FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

| STATEMENT | OF CHANG | GES IN BEN | JEFICIAL (| OWNERSHI |
|-----------|----------|------------|------------|----------|

| OMB APPRO |)VAL | | | | |
|------------------------|-----------|--|--|--|--|
| OMB Number: | 3235-0287 | | | | |
| Estimated average burd | en | | | | |
| 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* | | | | 2. Issuer Name and Ticker or Trading Symbol MINERALS TECHNOLOGIES INC [MTX | | | | | | | | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) | | | | | | | | |
|--|--|------------|-------------------|---|-----------------|--|--|-----------------|---------------------|--|--------------------|---|--|--|-------------------|--|--|---------------|---------|--|
| DUNHAM DUANE | | | | | $1\overline{1}$ | | | | | | | | | X | Directo | or | | 10% O | wner | |
| (Last) | (Fi | rst) (| (Middle) | | | | | | | | | | | | Officer below) | (give title | | Other (below) | specify | |
| MINERALS TECHNOLOGIES INC. | | | | 3. Date of Earliest Transaction (Month/Day/Year) 09/17/2007 | | | | | | | | | | | | | | | | |
| 405 LEXINGTON AVENUE | | | | | | | | | | | | | | | | | | | | |
| | | | | | 4. If | 4. If Amendment, Date of Original Filed (Month/Day/Year) | | | | | | | | 6. Individual or Joint/Group Filing (Check Applicable Line) | | | | | | |
| (Street) NEW YO | ORK N | v · | 10174 | | | | | | | | | | | X | Form | filed by One | Rep | orting Perso | on | |
| | | | | | | | | | | | | | | | Form Person | filed by Mor | e thar | n One Repo | orting | |
| (City) | (S | tate) | (Zip) | | | | | | | | | | | | | | | | | |
| | Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned | | | | | | | | | | | | | | | | | | | |
| 1. Title of Security (Instr. 3) 2. Transar Date (Month/Date | | | | | Execution Date, | | | Code (Instr. 5) | | | | 4 and Securitie Benefici | | es Forn ially (D) o Following (I) (II | | n: Direct r Indirect istr. 4) | 7. Nature of Indirect Beneficial Ownership | | | |
| | | | | | | Code | v | Amount | (A) or (D) Price | | e | Transac (Instr. 3 | ction(s) | | | (Instr. 4) | | | | |
| | Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) | | | | | | | | | | | | | | | | | | | |
| | | | Transa Code (I | ansaction of ode (Instr. Derivative | | | 6. Date Exercisable and Expiration Date (Month/Day/Year) | | | 7. Title and Amount of Securities Underlying Derivative Securi (Instr. 3 and 4) | | 8. Price of Derivative Security (Instr. 5) | | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4) | | 10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) | | | |
| | | | | | Code | v | (A) | (D) | Date Exercisal | | Expiration Date | Title | Amount or Number of Shares | er | | | | | | |
| Phantom Stock Units | \$0 ⁽¹⁾ | 09/17/2007 | | | A | | 3.123 | | (2) | | (2) | Common Stock | 3.12 | 3 | \$0 | 4,096.30 | 1 | D | | |

Explanation of Responses:

- 1. Each phantom stock unit is the economic equivalent of one share of the Company's common stock.
- 2. The phantom stock units were accrued under the Minerals Technologies Inc. Non-Funded Deferred Compensation and Unit Award Plan for Non-Employee Directors and are to be settled in cash upon the reporting person's termination of service as a director.

Remarks:

Laszlo Serester For Duane R. 09/19/2007 **Dunham**

** 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.