



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

DIVISION OF  
CORPORATION FINANCE

Mail Stop 4631

March 8, 2016

Via E-mail

Mr. Scott Crocco  
Senior Vice President and Chief Financial Officer  
Air Products and Chemicals, Inc.  
7201 Hamilton Boulevard  
Allentown, PA 18195

**RE: Air Products and Chemicals, Inc.**  
**Form 10-K for the Year Ended September 30, 2015**  
**Filed November 24, 2015**  
**File No. 1-4534**

Dear Mr. Crocco:

We have completed our review of your filing. We remind you that our comments or changes to disclosure in response to our comments do not foreclose the Commission from taking any action with respect to the company or the filing and the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States. We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ John Cash

John Cash  
Accounting Branch Chief  
Office of Manufacturing and  
Construction