

AIR PRODUCTS & CHEMICALS INC /DE/  
 Form 4  
 January 03, 2007

**FORM 4**

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION  
 Washington, D.C. 20549**

OMB APPROVAL

OMB Number: 3235-0287  
 Expires: January 31, 2005  
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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 OF SECURITIES**

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

1. Name and Address of Reporting Person \*  
 SMITH LAWRENCE S

2. Issuer Name and Ticker or Trading Symbol  
 AIR PRODUCTS & CHEMICALS INC /DE/ [APD]

5. Relationship of Reporting Person(s) to Issuer  
 (Check all applicable)

(Last) (First) (Middle)  
 7201 HAMILTON BOULEVARD  
 (Street)

3. Date of Earliest Transaction (Month/Day/Year)  
 12/31/2006

Director  10% Owner  
 Officer (give title below)  Other (specify below)

ALLENTOWN, PA 18195  
 (City) (State) (Zip)

4. If Amendment, Date Original Filed(Month/Day/Year)

6. Individual or Joint/Group Filing(Check Applicable Line)  
 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 Reported Transaction(s) (Instr. 3 and 4)	6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4)	7. Nature of Ownership (Instr. 4)		
				(A) or (D)	Code	V	Amount	(D)	Price

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

**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 control number.**

SEC 1474 (9-02)

**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)**

1. Title of Derivative Security	2. Conversion or Exercise	3. Transaction Date (Month/Day/Year)	3A. Deemed Execution Date, if any	4. Transaction Code	5. Number of Derivative Securities	6. Date Exercisable and Expiration Date (Month/Day/Year)	7. Title and Am Underlying Sec (Instr. 3 and 4)
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(Instr. 3)	Price of Derivative Security	(Month/Day/Year)	(Instr. 8)	Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5)	Code	V	(A)	(D)	Date Exercisable	Expiration Date	Title
Phantom Stock <sup>(1)</sup>	<u>(2)</u>	12/31/2006	A	289.2221					08/08/1988 <sup>(3)</sup>	08/08/1988 <sup>(3)</sup>	Common Stock

## Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
SMITH LAWRENCE S 7201 HAMILTON BOULEVARD ALLENTOWN, PA 18195	X			

## Signatures

By: Linda M. Svoboda as Attorney  
in Fact 01/02/2007

\*\*Signature of Reporting Person Date

## Explanation of Responses:

\* 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).

(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). Under the Plan, all non-employee directors are credited with Units for the portion of their Board retainer required to be received in this form and they are permitted to defer receiving payment of all or a portion of the remainder of their Board and Committee retainers and meeting fees.

(2) Not applicable to this security.

(3) These units are generally payable in the form of shares of Common Stock equal in number to the units, after the reporting person's service on the issuer's Board of Directors ends, in a lump sum or up to ten installments as elected by the reporting person in advance.

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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