



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

DIVISION OF
CORPORATION FINANCE

May 14, 2014

Via E-mail

Mr. Ernesto Bautista III
Chief Financial Officer
CARBO Ceramics Inc.
575 North Dairy Ashford – Suite 300
Houston, TX 77079

**Re: CARBO Ceramics Inc.
Form 10-K for the Fiscal Year Ended December 31, 2013
Filed February 24, 2014
Form 10-Q for the Fiscal Quarter Ended March 31, 2014
Filed April 28, 2014
File No. 1-15903**

Dear Mr. Bautista:

We have reviewed your filings 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 Fiscal Year Ended December 31, 2013

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 21

Results of Operations, page 24

Gross Profit, page 25

1. Please revise future annual and quarterly filings to quantify the factors you identify as impacting the fluctuations in cost of sales and gross profit margins from period-to-period, including: spending to bring new proppant technology to a commercial state; increased freight and logistics costs; higher absorption; and changes in product mix. Please also

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discuss the most significant components of your cost of sales and the percentage of cost of sales attributable to such components.

2. In light of the continued and significant negative trend in your gross profit margins that appear to be primarily due to declines in your selling prices, please revise future annual and quarterly filings to disclose and discuss any metrics you use to evaluate your selling prices such as the prices of natural gas and oil and the levels of drilling and hydraulic fracturing. Please also revise future annual and quarterly filings to disclose and discuss any measures you are taking to address the declines in selling prices.

Form 10-Q for the Fiscal Quarter Ended March 31, 2014

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations, page 10

Results of Operations, page 10

3. Please revise future filings to disclose and discuss the factors that resulted in the decline in ceramic sales volumes during the period presented. Also, if accurate, please revise future filings to address the fact that the substantial increase in northern white sand sales volumes did not materially impact your operating results.

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.

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You may contact Dale Welcome at (202) 551-3865 or Anne McConnell at (202) 551-3709 if you have questions regarding these comments.

Sincerely,

/s/ John Cash

John Cash
Accounting Branch Chief