



DIVISION OF
CORPORATION FINANCE

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

April 12, 2011

Mr. Mark Weinswig
Chief Financial Officer
EMCORE Corporation
10420 Research Road, SE
Albuquerque, NM 87123

Re: EMCORE Corporation
Form 10-K for the fiscal year ended September 30, 2010
Filed January 10, 2011
Form 10-Q for the quarterly period ended December 31, 2010
File No. 000-22175

Dear Mr. Weinswig:

We have reviewed your response dated April 6, 2011 and related 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.

Mr. Mark Weinswig
EMCORE Corporation
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Form 10-Q for the quarterly period ended December 31, 2010

Notes to Condensed Consolidated Financial Statements, page 7

Note 13. San'an Joint Venture, page 20

1. We refer to your response to comment 3. In future filings, please disclose how you are accounting for the \$8.5 million of consulting fees for services provided to Suncore.
2. We acknowledge your response our prior comment 4. In future filings, please clarify the company's contribution requirements under the San'an joint venture, similar to the response provided.

You may contact Leigh Ann Schultz at 202-551-3628 or Gary Todd at 202-551-3605 if you have questions regarding comments on the financial statements and related matters. You may also contact me at (202) 551-3676 with any other questions.

Sincerely,

for

Brian Cascio
Accounting Branch Chief