



DIVISION OF  
CORPORATION FINANCE

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

August 6, 2012

Via E-mail

Hudson La Force III, Senior Vice President and Chief Financial Officer  
W.R. Grace & Co.  
7500 Grace Drive  
Columbia, MD 21044

**Re: W.R. Grace & Co.  
Form 10-K for the year ended December 31, 2011  
Filed February 24, 2012  
Form 10-Q for the quarter ended March 31, 2012  
Filed May 4, 2012  
File No. 1-13953**

Dear Mr. La Force:

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/ John Cash

John Cash  
Branch Chief