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):

September 24, 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

Item 7.01 Regulation FD Disclosure.

On September 24, 2007, the company published the Quarter-to-Date Sales Update, including consolidated sales and product volumes for July and August 2007 on its website at http://www.airproducts.com/Invest/financialnews/current.htm. A copy is attached at Exhibit 99.1 to this Form 8-K. The Quarter-to-Date Sales Update is being furnished, it is not deemed to be filed.

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.

September 24, 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 September 24, 2007

Investor Information		
Sales Update		
September 24, 2007		
(% change versus PY)	July & August 2007	Commentary
· · · ·	<u> </u>	Underlying growth of +11% on
		increases across most business
		segments (Equipment & Energy segment
		flat). Currency +2%, acquisitions
Consolidated Sales	15%	+2%.
		Sales increased on strong demand in
		Asia and improved pricing across all
		regions. Currency +4%, acquisitions
Merchant Gases	20%	+5%.
		Sales increased mainly due to new
		plants and higher loading. Currency
		+2%, acquisitions +2% and higher
Tonnage Gases	20%	natural gas pricing +1%.
		Sales growth remains strong driven by
		underlying industry growth. As
Electronics and Performance Materials	8%	expected, strong Electronics
		Specialty Materials and Tonnage sales
		were partially offset by weaker
		Equipment sales. Performance
		Materials has benefited from growth
		in all major product lines. Currency
		+2%.
Healthcare	6%	Sales increased due to underlying
		strength in our European homecare
		business and currency +4%.
Note: We are providing this information at the request of financial analysts and investors who have indicated		

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.