FORM 4

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

ashington,	D.C.	20549	
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STATEMENT	OF CHANGES	S IN BENEFICIAL	L OWNERSHIP

ONB APPROVAL									
OMB Number:	3235-0287								
Estimated average burden									
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)

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/								elationship of eck all applica	er						
<u>FAIRBAIRN URSULA F</u>				- 17	APD]								X Director			10% Ow	ner		
(1 a a b) (5 i a a b) (4 i a b)				— Ľ	-									Officer (below)	Officer (give title		Other (s below)	pecify	
(Last) (First) (Middle) 3. Date of Earliest Transaction (Month/Day/Year)										50.011)			50.011)						
7201 HAMILTON BOULEVARD					09/30/2010														
(Street)				_	I. If Am	endment,	Date	of O	riginal File	d (Month/E	ay/\	Year)		6. Individual or Joint/Group Filing (Check Applicable					
ALLENT	TOWN P	A	18195										Line						
				_										_	,		One Report	ng Person	
(City)	(\$	State)	(Zip)											7 01111 1111	ou by mor	c tricti	one report	ng r croon	
	Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																		
1. Title of Security (Instr. 3) 2. Trans Date (Month/I			e	action 2A. Deemed Execution Date, if any (Month/Day/Yea		"	, Transaction Disposed Of (D		s Acquired (A) or of (D) (Instr. 3, 4 and 5)		Beneficial Owned Fo	Form (D) o		Direct Indirect Itr. 4)	7. Nature of ndirect Beneficial Ownership				
								Code V	Amour	nt	(A) or (D)	Price	Reported Transactio (Instr. 3 ar	saction(s)			Instr. 4)		
			Table II - De	rivativ	/e Se	curities	s Ac	qui	red, Dis	posed c	of, c	or Benef	icially	Owned					
			(e.	j., pu	ts, ca	lls, waı	rrant	ts, c	options	, conver	tibl	le secur	ities)						
Derivative Security (Instr. 3) Pare (Month/Day/Year) Execution Date, (Month/Day/Year) Execution Date, if any (Month/Day/Year)			Transaction Code (Instr. 8)		Derivative Ex		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)	(D)	Date Exe	e rcisable	Expiration Date		Title	Amount or Number of Share	3	(Instr. 4)				
Phantom Stock ⁽¹⁾	\$0.0000 ⁽²⁾	09/30/2010		A		52.2454		08/0	08/1988 ⁽³⁾	08/08/1988	3(3)	Common Stock	52.245	\$83.97	9,005.4	4162	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

09/30/2010

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.