



DIVISION OF
CORPORATION FINANCE

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

February 24, 2014

Via Email

William S. Barth
Chief Financial Officer
BSD Medical Corporation
2188 West 2200 South
Salt Lake City, Utah 84119

**Re: BSD Medical Corporation
Form 10-K for the Fiscal Year Ended August 31, 2013
Filed November 14, 2013
File No. 001-32526**

Dear Mr. Barth:

We have reviewed your filing and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your documents. 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 the Fiscal Year Ended August 31, 2013

Exhibits 31.2

1. The certifying individual's name in the first line of this certification is not the same as the certifying individual who signed the certification. Similarly, the name in the certification in Exhibit 32.2, Dennis P. Gauger, is not the name of the individual who signed that certification. Please file an amendment to your Form 10-K to correct the certifications.

Exhibit 32.1 and Exhibit 32.2

2. The Section 906 certifications to your August 31, 2013 Form 10-K refer to the Form 10-K of BSD Medical Corporation for the fiscal year ended August 31, 2012. Please file an amendment to your Form 10-K to correct the certifications.

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.

You may contact Andri Boerman, Staff Accountant, at (202) 551-3645, or Kate Tillan, Assistant Chief Accountant, at (202) 551-3604 if you have questions regarding comments on the financial statements and related matters. You may also contact me at (202) 202-3671.

Sincerely,

/s/ Kate Tillan for

Martin F. James
Senior Assistant Chief Accountant