FORM 4

# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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

11. Nature

### 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 2. Issuer Name and Ticker or Trading Symbol 5. Relationship of Reporting Person(s) to Issuer 1. Name and Address of Reporting Person\* (Check all applicable) AIR PRODUCTS & CHEMICALS INC FORD W DOUGLAS Director 10% Owner  $\underline{DE}$  [ APD ] Other (specify Officer (give title (Last) (First) (Middle) below) below) 3. Date of Earliest Transaction (Month/Day/Year) 01/28/2010 7201 HAMILTON BOULEVARD 4. If Amendment, Date of Original Filed (Month/Day/Year) 6. Individual or Joint/Group Filing (Check Applicable (Street) Line) 18195 Form filed by One Reporting Person ALLENTOWN PA Form filed by More than One Reporting (City) (State) (Zip) Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned 1. Title of Security (Instr. 3) 4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 6. Ownership Form: Direct (D) or Indirect 2. Transaction 2A. Deemed 5. Amount of 7. Nature of Indirect Beneficial Execution Date Transaction Securitie (Month/Day/Year) Beneficially if any Code (Instr. 5) Owned Following (Month/Day/Year) 8) (I) (Instr. 4) Ownership (Instr. 4) (A) or (D) Transaction(s) Price Code Amount (Instr. 3 and 4) Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities) 3A. Deemed 9. Number of

Security (Instr. 3)	or Exercise Price of Derivative Security	Date (Month/Day/Year)	if any (Month/Day/Year)	Code (	iction (Instr.	Deriva Securi Acquir (A) or Dispos of (D)	Derivative (Month/Day Securities Acquired (A) or Disposed of (D) (Instr. 3, 4		ay/Year) Securiti Underly		g Security	Security (Instr. 5)	rity Securities	Form: Direct (D) or Indirect (I) (Instr. 4)	of indirect Beneficial Ownership (Instr. 4)
				Code	v	(A)	(D)	Date Exercisable	Expiration Date	Title	Amount or Number of Shares				
Phantom Stock	\$0 <sup>(1)</sup>	01/28/2010		A		1,299		08/08/1988 <sup>(2)</sup>	08/08/1988 <sup>(2)</sup>	Common Stock	1,299	\$77.04	18,679.1072	D	

6. Date Exercisable and

5. Number

## **Explanation of Responses:**

- 1. Not applicable to this security
- 2. 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:

1. Title of

Linda M. Svoboda as Attorney

01/29/2010

in Fact

7. Title and

\*\* Signature of Reporting Person

Date

8. Price of

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).

3. Transaction

\*\* 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.

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