



DIVISION OF  
CORPORATION FINANCE

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

March 9, 2012

Via E-mail

Mr. Eduardo Cordeiro  
Executive Vice President and Chief Financial Officer  
Cabot Corporation  
Two Seaport Lane, Suite 1300  
Boston, MA 02210

**RE: Cabot Corporation  
Form 10-K for the Year ended September 30, 2011  
Filed November 29, 2011  
File No. 1-5667**

Dear Mr. Cordeiro:

We have completed our review of your filings. 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 filings 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 filings to be certain that the filings include the information the Securities Exchange Act of 1934 and all applicable rules require.

Sincerely,

/s/ Rufus Decker

Rufus Decker  
Accounting Branch Chief