

AIR PRODUCTS & CHEMICALS INC /DE/
 Form 4
 June 30, 2005

FORM 4

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

OMB APPROVAL

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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)

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

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

7201 HAMILTON BOULEVARD

06/30/2005

(Street)

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

ALLENTOWN, PA 18195

(City) (State) (Zip)

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 Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|--|-----------------------------------|
| | | | | (A) or (D) | Price | | |
| | | | | Code | V | Amount | |

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 Amount of Underlying Security (Instr. 3 and 4) |
|---------------------------------|---------------------------|--------------------------------------|-----------------------------------|---------------------|------------------------------------|--|---|
|---------------------------------|---------------------------|--------------------------------------|-----------------------------------|---------------------|------------------------------------|--|---|

| (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 | Amount or Number of Shares |
|-------------------|------------------------------|------------------|------------|---|------|---|-----|-----|------------------|-----------------|--------------|----------------------------|
| Phantom Stock (1) | (2) | 06/30/2005 | A | 254.22 | | | | | 08/08/1988(3) | 08/08/1988(3) | Common Stock | 254 |

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
Date: 06/30/2005

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. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.