



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4631

December 14, 2011

Via E-Mail

Mr. K. Douglas Ralph
Chief Financial Officer
Carpenter Technology Corp.
P.O. Box 14662
Reading, PA 19610

**Re: Carpenter Technology Corp.
Form 10-K for the Fiscal Year Ended June 30, 2011
Filed August 24, 2011
Response Letter Dated December 12, 2011
File No. 1-05828**

Dear Mr. Ralph:

We have reviewed your response 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 amending your filing, 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 or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Form 10-K for Fiscal Year Ended June 30, 2011

Management's Discussion and Analysis of Financial Condition and Result of Operations

Impact of Raw Material Prices and Product Mix, page 20

1. We note your response to our prior comment number one in our letter dated, November 30, 2011. It is unclear why you are recognizing your gains and losses associated with commodity forward contracts in cost of goods sold at the time quantities are purchased. Your proposed disclosure revisions suggest the recognition in cost of goods sold at the time of purchase is related to LIFO inventory accounting. Please explain to us why you

Mr. K. Douglas Ralph
Carpenter Technology Corp.
December 14, 2011
Page 2

believe LIFO inventory accounting causes you to recognize these gains and losses when quantities are purchased, rather than sold. As part of your response, please clarify for us how you maintain your perpetual inventory records (i.e. FIFO, average cost, etc.) and describe how you convert your perpetual inventories to a LIFO cost basis.

Closing Comments

You may contact Kevin Stertz at (202) 551-3723, 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/ W. John Cash

W. John Cash
Branch Chief