FORM 4

Section 16. Form 4 or Form 5 obligations may continue. See

Instruction 1(b).

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

Check this box if no longer subject to

## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

**OMB APPROVAL** OMB Number: Estimated average burden hours per response: 0.5

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*  MUSCARI JOSEPH C							2. Issuer Name and Ticker or Trading Symbol MINERALS TECHNOLOGIES INC [ MTX ]											5. Relationship of Reporting Person(s) to Issuer (Check all applicable)  Director 10% Owner					
(Last) (First) (Middle) 405 LEXINGTON AVENUE						3. Date of Earliest Transaction (Month/Day/Year) 01/27/2010											X Officer (give title Other (specify below)  Chief Executive Officer						
(Street) NEW YORK NY 10174 (City) (State) (Zip)				4. 1	4. If Amendment, Date of Original Filed (Month/Day/Year)											6. Individual or Joint/Group Filing (Check Applicable Line)  X Form filed by One Reporting Person Form filed by More than One Reporting Person							
		Tab	le I - Nor	ı-Deriv	/ative	e Se	curities	s Ac	qu	ired, I	Disp	osed o	of, o	r Ber	nefici	ally	Owned						
1. Title of Security (Instr. 3)  2. Transa Date (Month/D							2A. Deemed Execution Date, if any (Month/Day/Year		,	3. Transac Code (li 8)			ities Acquired (A) or d Of (D) (Instr. 3, 4 a				Beneficially Owned Following		Form (D) o	: Direct r Indirect str. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)		
										Code	v	Amount	nt (A) o		Pric	e	Reported Transact (Instr. 3 a	ion(s)					
Common Stock																5		93(1)		Ι .	By 401(k) Plan		
		-	Гable II -				urities .										wned						
1. Title of Derivative Security (Instr. 3)	2. Conversion or Exercise Price of Derivative Security	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution I if any (Month/Day	Date,	4. Transaction Code (Instr. 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		6. Date Exercis Expiration Dat (Month/Day/Ye				7. Title and Amoun of Securities Underlying Derivative Security (Instr. 3 and 4)		5	B. Price of Derivative Security Instr. 5)	9. Numbe derivative Securities Beneficia Owned Following Reported Transacti (Instr. 4)	e s lly	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)			
					Code	v	(A)	(D)	Da: Ex	te ercisabl		xpiration ate	Title		Amour or Number of Shares	er							
Employee Stock Option (Right to Buy)	\$49.12	01/27/2010			A		44,400			(2)	0:	1/27/2020		nmon ock	44,40	00	\$0	204,40	00	D			
Deferred Restricted Stock Units	(3)	01/27/2010			A		26,020			(4)		(4)		nmon ock	26,02	20	\$0	87,68	5	D			

## **Explanation of Responses:**

- 1. Mr. Muscari has 593 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 January 28,
- 2. The options vest in three equal annual installments beginning on January 27, 2011.
- 3. Each DRSU is the economic equivalent of one share of Minerals Technologies Inc. Common Stock.
- 4. DRSUs vest in three equal annual installments beginning on January 27, 2011. Vested shares will be delivered to the reporting person upon vesting.

## Remarks:

Thomas Meek for Joseph C. <u>Muscari</u>

02/05/2010

\*\* 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.