



DIVISION OF  
CORPORATION FINANCE

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

June 4, 2014

Via E-mail

Mr. Hudson La Force III  
Sr. 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, 2013  
Filed February 27, 2014  
Form 10-Q for the quarter ended March 31, 2014  
Filed May 8, 2014  
File No. 1-13953**

Dear Mr. La Force:

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 this letter within ten business days by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the year ended December 31, 2013

Consolidated Financial Statements

1. Basis of Presentation and Summary of Significant Accounting and Financial Reporting Policies

Reclassifications and Revisions, page F-14

1. We note your disclosures here and under "Change in Accounting Principle Regarding Pension Benefits" that you retrospectively revised the classification of defined benefit pension expense in your statements of operations to align the costs based on the function of the employee to which they relate and that you revised your accounting to capitalize a portion of defined benefit pension expense into inventory prior to reporting it in cost of

goods sold. We also note you believe the change in classification of defined benefit pension costs and the change to inventory capitalization were not material to prior periods. Please tell us the basis for your prior accounting, including whether these changes are error corrections. Please also tell us how you determined that each change was not material to each prior period presented.

Management's Discussion and Analysis of Financial Condition and Results of Operations, page F-69

Operating Segment Overview, page F-78

2. Please revise future filings to disclose and discuss average prices of key raw materials during each period presented. In this regard, we note that in your discussions of segment results you reference both higher and lower raw materials costs as impacting your margins. Please also revise future filings to address your ability or inability to pass on changes in raw materials costs to customers.

Critical Accounting Estimates, page F-89

Goodwill, page F-92

3. We note that as of your most recent goodwill impairment analysis you determined that none of your reporting units were impaired. Please revise future filings to either state that the estimated fair values of all your reporting units substantially exceeded their carrying values or, if not, to identify each reporting unit where estimated fair value did not substantially exceed carrying value, to disclose the amount of goodwill allocated to any such reporting unit, and to quantify the percentage by which estimated fair value exceeded carrying value.

Form 10-Q for the period ended March 31, 2014

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 37

Income Taxes, page 50

4. We note your disclosures regarding deferred tax assets. Please tell us, and revise future filings to provide:
  - The amount of income you will be required to generate to fully realize deferred tax assets;
  - A more detailed analysis regarding how you determined realization of your deferred tax assets is more likely than not; and
  - More detailed information regarding the jurisdictions and time frames for tax loss carry-forwards.

Mr. Hudson La Force III  
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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 or Anne McConnell at (202) 551-3709 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3768 with any other questions.

Sincerely,

/s/ John Cash

John Cash  
Branch Chief