UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of Earliest Event Reported):

May 21, 2007

Air Products and Chemicals, Inc.

(Exact name of registrant as specified in its charter)

Delaware

1-4534

(Commission

File Number)

(State or other jurisdiction of incorporation)

7201 Hamilton Boulevard, Allentown, Pennsylvania

(Address of principal executive offices)

Registrant's telephone number, including area code:

Not Applicable

Former name or former address, if changed since last report

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

[] Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

[] Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

[] Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

[] Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

23-1274455

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

18195-1501

(Zip Code)

610 481-4911

Top of the Form

Item 7.01 Regulation FD Disclosure.

On May 21, 2007, the company published the Quarter-to-Date Sales Update, including consolidated sales and product volumes for April 2007 on its website at http://www.airproducts.com/Invest/financialnews/current.htm. A copy is attached as Exhibit 99.1 to this Form 8-K. The Quarter-to-Date Sales Update is being furnished; it is not deemed to be filed.

Item 9.01 Financial Statements and Exhibits.

(c) Exhibits

99.1 Quarter-to-Date Sales Update dated May 21, 2007.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

May 21, 2007

Air Products and Chemicals, Inc.

By: Paul E. Huck

Name: Paul E. Huck Title: Vice President and Chief Financial Officer Exhibit Index

Exhibit No.

99.1

Description

Quarter-to-Date Sales Update dated May 21, 2007.

Sales Update

May 21, 2007

	April 2007 % Change vs. PY	Commentary
Consolidated Sales	19%	Underlying growth of +16% on increases across most segments (Chemicals lower and Equipment & Energy essentially flat). Currency +3%.
Merchant Gases	17%	Sales increased on solid demand across all regions and higher pricing. Currency +4%.
Tonnage Gases	31%	Sales increased mainly due to new hydrogen plants brought on-stream during 2006. Natural gas pricing was essentially unchanged.
Electronics and Performance Materials	23%	Sales growth remained strong in both businesses driven by underlying industry growth. Electronics benefited from continued strong Equipment sales. Performance Materials benefited from growth in all major product lines.
Healthcare	14%	Sales increased primarily due to the UK respiratory care contract and underlying strength in our Europe homecare business. Currency +5%.

Note: We are providing this information at the request of financial analysts and investors who have indicated that it would assist them in understanding recent business trends at Air Products. This information is based on current estimates and data that we believe in our judgment to be reliable. Please keep in mind that sales are not the only factors that determine future financial performance. Many other factors including raw material, energy, distribution and overhead costs and other price changes also influence results.