

As filed with the Securities and Exchange Commission on December 22, 1994

Registration No. -----
=====

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, DC 20549

FORM S-8

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

AIR PRODUCTS AND CHEMICALS, INC.

(Exact Name of Registrant as Specified in Its Charter)Delaware

(State or Other Jurisdiction of Incorporation or Organization)

23-1274455

(I.R.S. Employer Identification No.)

7201 Hamilton Boulevard, Allentown, Pennsylvania 18195-1501

(Address of Principal Executive Offices) (Zip Code)

Air Products and Chemicals, Inc. Long-Term Incentive Plan
and 1990 Long-Term Incentive Plan

(Full Title of the Plan)

James H. Agger, Vice President, General Counsel and Secretary
Air Products and Chemicals, Inc., 7201 Hamilton Boulevard,
Allentown, PA 18195-1501

(Name and Address of Agent for Service)

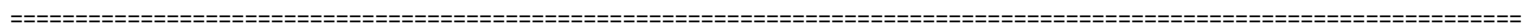
215-481-4911

(Telephone Number, Including Area Code, of Agent for Service)

=====

CALCULATION OF REGISTRATION FEE

Title of securities to be registered	Amount to be registered	Proposed maximum offering price per share	Proposed aggregate offering price	Amount of registration fee
Common Stock, par value \$1				
1988	387,333	\$17.60	\$ 6,817,060.80	\$ 2,350.71
1989	615,676	\$20.82	\$12,818,374.32	\$ 4,420.13
1990	582,248	\$22.82	\$13,286,899.36	\$ 4,581.69
	23,840	\$27.28	\$ 650,355.20	\$ 224.26
1991	663,018	\$23.22	\$15,395,277.96	\$ 5,308.72
	6,200	\$30.94	\$ 191,828.00	\$ 66.15
1992	725,931	\$33.85	\$24,572,764.35	\$ 8,473.37
1993	381,779	\$44.38	\$16,943,352.02	\$ 5,842.54
1994	218,228	\$39.13	\$ 8,539,261.64	\$ 2,944.57
TOTAL	3,604,253		\$99,215,173.65	\$34,212.13



Air Products and Chemicals, Inc. (the "Company"), by the filing of this Registration Statement, hereby registers additional shares of common stock of the Company, for distribution pursuant to the Long-Term Incentive Plan and the 1990 Long-Term Incentive Plan (the "Plans"). These are securities of the same class as the securities registered on Form S-8, Registration Statement No. 33-45354 for distribution pursuant to the Plans. Accordingly, the contents of Registration Statement No. 33-45354 are incorporated herein by reference.

EXHIBITS

23. Consent of Arthur Andersen LLP.

24. Power of Attorney. (Filed as Exhibit 24 to the Company's Form S-8 Registration Statement filed December 22, 1994 to register shares under the Company's Retirement Savings and Stock Ownership Plan.)*

SIGNATURES

The Registrant. Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Allentown, State of Pennsylvania, on this 21st day of December, 1994.

AIR PRODUCTS AND CHEMICALS, INC.
(Registrant)

By: /s/ James H. Agger

James H. Agger**
Vice President, General Counsel
and Secretary

- - - - -
* Previously filed as indicated and incorporated herein by reference.
Exhibits incorporated by reference should be located in SEC File No. 1-4534.
** James H. Agger, Vice President, General Counsel and Secretary, by signing his name hereto, signs this registration statement on behalf of the registrant and, for each of the persons indicated by asterisk on pages 3 and 4 hereof, pursuant to a power of attorney duly executed by such persons which is filed with the Securities and Exchange Commission.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the date indicated.

Signature -----	Title -----	Date -----
/s/ Harold A. Wagner ----- Harold A. Wagner	Director, Chairman of the Board and Chief Executive Officer (Principal Executive Officer)	December 21, 1994
/s/ Gerald A. White ----- Gerald A. White	Senior Vice President - Finance (Principal Executive Officer)	December 21, 1994
/s/ Paul E. Huck ----- Paul E. Huck	Corporate Controller (Principal Accounting Officer)	December 21, 1994
* ----- Dexter F. Baker	Director	December 21, 1994
* ----- Tom H. Barrett	Director	December 21, 1994
* ----- L. Paul Bremer, III	Director	December 21, 1994
* ----- Will M. Caldwell	Director	December 21, 1994
* ----- Robert Cizik	Director	December 21, 1994
* ----- Ruth M. Davis	Director	December 21, 1994
* ----- Robert F. Dee	Director	December 21, 1994

Signature -----	Title -----	Date -----
* ----- Terry R. Lautenbach	Director	December 21, 1994
* ----- Walter F. Raab	Director	December 21, 1994
* ----- Judith Rodin	Director	December 21, 1994
* ----- Takeo Shiina	Director	December 21, 1994
* ----- Lawrason D. Thomas	Director	December 21, 1994

INDEX TO EXHIBITS

23. Consent of Arthur Andersen LLP

24. Power of Attorney. (Filed as Exhibit 24 to the Company's Form S-8 Registration Statement filed December 22, 1994 to register shares under the Company's Retirement Savings and Stock Ownership Plan).*

- - - - -

* Previously filed as indicated and incorporated herein by reference.
Exhibits incorporated by reference should be located in SEC File No. 1-4534.

CONSENT OF INDEPENDENT PUBLIC ACCOUNTANTS

To: Air Products and Chemicals, Inc.:

As independent public accountants, we hereby consent to the incorporation by reference in this Registration Statement of our reports dated 3 November 1994 included in or incorporated by reference in the Annual Report of Air Products and Chemicals, Inc., on Form 10-K for the year ended 30 September 1994.

Arthur Andersen LLP

Philadelphia, Pennsylvania
22 December 1994