

Mail Stop 3030

July 31, 2009

Via Facsimile and U.S. Mail

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

Re: Sirona Dental Systems, Inc.
Form 10-K for fiscal year ended September 30, 2008
Filed December 4, 2008
Form 10-Q for the quarterly period ended March 31, 2009
File No. 0-22673

Dear Mr. Fischer:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise future filings in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for Fiscal Year Ended September 30, 2008

Manufacturing and Suppliers, page 8

1. We note the single-supply sources and the limited number of sources mentioned in the third paragraph of this section. In future filings, please disclose the extent to which your products are dependent on components purchased from limited or single-supply sources. Also, disclose the availability of the components and the names of the suppliers. In addition, clarify whether you have written agreements with any of the suppliers, and, if applicable, disclose the material terms of the agreements.

Distribution, page 9

2. We note the disclosure in the first paragraph of this section that Henry Schein is one of your primary distributors. In future filings, please clarify whether you have a written agreement with Henry Schein, and, if applicable, disclose the material terms of the agreement. Also, file as an exhibit the written agreement, if applicable, with Henry Schein.
3. Please tell us where you filed as an exhibit the March 2007 amended distribution agreement mentioned in the third paragraph of this section.

Restrictive covenants and conditions contained in our senior credit agreement, page 17

4. It appears from section 24.2 of exhibit 10.17 that the debt coverage ratio mentioned in this section represents the required ratio at September 30, 2007. In future filings, please update to reflect the current ratio. Also, expand the appropriate section in future filings, such as on page 40 in your MD&A, to compare the ratios to your financial position in the period for which financials are presented.

Overview, page 27

5. The overview in this section should be a balanced, executive-level discussion that identifies the most important themes or other significant matters with which management is concerned primarily in evaluating the company's financial condition and operating results. In future filings you should discuss material business opportunities, challenges and risks, such as those presented by known material trends and uncertainties, on which the company's executives are most focused, and the actions they are taking in response to them. For example, we note the themes and matters discussed in your May 5, 2009 and December 4, 2008 earnings conference calls, such as the two programs to reduce expenses and save \$20 million mentioned in your call and that you will pay down debt of approximately \$80 million six months ahead of schedule mentioned in your call. For further guidance on the content and purpose of the "Overview," see Commission Guidance Regarding Managements Discussion and Analysis of Financial Condition and

Results of Operations Interpretive Release No. 34-48960 (December 19, 2003) on our website.

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

Critical Accounting Policies, page 41

- Impairment of Indefinite-Lived Assets, page 44

6. In light of the significant amount of goodwill reported on your consolidated balance sheet, please further revise the discussion here in future filings to address the following:
- Clearly disclose the number of reporting units you have identified for purposes of your annual goodwill impairment testing.
 - Discuss in greater detail the methodologies you utilize to determine the fair value of the reporting units and quantify and discuss any significant assumptions utilized in your evaluation.
 - Here and in the notes to the consolidated financial statements, disclose in greater detail your policy for testing goodwill for impairment, including a more detailed description of the two-step impairment testing process outlined in FASB Accounting Standards Codification 350-20-35

Certain Relationships and Related Transactions, page 51

7. With respect to your disclosure in the first two paragraphs on page 57 of the proxy statement that you have incorporated by reference into your Form 10-K, please provide in future filings the disclosure required by Item 404(b) of Regulation S-K.

Exhibits, Financial Statement Schedules, page 52

8. We note that the exhibit index does not appear to include the October 1, 2005 Advisory Services Agreement filed as exhibit A to exhibit 10.1 of your Form 10-Q for the quarterly period ended March 31, 2009. In future filings, please expand the exhibit index to include your advisory service agreements with Luxco.

Note 22. Segment Reporting, page F-35

9. We note that your disclosure of long-lived assets by geographic region includes goodwill and intangible assets. Please note the guidance set forth in the FASB Accounting Standards Codification 280-10-55-23, which indicates that disclosure relating to long-lived assets by geographic region should not include intangible assets. Please revise your future filings accordingly.

Form 10-Q for the quarterly period ending March 31, 2009

Management's Discussion and Analysis of Financial Condition and Results of Operations, page 19

Net other operating (income)/loss and restructuring costs, pages 22 and 25

10. We note that you implemented a formal restructuring plan in December 2008 which has resulted in \$2.8 million of expenses through March 31, 2009 and that you expect to additional costs of \$7.5 million in the second half of fiscal 2009. Please expand MD&A in future filings to include discussion of the likely effects of management's plans on financial position, future operating results and liquidity unless it is determined that a material effect is not reasonably likely to occur. As appropriate, please revise future filings to discuss whether you expect the cost savings to be offset by anticipated increases in other expenses or reduced revenues. In future periods, if actual savings anticipated by the restructuring plan are not achieved as expected or are achieved in periods other than as expected, discuss that outcome, its reasons and the possible effects on future operating results and liquidity. Refer to SAB Topic 5P:4.

* * * *

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your response that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

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 all information required under the Securities and Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- The company is responsible for the adequacy and accuracy of the disclosure in the filing;

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- 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact David Burton, Staff Accountant, at (202) 551-3626 or me at (202) 551-3643 if you have questions regarding comments on the financial statements and related matters. Please contact Thomas Jones, Staff Attorney, at (202) 551-3602 or Jay Mumford, Legal Reviewer, at (202) 551-3637 if you have questions on other comments. In this regard, do not hesitate to contact Martin James, Senior Assistant Chief Accountant at (202) 551-3671.

Sincerely,

Kevin L. Vaughn
Accounting Branch Chief