FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

| Washington, | D.C. | 20549 |
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| STATEMENT C | F CHANGES II | N BENEFICIAL | OWNERSHIP |
|-------------|--------------|--------------|------------------|

| OMB APPROVAL | | | | | | | | | |
|--------------------------|-----------|--|--|--|--|--|--|--|--|
| OMB Number: | 3235-0287 | | | | | | | | |
| Estimated average burder | n | | | | | | | | |
| hours per response: | 0.5 | | | | | | | | |
| | | | | | | | | | |

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

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* VALLES JEAN PAUL | | | | 2. Issuer Name and Ticker or Trading Symbol MINERALS TECHNOLOGIES INC [MTX] | | | | | | | | _ | ble) | Perso | 10% Owr | ner | |
|--|--|-----------------|--------------------------------|---|---|---------|--|---------------------|------------------------------------|--|---|---|--|-------------------------|--|--|----------|
| (Last) (First) (Middle) MINERALS TECHNOLOGIES INC. | | | | | 3. Date of Earliest Transaction (Month/Day/Year) 10/03/2005 | | | | | | | | Officer (below) | give title | | Other (sp below) | ecify |
| 405 LEXINGTON AVENUE | | | | 4. | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | 6. Inc | 6. Individual or Joint/Group Filing (Check Applicable | | | | | |
| (Street) NEW YO | RK NY | <i>(</i> | 10174 | | | | | | | - 1 ' | X Form filed by One Reporting Person Form filed by More than One Reporting Person | | | | ng | | |
| (City) | (Sta | ate) | (Zip) | | | | | | | | | | | | | | |
| | Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | | | | | | | |
| Date | | | Transaction te onth/Day/ | Execution | | Date, | Transaction Dispose Code (Instr. | | ities Acquired d Of (D) (Instr. | | 5. Amount Securities Beneficiall Owned Fo | Form (D) or ollowing (I) (In | | r Indirect B str. 4) | 7. Nature of ndirect Beneficial Ownership | | |
| | | | | | | | | Code | / Am | ount | (A) or (D) | Price | Reported Transactio (Instr. 3 an | ion(s) | | | nstr. 4) |
| | Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | | | |
| Security or Exercise (Month/Day/Year) if any | | Execution Date, | Code (Instr. | | Derivative | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | and | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) | | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | |
| | | | | Code | v | (A) (D) | | Date Exercisable | Expira Date | tion | Title | Amount or Number of Shares | | (Instr. 4) | | | |
| PHANTOM STOCK UNITS | \$0 ⁽¹⁾ | 10/03/2005 | | A | | 135.846 | | (2) | (2) | | COMMON STOCK | 135.846 | \$57.05 | 6,133.68 | 8(3) | D | |

Explanation of Responses:

1. EACH PHANTOM STOCK UNIT, WHEN REDEEMED, WILL HAVE THE VALUE OF ONE SHARE OF THE COMPANY'S COMMON STOCK ON THE FIRST BUSINESS DAY OF THE MONTH IN WHICH PAYMENT IS MADE.

2. THE PHANTOM STOCK UNITS WERE ACCRUED UNDER THE MINERALS TECHNOLOGIES INC. NON-FUNDED DEFERRED COMPENSATION AND UNIT AWARD PLAN FOR NON-EMPLOYEE DIRECTOR'S AND ARE TO BE SETTLED IN CASH UPON THE REPORTING PERSON'S RETIREMENT.

3. THE REPORTING PERSON ALSO DIRECTLY OWNS (I) EMPLOYEE STOCK OPTIONS TO PURCHASE 202,962 SHARES OF MTX COMMON STOCK AT \$39.53 PER SHARE WHICH BECAME EXERCISABLE IN THREE EQUAL ANNUAL INSTALLMENTS BEGINNING ON JANUARY 28, 2000 AND EXPIRING ON JANUARY 28, 2009 AND (II) DIRECTOR STOCK OPTIONS TO PURCHASE 135 SHARES OF MTX COMMON STOCK AT \$46.63 PER SHARE WHICH BECAME EXERCISABLE IN THREE EQUAL ANNUAL INSTALLMENTS BEGINNING ON JANUARY 24, 2003 AND EXPIRING ON JANUARY 24, 2012.

Remarks:

VICTORIA LUKAUSKAS FOR JEAN-PAUL VALLES

10/05/2005

** 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.