FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

	OMB ADDDOMAL
II	OMB APPROVAL

OMB Number:	3235-0287
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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* <u>DONAHUE MICHAEL J</u>					2. Issuer Name and Ticker or Trading Symbol AIR PRODUCTS & CHEMICALS INC /DE/ [APD]								lationship of I ck all applicat Director		Persor	n(s) to Issuer 10% Owi	
(Last) (First) (Middle) 7201 HAMILTON BOULEVARD					3. Date of Earliest Transaction (Month/Day/Year) 09/30/2009							-	Officer (g below)	jive title		Other (sp below)	ecify
(Street) ALLENTOWN PA 18195					4. If Amendment, Date of Original Filed (Month/Day/Year)						I	Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person					
(City)	(State)	(Zip)										T OIII IIIC	a by More	, triair c	ле перопп	g i cison
			Table I - Non-	Deriva	ative S	Securiti	es Ac	quired,	Disp	osed of	, or Ben	eficially	Owned				
Da			2. Transaction Date (Month/Day/Year)		2A. Deemed Execution Date if any (Month/Day/Ye		te, Transaction D Code (Instr.		4. Securities Acquired (A) Disposed Of (D) (Instr. 3, 4			and 5) Securities Beneficial Following		Form:	Direct II Indirect E tr. 4) C	7. Nature of Indirect Beneficial Ownership	
								Code	v	Amount	nt (A) or (D)		Reported Transactio (Instr. 3 an				(Instr. 4)
			Table II - D (e							sed of, o			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 Date, if any (Month/Day/Year)	Transaction Code (Instr.) 8)		Derivative		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)		10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	v	(A)		Date Exercisable	Ex Da	piration ite	Title	Amount or Number of Shares		(Instr. 4)		<u></u>	
Phantom Stock ⁽¹⁾	\$0 ⁽²⁾	09/30/2009		A		104.3894	C	08/08/1988 ⁽³	08	/08/1988 ⁽³⁾	Common Stock	104.3894	\$78.01	18,200	.8821	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

09/30/2009

in Fact

** 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.