June 3, 2010 – Via Edgar

Mr. Brian Cascio Accounting Branch Chief Division of Corporation Finance Securities and Exchange Commission Washington, DC 20549-6010

> Re: DENTSPLY International Inc. Form 10-K for the fiscal year ended December 31, 2009 Filed February 22, 2010 Forms 8-K dated April 29, 2010 and February 10, 2010 File No. 000-16211

Dear Mr. Cascio:

By letter dated May 25, 2010, the Staff has requested additional information from DENTSPLY International Inc. related to the Form 10-K filing and Forms 8-K referenced above. We have set forth below our responses to the Staff's comments. We have keyed our responses to the Staff's comments by providing our response immediately following a reiteration of the original Staff comment.

In addition, as requested by the Staff, DENTSPLY International Inc. acknowledges that:

• DENTSPLY International Inc. is responsible for the adequacy and accuracy of the disclosure in the filings;

- 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
- DENTSPLY International Inc. 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.

Please contact me at 717-849-4243 or at the address below with any additional comments you have related to subject filings.

Sincerely,

William R. Jellison DENTSPLY International Inc. Sr. Vice President and CFO 221 W. Philadelphia Street York, PA 17405-0872 (717) 849-4243 1. Please tell us why you have not included "net income" within selected financial data. We reference Item 301 of Regulation S-K, which requires presentation of "net income from continuing operations."

Response:

Although we present net income attributable to DENTSPLY International to eliminate the net income which is allocable to a co-owner of a consolidated business, in future filings we will include a line item for "net income from continuing operations" as required by Item 301 of Regulation S-K in addition to "net income attributable to DENTSPLY International."

Results of Operations, page 25

2. Regarding the restructuring programs undertaken in 2008 and 2009, in future filings please provide quantified disclosure of the expected cost savings from plans and identify the periods when you expect to first realize those benefits. For guidance on these MD&A disclosures, please refer to SAB Topic 5-P.

Response:

The Company will ensure that future disclosures regarding material restructuring programs include expected cost savings and the period or periods in which these savings are expected to be realized.

Operating Segments Results, page 28

3. We see that you attribute the fluctuations in net sales and operating income by operating segment to unfavorable product and geographic sales mix, changes in sales, unfavorable absorption and currency translation. In future filings, please also include a discussion of the underlying reasons why each of those items changes and how they impacted net sales and operating income. For example you could discuss how the sales and geographic mix changed and why that particular mix increased or decreased revenues/operating margin. In addition, when you attribute the fluctuations to multiple factors, please quantify the impact of each factor on the financial statement line item.

Response:

In future filings, the Company will enhance the quantitative and qualitative disclosures regarding the factors causing significant fluctuations in net sales and operating income by operating segment.

Note 13, Benefit Plans, page 77

Fair Value Measurements of Plan Assets, page 81

4. In future filings, please revise to disclose the methodologies and assumptions you used to value the level 3 pension plan assets.

Response:

While the level 3 pension plan assets were only \$5.6 million as of December 31, 2009, in future filings the Company will ensure that disclosures regarding the fair value measurements of plan assets include the manner used to value level 3 pension plan assets.

Forms 8-K dated April 29, 2010 and February 10, 2010

5. We see that you present "Non-GAAP earnings per share" as a headline in the press release attached as an exhibit to the Forms 8-K without providing the comparable GAAP measure. Please note that Instruction 2 to item 2.02 of Form 8-K requires that when furnishing information under this item, you must provide all the disclosures required by paragraph (e)(1)(i) of Regulation S-K. In future filings please provide a presentation, with equal or greater prominence, of the most directly comparable financial measure calculated and presented in accordance with U.S. GAAP.

Response:

The Company will ensure that future press releases attached as an exhibit to the Form 8-K include a reference with equal prominence to the comparable GAAP measure, wherever a non-GAAP number is mentioned or shown.