

AIR PRODUCTS & CHEMICALS INC /DE/
 Form 4
 October 04, 2006

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 *
 Dixon Robert D

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)
 10/02/2006

____ Director _____ 10% Owner
 Officer (give title below) _____ Other (specify below)
 V.P. and G.M. Merchant Gases

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 Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Ownership (Instr. 4) |
|---------------------------------|--------------------------------------|--|--------------------------------|---|---|--|-----------------------------------|
| | | | Code | V | Amount (A) or (D) Price | | |
| Common Stock | 10/03/2006 | | A | | 1,150 A \$ 0 | 10,106.268 | D |
| Common Stock | | | | | | 3,505.67 | I By RSP |

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 (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 Underlying Securities (Instr. 3 and 4) | | | | |
|--|--|--------------------------------------|--|--------------------------------|---|--|---|------------------|-----------------|--------------|----------------------------|
| | | | | Code | V | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares |
| 2007 Stock Options ⁽¹⁾ | \$ 67.23 | 10/02/2006 | | A | 10,000 | 08/08/1988 ⁽²⁾ | | 10/03/2016 | | Common Stock | 10,000 |
| Rights 2007 ⁽³⁾ | ⁽³⁾ | 10/02/2006 | | A | 10,000 | 08/08/1988 ⁽³⁾ | | 10/03/2016 | | Common Stock | 10,000 |

Reporting Owners

| Reporting Owner Name / Address | Relationships | | | |
|--|---------------|-----------|------------------------------|-------|
| | Director | 10% Owner | Officer | Other |
| Dixon Robert D 7201 HAMILTON BOULEVARD ALLENTOWN, PA 18195 | | | V.P. and G.M. Merchant Gases | |

Signatures

By: Linda M. Svoboda as Attorney
in Fact

Date: 10/04/2006

____ 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) 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.

(2) One-third become exercisable on 10/2/07; one-third become exercisable on 10/2/08; and one-third become exercisable on 10/2/09.

(3) The Options include contractual rights (Rights) similar to employee restricted appreciation rights with exercise dates only during a 30 day period following a change in control of the Company (as defined in the LTIP). Exercise of Rights cancels the related Options on a one-for-one basis and entitles the reporting person to receive a cash payment equal to the fair market value of a share of Common Stock on the date of exercise (as defined in the LTIP) minus the option exercise price.

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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