



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 4631

August 26, 2016

Via E-mail

Mr. Thomas E. Blaser, 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, 2015
Filed February 25, 2016
Form 10-Q for the period ended June 30, 2016
Filed August 4, 2016
File No. 1-13953**

Dear Mr. Blaser:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Form 10-Q for the period ended June 30, 2016

Consolidated Financial Statements

8. Commitments and Contingent Liabilities, page 25

1. We note your disclosure that it is probable your ultimate liability for vermiculite-related matters will exceed current estimates by material amounts but that such amounts are not currently estimable. Please more fully explain to us and revise future filings to disclose why you are unable to estimate a range of additional loss for this contingency, please discuss what additional information you need and indicate the anticipated timeframe for obtaining that information.

13. Operating Segment Information, page 31

2. We note that following the Separation, you manage your business through three operating segments. We also note that you aggregate Grace Refining Technologies and Grace Specialty Catalysts into the Grace Catalysts Technologies reportable segment based upon similar economic characteristics, the nature of the products and production processes, type and class of customer and channels of distribution. Please more fully explain to us how you determined your aggregation of these two operating segments meets the requirements of ASC 280-10-10-1 and 280-10-50-11.

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 Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to 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.

You may contact Mindy Hooker at (202) 551-3732, Anne McConnell at (202) 551-3709 or me at (202) 551-3768 with any questions.

Sincerely,

/s/ John Cash

John Cash
Branch Chief
Office of Manufacturing and
Construction

Cc: Trish O'Hara, Executive Assistant