

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP

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 APPROVAL	
OMB Number:	3235-0287
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1. Name and Address of Reporting Person* <u>BYE MARK L</u> (Last) (First) (Middle) 7201 HAMILTON BOULEVARD (Street) ALLENTOWN PA 18195 (City) (State) (Zip)	2. Issuer Name and Ticker or Trading Symbol <u>AIR PRODUCTS & CHEMICALS INC</u> <u>/DE/ [APD]</u>	5. Relationship of Reporting Person(s) to Issuer (Check all applicable) Director 10% Owner Officer (give title below) Other (specify below) Group V.P. Gases & Equip.
	3. Date of Earliest Transaction (Month/Day/Year) 05/02/2006	
		6. Individual or Joint/Group Filing (Check Applicable Line) X Form filed by One Reporting Person Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

1. Title of Security (Instr. 3)	2. Transaction Date (Month/Day/Year)	2A. Deemed Execution Date, if any (Month/Day/Year)	3. Transaction Code (Instr. 8)		4. Securities Acquired (A) or Disposed Of (D) (Instr. 3, 4 and 5)			5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Indirect Beneficial Ownership (Instr. 4)
			Code	V	Amount	(A) or (D)	Price			
Common Stock	05/02/2006		M		6,000	A	\$29.06	39,524	D	
Common Stock	05/02/2006		M		7,000	A	\$41.31	46,524	D	
Common Stock	05/02/2006		M		8,000	A	\$29.47	54,524	D	
Common Stock	05/02/2006		S		21,000	D	\$67.68	33,524	D	
Common Stock	05/02/2006 ⁽¹⁾		J ⁽¹⁾		68.91	A	\$0	3,851.45	I	By RSP ⁽²⁾

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)		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) (Instr. 4)	10. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	11. Nature of Indirect Beneficial Ownership (Instr. 4)	
				Code	V	(A)	(D)	Date Exercisable	Expiration Date						Title
1997 Rights ⁽³⁾	(3)	05/02/2006		J			6,000	08/08/1988 ⁽⁴⁾	10/02/2006	Common Stock	6,000	\$0	0.0000	D	
1997 Stock Options ⁽⁵⁾	\$29.06	05/02/2006		M			6,000	08/08/1988 ⁽⁶⁾	10/02/2006	Common Stock	6,000	\$0	0.0000	D	
1998 Rights ⁽³⁾	(3)	05/02/2006		J			7,000	08/08/1988 ⁽⁴⁾	10/02/2007	Common Stock	7,000	\$0	0.0000	D	
1998 Stock Options ⁽⁵⁾	\$41.31	05/02/2006		M			7,000	08/08/1988 ⁽⁷⁾	10/02/2007	Common Stock	7,000	\$0	0.0000	D	
1999 Rights ⁽³⁾	(3)	05/02/2006		J			8,000	08/08/1988 ⁽⁴⁾	10/02/2008	Common Stock	8,000	\$0	0.0000	D	
1999 Stock Options ⁽⁵⁾	\$29.47	05/02/2006		M			8,000	08/08/1988 ⁽⁸⁾	10/02/2008	Common Stock	8,000	\$0	0.0000	D	

Explanation of Responses:

- Transactions not required to be reported since last filing.
- Shares represented by units of interest in the Company Stock Fund held under the issuer's Retirement Savings Plan.
- These Rights were cancelled upon the exercise of the Options described herein.
- Rights have exercise dates only during a 30 day period following a change in control of the Company (as defined in the LTIP).
- Employee Stock Options (Options) granted under the issuer's Long-Term Incentive Plan (LTIP). Exercise of these Options cancels the related Rights described herein on a one-for-one basis.
- One-third became exercisable 10/1/97; one-third became exercisable 10/1/98; and one-third became exercisable 10/1/99.
- One-third became exercisable 10/1/98; one-third became exercisable 10/1/99; and one-third became exercisable 10/1/00.
- One-third became exercisable 10/1/99; one-third became exercisable 10/1/00; and one-third became exercisable 10/1/01.

Remarks:

By: Linda M. Svoboda as
Attorney in Fact

05/03/2006

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.