



DIVISION OF  
CORPORATION FINANCE

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

December 27, 2011

Via E-mail

Mr. Robert J. Zatta  
Chief Financial Officer  
Rockwood Holdings, Inc.  
100 Overlook Center  
Princeton, New Jersey 08540

**RE: Rockwood Holdings, Inc.  
Form 10-K for the Year Ended December 31, 2010  
Filed February 28, 2011  
Form 10-Q for the Period Ended September 30, 2011  
Filed October 26, 2011  
Form 8-K  
Filed September 12, 2011  
Response dated December 13, 2011  
File No. 1-32609**

**Rockwood Specialties Group, Inc.  
Form 10-K for the Year Ended December 31, 2010  
Filed March 10, 2011  
Form 10-Q for the Period Ended September 30, 2011  
Filed October 26, 2011  
File No. 333-109686**

Dear Mr. Zatta:

We have reviewed your response letter dated December 13, 2011 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, 2010

General

1. Where a comment below requests additional disclosures or other revisions to be made, please show us in your supplemental response what the revisions will look like. These revisions should be included in your future filings. Our comments on the Form 10-K you filed for Rockwood Holdings, Inc. also pertain to the Form 10-K filed for Rockwood Specialties Group, Inc.

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

Years ended December 31, 2010 Compared to year ended December 31, 2009, page 44

2. We note your response to comment five from our letter dated November 29, 2011. You will include quantification with respect to the impact of each factor where two or more factors contribute to a fluctuation in a line item in a period-to-period comparison whenever quantifiable. Please show us in your supplemental response what the revisions will look like in future filings.

Liquidity and Capital Resources, page 51

General

3. We note your response to comment six from our letter dated November 29, 2011. You indicate that if cash and cash equivalents held by foreign subsidiaries were needed for your operations in the U.S., you do not believe that you would be required to accrue and pay taxes in the U.S. to repatriate these funds. Please tell us and disclose how you determined that you would not be required to accrue and pay taxes in the U.S. to repatriate cash and cash equivalents held by foreign subsidiaries.

Form 10-Q for the Period Ended September 30, 2011

General

4. Please address the above comments in your interim filings as well, as applicable.

Form 8-K filed on September 12, 2011

5. We note your response to comment 10 from our letter dated November 29, 2011. You indicate that in future filings you will present the most directly comparable financial measure calculated and presented in accordance with US GAAP and a reconciliation of the non-GAAP financial measure with the most comparable financial measure or measures calculated

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and presented. Please show us in your supplemental response what the revisions will look like.

You may contact Ernest Greene, Staff Accountant at (202) 551-3733 or Nudrat Salik, Staff Accountant at (202) 551-3692 if you have questions regarding these comments.

Sincerely,

/s/ Rufus Decker

Rufus Decker  
Accounting Branch Chief