FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

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).

## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

Name and Address of Reporting Person*     Painter Corning F.						2. Issuer Name <b>and</b> Ticker or Trading Symbol AIR PRODUCTS & CHEMICALS INC /DE/ APD APD									c all applicat Director	ole)	ng Person(s) to Issuer  10% Owner  Other (specify		ner
(Last) (First) (Middle) 7201 HAMILTON BOULEVARD					3. Date of Earliest Transaction (Month/Day/Year) 11/18/2011									X Officer (give title Other (specify below)  Senior V.P.					
(Street) ALLENTOWN PA 18195					4. If Amendment, Date of Original Filed (Month/Day/Year)									6. Indiv Line) X	′				
(City)		State) (Zip)				Form med b						а ву моге	by More than One Reporting Person						
Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned																			
				2. Transaction Date (Month/Day/Year)		2A. Deemed Execution Date, if any (Month/Day/Year)		∍,	3. Transacti Code (Ins 8)			s. Securities Acquired (A) o Disposed Of (D) (Instr. 3, 4					Form:	Direct I Indirect I tr. 4)	7. Nature of Indirect Beneficial Ownership
									Code V	<i>,</i>	Amount	(A) or (D)	Pric	e	Transaction (Instr. 3 and				nstr. 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. 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 Exer	e rcisable	Ex Da	piration te	Title	Amou or Numb of Sha	oer		(Instr. 4)			
Deferred Stock Units <sup>(1)</sup>	\$0.0000(2)	11/18/2011		A		308.338		08/08	8/1988 <sup>(3)</sup>	08.	/08/1988 <sup>(3)</sup>	Common Stock	308.	.338	\$81.08	308.33	38	D	

## Explanation of Responses:

- 1. Deferred Stock Units (Units) acquired under the Air Products and Chemicals, Inc. Deferred Compensation Plan.
- 2. Not applicable to this security
- 3. The Units are generally payable in the form of shares of Common Stock equal in number to the Units, after the reporting person's term of employment ends, in a lump sum or up to 10 installments as elected by the reporting person in advance.

Linda M. Svoboda as Attorney

in Fact

<u>11/21/2011</u>

\*\* Signature of Reporting Person

Date

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

- $^{\star}$  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.