FORM 4

## UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB 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).

## 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

1. Name and Address of Reporting Person*  HAGENLOCKER EDWARD E						2. Issuer Name and Ticker or Trading Symbol AIR PRODUCTS & CHEMICALS INC /DE/ [ APD ]								ole)	g Person(s) to Issuer 10% Owner		
(Last) (First) (Middle) 7201 HAMILTON BOULEVARD					3. Date of Earliest Transaction (Month/Day/Year) 03/31/2010								Officer (g below)	jive title		Other (sp below)	pecify
(Street) ALLENTOWN (City)		A State)	18195 (Zip)		4. If Amendment, Date of Original Filed (Month/Day/Year)  6. Individual or Joint/Group Filing (C Line)  X Form filed by One Reporting Form filed by More than O									ing 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		, Transaction Di			I. Securities Acquired (A) o Disposed Of (D) (Instr. 3, 4 a		5. Amount Securities Beneficiall Owned Fol	Form y (D) or		Direct Ir ndirect B r. 4) O	7. Nature of Indirect Beneficial Ownership
									v	Amount	(A) or (D)	Price	Reported 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)	Code (Instr.		5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)		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 Exercisable		piration ate	Title	Amount or Number of Shares		(Instr. 4)			
Phantom Stock <sup>(1)</sup>	(2)	03/31/2010		A		49.2058		08/08/1988 <sup>(3</sup>	08	/08/1988 <sup>(3)</sup>	Common Stock	49.2058	\$0	9,468.257	71	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.

# Remarks:

Linda M. Svoboda as Attorney

in Fact

\*\* Signature of Reporting Person

Date

04/01/2010

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.