FORM 4

## **UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

Washing

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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OMB APF	OMB APPROVAL										
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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*  DAVIS WILLIAM L				4	2. Issuer Name and Ticker or Trading Symbol AIR PRODUCTS & CHEMICALS INC /DE/ [ APD ]									5. Rela Check X	r ner				
(Last) (First) (Middle) 7201 HAMILTON BOULEVARD					3. Date of Earliest Transaction (Month/Day/Year) 09/30/2010										Officer (g below)	jive title		Other (s <sub>l</sub> below)	pecify
(Street) ALLENTOWN PA 18195 (City) (State) (Zip)					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					
		T	able I - Non-D	eriva	tive S	ecuriti	es A	cqu	ıired, D	isp	osed of	, or Ben	eficia	lly (	Owned				
Date				Transaction ate lonth/Day/Year)		2A. Deemed Execution Date if any (Month/Day/Ye		Code (Insti					nd 5)	5. Amount Securities Beneficially Owned Fol	y	Form:	Direct Indirect Etr. 4)	7. Nature of Indirect Beneficial Ownership	
								Ī	Code	,	Amount	(A) or (D)	Pric	е	Reported Transaction (Instr. 3 and			(	nstr. 4)
			Table II - De								sed of, o				wned				
Security or Exercise (Month/Day/Year) if any		Execution Date,	Code (Instr.		5. Number Derivative Securities Acquired or Disport of (D) (In 3, 4 and	re s I (A) sed str.	Expiration Date (Month/Day/Year)				7. Title and of Securiti Underlying Derivative (Instr. 3 and	ies g Securi		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 Exe	e rcisable	Exp Dat	oiration te	Title	Amou or Numb of Sha	er		(Instr. 4)			
Phantom Stock <sup>(1)</sup>	\$0.0000 <sup>(2)</sup>	09/30/2010		A		57.4227		08/0	08/1988 <sup>(3)</sup>	08/0	08/1988 <sup>(3)</sup>	Common Stock	57.4	227	\$83.97	9,897.79	943	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).
- 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.

Linda M. Svoboda as Attorney in Fact

09/30/2010

\*\* 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.