

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549-7010

VIA FACSIMILE AND U.S. MAIL

February 24, 2009

Paul E. Huck Senior Vice President and Chief Financial Officer Air Products and Chemicals, Inc. 7201 Hamilton Boulevard Allentown, Pennsylvania 18195

RE: Air Products and Chemicals, Inc.

Form 10-K for Fiscal Year Ended September 30, 2008 Form 10-Q for Fiscal Quarter Ended December 31, 2008

File No. 1-4534

Dear Mr. Huck:

We have completed our review of your Form 10-K and related filings and have no further comments at this time.

If you have any further questions regarding our review of your filings, please direct them to Ernest Greene, Staff Accountant, at (202) 551-3733, or in his absence, Lisa Haynes, Staff Accountant, at (202) 551-3424.

Sincerely,

Rufus Decker Accounting Branch Chief