FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL

OMB Number: 3235-0287

Estimated average burden

0.5

hours per response:

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

| 1. Name and Address of Reporting Person* <u>CHOLMONDELEY PAULA H</u> | | | | | 2. Issuer Name and Ticker or Trading Symbol DENTSPLY INTERNATIONAL INC /DE/ XRAY | | | | | | | [(Che | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) X Director 10% Owner | | | | | |
|--|--|--|---|-------|--|------|----------------------|--------|--|---|---|---|---|--|------------------------------|--|---------------------------------------|--|
| (Last) (First) (Middle) 221 W. PHILADELPHIA ST | | | 3. Date of Earliest Transaction (Month/Day/Year) 10/01/2010 | | | | | | | | Officer (below) | Officer (give title below) | | Other (spec below) | | | | |
| (Street) YORK PA 17405-0872 (City) (State) (Zip) | | | 4. If Amendment, Date of Original Filed (Month/Day/Year) 06/30/2010 | | | | | | Line | dividual or Joint/Group Filing (Check Applicable) K Form filed by One Reporting Person Form filed by More than One Reporting Person | | | | | | | | |
| | Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | | | | | | | | |
| 1. Title of Security (Instr. 3) 2. Transa Date (Month/D | | | action 2A. Deemed Execution Date, | | 3. Transaction Code (Instr. 8) 4. Securities Acquired (A) Disposed Of (D) (Instr. 3, 4) | | | (A) or | 5. Amoun Securities Beneficial Owned Fo | Form (D) o | | n: Direct II or Indirect E ostr. 4) C | 7. Nature of Indirect Beneficial Ownership | | | | | |
| | | | | | | Code | v | Amount | (A) or (D) | Price | Reported Transaction (Instr. 3 and | | | | (Instr. 4) | | | |
| | Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | | | | |
| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Da if any (Month/Day/Y | Date, | Code (Inst | | | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | 7. Title and Amount of Securities Underlying Derivative Securit (Instr. 3 and 4) | | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported | e S Illy | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | Beneficial Ownership (Instr. 4) | |
| | | | | Code | | v | (A) | (D) | Date Exercisa | able | Expiration Date | Title | Amount or Number of Shares | | Transaction(s) (Instr. 4) | uii(S) | | |
| Phantom Stock- Director's Deferred | \$31.11 | 06/28/2010 | | | A | V | 11.98 ⁽³⁾ | | (1) | | (2) | Common Stock | 11.98 | \$31.11 | 7,463.78 | 3 ⁽⁴⁾ | D | |

Explanation of Responses:

- Value paid in stock upon retirement
- 2. Not applicable to this transaction
- 3. Dividend on existing account balance
- 4. On the form 4 filing dated 6/28/2010, the number of derivative securities beneficially owned following reported transactions was incorrectly reported as 7179.3

Remarks:

Brian M. Addison, POA 10/01/2010

** Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- * If the form is filed by more than one reporting person, see Instruction 4 (b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB Number.