

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549-4628

August 4, 2010

Via U.S. Mail & Facsimile
Mr. Charles M. Sledge
Chief Financial Officer
Cameron International Corporation
1333 West Loop South, Suite 1700
Houston, TX 77027

Re: Cameron International Corporation

Form 10-K for the Fiscal Year Ended December 31, 2009

Filed February 26, 2010 Definitive Proxy Statement Filed March 23, 2010

Form 10-Q for the Fiscal Quarter Ended March 31, 2010

Filed May 3, 2010

Response Letter Dated June 9, 2010

File No. 1-13884

Dear Mr. Sledge:

We have reviewed your response letter 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.

General

1. We note your response to prior comment 12 regarding the Deepwater Horizon incident, and we have the following additional comments:

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- Discuss in further detail the warranties, express or implied, included in the 1999 contract covering the purchase and sale of the BOP. State when each specific warranty expired or if there is any lingering obligation.
- Supplementally provide us with a copy of the 1999 contract.
- We note that, fortunately, there were no Cameron employees, contractors, or property aboard the Deepwater Horizon at the time of the incident.
 Describe the most recent time that you, or anyone on your behalf, performed any services relating to the Deepwater Horizon and its BOP.
 Explain the specific nature of such services.
- Describe the general nature of the services that you offer customers related to the operation, service, and maintenance of your BOPs in the deepwater environment. Specifically describe any such services that were performed by you, or on your behalf, to the Deepwater Horizon and its BOP.

Form 10-K

2. We note your response to prior comment 3 that your disclosures will continue to evolve and that you will add a separate discussion on the topic of deepwater markets and your participation therein in future filings. Please provide us the content of this future "separate discussion." Tell us whether you will also expand the "Overview" section of your MD&A to address this topic.

Proxy Statement Filed March 23, 2010

Compensation Discussion and Analysis, page 16

Annual Incentives, page 22

3. We note your response to prior comment 9 and reissue it in part. Please provide the actual performance achieved for the corporate EPS and cash flow performance objectives. For example, while the table on page 24 discloses a 128.65% EPS performance achievement against EPS performance objectives, disclose the actual EPS achieved.

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.

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You may contact Gary Newberry at (202) 551-3761, or Chris White, Branch Chief, at (202) 551-3461 if you have questions regarding comments on the financial statements and related matters. Please contact John Lucas at (202) 551-5798, Anne Nguyen Parker, Branch Chief, at (202) 551-3611, or me at (202) 551-3745 with any other questions.

Sincerely,

H. Roger Schwall Assistant Director