Instruction 1(b)

FORM 4

Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See

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

Washingt

D C 20540	
ton, D.C. 20549	OMB APPRO

<b>STATEMENT</b>	<b>OF CHANGE</b>	S IN BENEF	FICIAL C	WNERS	HIP

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						
OMB Number: 3235-0287						
Estimated average burden						
hours per response:	0.5					

1. Name ar <u>Henkes</u>		Reporting Person*		4	2. Issuer Name and Ticker or Trading Symbol AIR PRODUCTS & CHEMICALS INC /DE/ [ APD ]				E/ (Ched	5. Relationship of Reporting Person(s) to Issuer (Check all applicable)  X Director 10% Owne							
(Last) 7201 HA	`	First) BOULEVARD	(Middle)		3. Date of Earliest Transaction (Month/Day/Year) 06/30/2011						Officer (g below)	give title		Other (sp below)	ecify		
(Street) ALLENT		A State)	18195 (Zip)		4. If Am	endment,	Date	of Original F	iled (	Month/Day/`	Year)	6. Ind Line)		ed by One	Report	Check Applic ing Person One Reportir	
	Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																
1. Title of Security (Instr. 3)  2. Transc Date (Month/L			ate	2A. Deemed Execution Date, if any (Month/Day/Year)		Code (Instr.		es Acquired Of (D) (Instr	(A) or 3, 4 and 5)	5. Amount Securities Beneficiall Owned Fol Reported	у	Form:	Direct In Indirect B tr. 4) O	7. Nature of ndirect Beneficial Dwnership Instr. 4)			
					Code V Amount (A) or Pr				Price	Transactio (Instr. 3 an				11501.4)			
Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)																	
		Transa Code (	nsaction Derivative		6. Date Exercisable and Expiration Date (Month/Day/Year) 7. Title and of Securiti Underlying Derivative (Instr. 3 and		es g Security	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)	(D)	Date Exercisable		kpiration ate	Title	Amount or Number of Shares		(Instr. 4)	onital		
Phantom Stock <sup>(1)</sup>	\$0.0000 <sup>(2)</sup>	06/30/2011		A		57.6596		08/08/1988 <sup>(3)</sup>	08	3/08/1988 <sup>(3)</sup>	Common Stock	57.6596	\$94.84	9,486.0	)12	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.

Linda M. Svoboda as Attorney in Fact

07/05/2011

\*\* 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.