

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

OMB APPROVAL	
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1. Name and Address of Reporting Person* <u>MUSCARI JOSEPH C</u> (Last) (First) (Middle) 405 LEXINGTON AVENUE (Street) NEW YORK NY 10174 (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>MINERALS TECHNOLOGIES INC [MTX]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner <input checked="" type="checkbox"/> Officer (give title below) Other (specify below) Chief Executive Officer
	3. Date of Earliest Transaction (Month/Day/Year) 03/01/2010	
	4. If Amendment, Date of Original Filed (Month/Day/Year)	
		6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> 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. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	03/01/2010		M		6,833	A	(1)	23,591	D	
Common Stock	03/01/2010		F		3,431	D	\$49.4	20,160	D	
Common Stock	03/01/2010		M		6,666	A	(1)	26,826	D	
Common Stock	03/01/2010		F		3,347	D	\$49.4	23,479	D	
Common Stock	03/01/2010		M		20,000	A	(1)	43,479	D	
Common Stock	03/01/2010		F		10,044	D	\$49.4	33,435	D	
Common Stock								741 ⁽²⁾	I	By 401(k) Plan

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 Date, if any (Month/Day/Year)	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercisable and Expiration Date (Month/Day/Year)		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) (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 Exercisable	Expiration Date						Title
Deferred Restricted Stock Units (DRSUs)	(1)	03/01/2010		M			6,833	(3)	(3)	Common Stock	6,833	(1)	80,852	D	
DRSUs	(1)	03/01/2010		M			6,666	(4)	(4)	Common Stock	6,666	(1)	74,186	D	
DRSUs	(1)	03/01/2010		M			20,000	(5)	(5)	Common Stock	20,000	(1)	54,186	D	

Explanation of Responses:

- Each DRISU is the economic equivalent of one share of Minerals Technologies Inc. Common Stock.
- Mr. Muscari has 741 shares of Minerals Technologies Inc. Common Stock under the Company's 401(k) Plan. The information contained in this report is based on a Plan Statement dated as of March 1, 2010.
- Mr. Muscari was granted 20,500 DRSUs on February 27, 2008, which vest in three equal annual installments beginning on February 27, 2009.
- Mr. Muscari was granted 20,000 DRSUs on March 1, 2007, which vest in three equal installments beginning on March 1, 2008.
- Mr. Muscari was granted 20,000 DRSUs on March 1, 2007, which vest on the third year anniversary of the grant date.

Remarks:

Thomas Meek for Joseph C. Muscari 03/03/2010

** 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.

