FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL	

OMB Number:	3235-0287						
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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)

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*					2. Issuer Name and Ticker or Trading Symbol AIR PRODUCTS & CHEMICALS INC /DE/									5. Relationship of Reporting Person(s) to Issuer (Check all applicable)					
DONAHUE MICHAEL J				- 1	APD									X Directo	r		10% Ow	ner	
(Last) (First) (Middle)			(Middle)	_ [Officer below)	(give title		Other (s below)	pecify	
7201 HAMILTON BOULEVARD					3. Date 1 <mark>2/31</mark> /.	of Earlies 2009	t Tran	sacti	ion (Mont	h/Da	ay/Year)								
(Street) ALLENTOWN PA 18195			18195	4	4. If Amendment, Date of Original Filed (Month/Day/Year)									6. Individual or Joint/Group Filing (Check Applicable Line)					
ALLENTOWN PA 18195														X Form	led by Or	ne Repor	ting Person		
(City)	(:	State)	(Zip)	_										Form	iled by Mo	ore than	One Report	ng Person	
		Т	able I - Non-D	eriva	tive S	ecuriti	es A	cqu	ıired, D	isp	osed of	, or Ben	eficiall	y Owned					
1. Title of Security (Instr. 3)			Da	Transaction ate lonth/Day/Year)		2A. Deemed Execution Dat if any (Month/Day/Ye		е,		ransaction Disposed ode (Instr.		es Acquired (A) or Of (D) (Instr. 3, 4 and		Benefici Owned F	s ally ollowing	Form:	Direct Indirect Istr. 4)	7. Nature of Indirect Beneficial Ownership	
								Code \	,	Amount	(A) or (D)	Price	Transact	Reported Transaction(s) (Instr. 3 and 4)			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 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 of Securit Underlying Derivative (Instr. 3 and	ies g Security	8. Price of Derivativ Security (Instr. 5)	derivat Securit Benefic Owned Follow Report	tive ties cially l ing	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	v	(A)		Date Exe	e rcisable	Ex Da	piration te	Title	Amount or Number of Share	s	(Instr. 4				
Phantom Stock ⁽¹⁾	\$0 ⁽²⁾	12/31/2009		A		99.1514		08/0	8/1988 ⁽³⁾	08	/08/1988 ⁽³⁾	Common Stock	99.151	4 \$82.605	18,30	0.0335	D		

Explanation of Responses:

- 1. Phantom deferred stock units (Units) acquired under the Air Products Stock Account of the issuer's Deferred Compensation Program for Directors, of the Company's Long-Term Incentive Plan (the Plan).
- 2. Not applicable to this security
- 3. These units are payable in the form of shares of common Stock equal in number to the units, at the time elected by the reporting person, which is generally after service on the issuer's Board of Directors ends. Units may be paid in a lump sum or up to ten installments as elected by the reporting person in advance.

Remarks:

Linda M. Svoboda as Attorney

in Fact

** Signature of Reporting Person

Date

01/04/2010

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.