April 21, 2011 - Via EDGAR

Ms. Kate Tillan Assistant Chief Accountant Division of Corporation Finance Securities and Exchange Commission Washington, DC 20549-0306

Re: DENTSPLY International Inc.

Form 10-K for the fiscal year ended December 31, 2010

Filed February 18, 2011 File No. 0-16211

Dear Ms. Tillan,

By letter dated April 7, 2011, the Staff has requested additional information from DENTSPLY International Inc. related to the Form 10-K filing 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 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
- · 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,

/s/ William R. Jellison

William R. Jellison DENTSPLY International Inc. Sr. Vice President and CFO 221 W. Philadelphia Street York, PA 17405-0872 (717) 849-4243

Liquidity and Capital Resources

1. We see that the majority of your income is generated outside of the United States and that you plan to indefinitely invest outside the United States \$800 million of cumulative earnings from your foreign subsidiaries. Please tell us your consideration of providing enhanced liquidity disclosures to discuss the amount of investments held by foreign subsidiaries that would be subject to a potential tax impact associated with the repatriation of undistributed earnings on foreign subsidiaries to illustrate that some investments are not presently available to fund domestic operations such as corporate expenditures or acquisitions without paying a significant amount of taxes upon their repatriation. We refer you to Item 303(a)(1) of Regulation S-K and Section IV of SEC Release 33-8350.

Response:

The Company has reviewed Item 303(a)(1) of Regulation S-K and Section IV of SEC Release 33-8350 and believes that providing enhanced liquidity disclosures discussing the ability, inability, and/or limitations of the Company to access cash and investments held by foreign subsidiaries to fund domestic operations would be beneficial. In future filings, the Company will revise the Liquidity and Capital Resources section of Management's Discussion and Analysis to include additional disclosures to discuss investments held by foreign subsidiaries which may not be presently available to fund domestic operations due to significant taxes being required upon their repatriation and how cash needs across our businesses are met.

Accounts and Notes receivable - Trade

2. Please revise future filings do disclose how you estimate the allowance for doubtful accounts for losses from the inability of customers to make required payments.

Response:

The Company will ensure that future filings include disclosures on how the Company estimates the allowance for doubtful accounts for losses from the inability of customers to make required payments.

Litigations

3. You disclose that the company records liabilities at the low point of the ranges for your estimates. Please explain how your accounting policy considers ASC 450-20-30-1 under which if some amount within a range of loss appears at the time to be a better estimate than any other amount within the range, you should accrue that amount and only when no amount within the range is better estimate than any other amount, you should accrue the minimum amount in the range.

Response:

We thoroughly evaluate the range of loss for liabilities covered by ASC 450-20-30-1 for the best estimate of loss. If an amount within the range of loss is a better estimate than any other amount, we accrue the best estimate of loss. If there is no amount which is a better estimate within the range of loss, we accrue the minimum amount of the range of loss. We will more clearly describe our accounting policy in future filings.

Revenue Recognition

4. We see that you sell to distributors. Please tell us whether your revenue recognition policies differ between sales to distributors and end users. In addition, please clarify if you have any post shipment obligation or customer acceptance provisions with your distributors and, if so, how such obligations and provisions are considered in your practices.

Response:

Our revenue recognition policies do not differ between sales to distributors and sales to end users. Additionally, no post-shipment obligations or customer acceptance provisions exist for distributors, except for rebates, which are accrued as a reduction of net sales based on estimates of customer performance against sales targets, and the Company's policy allowing returns of certain artificial tooth products, for which a credit against future tooth purchases is provided to the customer. We closely monitor our revenue recognition to ensure that it is in compliance with the provisions of ASC 605, and in doing so fully consider the guidance provided by SAB Topic 13, "Revenue Recognition."

5. Please revise future filings to disclose how you estimate rebates offered to your customers.

Response:

The Company will ensure that future filings include disclosures on how the Company estimates rebates offered to our customers.

Investment in Affiliates

6. Please tell us why the company has significant influence over DIO.

Response:

In evaluating the accounting for the Company's purchase of 16.2% of DIO's outstanding shares, it was determined that the Company has significant influence over DIO's operating and financial policies based on the following factors:

- · DENTSPLY has the right to name two of four directors to the Board of Directors of DIO, whereas DIO has the right to name one insider and nominate the fourth independent director, who must be approved by both DENTSPLY and DIO,
- · DENTSPLY has the right to name a new Statutory Auditor/CFO for DIO and review the filling of key management positions,
- · DENTSPLY has further invested 56.6 billion Korean won in new convertible debt instruments of DIO which replaced all previous debt holders, is convertible within one year of issuance, and upon conversion, would give DENTSPLY majority ownership of DIO,
- · DENTSPLY has obtained regular and frequent updates on operating decisions from DIO's management, as well as review key decisions at a board of director level through DENTSPLY's representative on DIO's Board of Directors, and
- · DENTSPLY has the right to obtain from DIO the timely financial information necessary to apply the equity method of accounting.

Variable Interest Entities

7. We see that you are the primary beneficiary for Materialise and Zhermack. Please tell us how the notes to the financial statements provide the information content applicable to public companies, which begin at FASB ASC 810-10-50-7. Please provide all of the relevant required disclosure in future filings or tell us why your current disclosure is sufficient.

Response:

The Company continuously re-evaluates the required disclosures around VIE accounting. At December 31, 2010, the Company believes that the current disclosures are sufficient as both the operating results of Materialise Dental and Zhermack entities and their related VIE disclosures are immaterial individually and in the aggregate to the Consolidated Financial Statements. Materialise Dental, where the Company has a 46% ownership interest, contributes less than 1% of DENTSPLY's Total Net Sales and DENTSPLY's Total Pretax Income, and contributes approximately 2.5% to DENTSPLY's Total Assets (less than 1% if you exclude Goodwill). Zhermack, where the Company has a 60% ownership interest, contributes approximately 3% of DENTSPLY's Total Net Sales and 2.5% of DENTSPLY's Total Pretax Income, and contributes approximately 4.5% of DENTSPLY's Total Assets (2.5% if you exclude Goodwill). We further highlight to the staff that we purchased the NCI of Materialise Dental during the first quarter of 2011. As a result, the only VIE remaining is Zhermack.

Litigation

8. Please tell us how your disclosures considered the guidance in FASB ASC 450-20-50-1 through 50-5.

Response:

In connection with the Litigation disclosure, the Company reviewed and considered the appropriate disclosure requirements in accordance with the guidance provided under ASC 450-20-50-1 through ASC 450-20-50-5. The following lists the Company's consideration under such provision.

- · <u>ASC 450-20-50-1</u> No disclosure on the amount of accruals made pursuant to ASC 450-20-25-2 is made as none of the disclosed litigation cases meet the criteria of ASC 450-20-50-1.
- · <u>ASC 450-20-50-2</u> The Company discloses in the last sentence of paragraph four of the Litigation disclosure, the indication that if "matters are unfavorably resolved, it is possible the Company's results from operations could be materially impacted."
- · <u>ASC 450-20-50-3</u> The Company discloses the details of the contingency for each case in the first three paragraphs of the Litigation disclosure, as in each case, there is a reasonable possibility of loss or an exposure to loss exists in excess of the amount accrued pursuant to paragraph ASC 450-20-30-1.
- · <u>ASC 450-20-50-4</u> The Company includes within the disclosure of each contingency the nature of the contingency, and that a reasonable range of estimated loss cannot be made, except as disclosed. For the third disclosed case, the Company states that the jury verdict was for \$44 million; however the Company believes that the "decision is not supported by the facts in the case or is supported by applicable law and intends to vigorously pursue all available options to challenge it," thereby establishing the reasonably possible range of loss.
- · ASC 450-20-50-5 The Company disclosed the contingencies pursuant to this requirement, as discussed above.

The Company believes that the existing disclosure meets the requirements of ASC 450-20-50-1 through ASC 450-20-50-5. However, in future filings, the Company will endeavor to meet such requirements with more clarity as necessary.

Exhibits 31.1 and 31.2

- 9. We note the following in the certifications required by Exchange Act Rule 13a-14(a):
 - · In paragraph 4, there is a parentheses missing after 15d-15(e);
 - · In paragraphs 4(b) and 5, the words internal control over financial reporting were changed to internal controls over financial reporting;
 - · In paragraph 4(b), the work 'our' was replaced by 'their';
 - · In paragraph 4(c), the phrase '(the registrant's fourth fiscal quarter in the case of an annual report)' is missing; and
 - · In paragraph 5, the phrase '(or persons performing the equivalent functions)' is missing.

In future filings, please revise the certification so that it is consistent with the language in Item 601(b)(31)(i) of Regulation S-K.

Response:

In future filings, the Company will revise the certification so that it is consistent with the language in Item 601(b)(31)(i) of Regulation S-K.