FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washingto

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

D.C. 20E40	
on, D.C. 20549	
	│ OMB APPROVAL

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

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

Name and Address of Reporting Person*     FAIRBAIRN URSULA F					AIR PRODUCTS & CHEMICALS INC /DE/ [ APD ]									ck all applica  Director  Officer (	ble)	ng Person(s) to Issu 10% O		vner
(Last) (First) (Middle) 7201 HAMILTON BOULEVARD					3. Date of Earliest Transaction (Month/Day/Year) 06/30/2010									below) `			below)`	
(Street) ALLEN		A State)	18195 (Zip)		4. If Amendment, Date of Original Filed (Month/Day/Year)							6. Incline						
		T	able I - Non-D	Deriva	tive S	Securiti	es A	cqu	ired, D	isp	osed of,	, or Ben	eficially	Owned				
1. Title of Security (Instr. 3)  2. Transa Date (Month/D			ite	Execution Dat		Code (Instr.		ion	4. Securities Acquired (A) o Disposed Of (D) (Instr. 3, 4 a					Form:	Direct Indirect tr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)		
								Code V	_	Amount	(A) or (D)	Price	Transaction(s) (Instr. 3 and 4)				msu. 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. Transa Code ( 8)		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		Expi	ate Exerci iration Dat nth/Day/Ye	te	e and	7. Title an of Securit Underlyin Derivative (Instr. 3 a	g e Security	8. Price of Derivative Security (Instr. 5)	9. Numb derivativ Securitie Beneficie Owned Followin Reported Transact	re es ally g	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)
				Code	v	(A)	(D)	Date Exer	rcisable	Exp Dat	oiration te	Title	Amount or Number of Shares		(Instr. 4)			
Phantom Stock <sup>(1)</sup>	\$0 <sup>(2)</sup>	06/30/2010		A		64.2509		08/08	8/1988 <sup>(3)</sup>	08/0	08/1988 <sup>(3)</sup>	Common Stock	64.2509	\$0	8,953.1	1708	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.

## Remarks:

Linda M. Svoboda as Attorney

in Fact

\*\* Signature of Reporting Person

Date

07/01/2010

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.