



DIVISION OF
CORPORATION FINANCE

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

May 29, 2012

Via E-mail

Thomas Patrick Schaeffer
Chief Executive Officer
Oryon Technologies, Inc.
4251 Kellway Circle
Addison, TX 75001

**Re: Oryon Technologies, Inc.
Current Report on Form 8-K, as amended
Filed May 7, 2012
File No. 001-34212**

Dear Mr. Schaeffer:

We have reviewed your filing 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.

Item 2.01 – Completion of Acquisition or Disposition of Assets, page 2

1. We note your disclosure that as of May 4, 2012 there were outstanding subscription agreement to purchase 650,000 shares of your common stock. Please revise your disclosure to discuss the current status of these subscription agreements and specify the financing transaction they are related to, including terms of the transaction.

Description of Business, page 4

2. To the extent you discuss historical business relationships, the discussion should be balanced with a discussion of the current status of your relationship.
3. We note your statement that you have “obtained market validation in the apparel, textile and gear arena.” Please clarify whether Marmot Mountain and Lands End currently sell apparel and gear items that incorporate Elastolite, and the terms of those business

arrangements. In addition, please expand your disclosure regarding your “test marketing” arrangements with these companies to explain the results of such tests and when, if ever, you expect these activities to begin generating revenue.

4. Please provide a discussion of your five-year plan in the Business Section, including funding requirements.

Background of Transaction, page 6

5. Identify who at Eaglecrest Resources, Inc. “identified Oryon as a potential strategic acquisition...” Identity any third parties, such as the “investment firm” mentioned on page 34, that played a material role in arranging or facilitating the transactions and disclose the benefits they received for their roles. See Item 404(c) of Regulation S-K.

Advantages of Elastolite, page 11

6. Please add a caption to the images on this page describing the status of these products. For example, if the products are prototypes or test products, please disclose that they are not currently in market.

Intellectual Property, page 12

7. Please expand your disclosure to identify all your material patents and the jurisdictions in which they were filed, the dates issued, the products to which they relate and expiration dates.

Industry and Competition, page 14

8. Please revise your disclosure to identify your specific competitors in the EL and LED markets.

Liquidity and Capital Resources, page 33

9. Please provide a more detailed assessment of your liquidity outlook. We note your plans to raise \$2 million in new equity. We also note the outstanding promissory notes for \$600 thousand as advances against the proceeds to be received at the closing of the Merger. It appears that this financing did not occur. Disclose the current status of this financing. Disclose how long management expects that current cash on hand will fund operations and how much additional cash the company will need to fund its operations over the next twelve months. In addition, please disclose your current monthly expenditures.

Security Ownership After the Merger, page 37

10. It appears that M. Richard Marcus is the beneficial owner of all the shares held by MRM Acquisitions, LLC and Oryon Capital based upon his position with each entity and his membership interests in Oryon Capital. See Rule 13d-3. Please revise the table accordingly.

Directors and Executive Officers, page 39

11. Please revise your director and officer biographies to specify each officer and director's business experiences during the last five years, including term of employment with each entity during that period.

Summary Compensation, page 42

12. Please revise to disclose the aggregate grant date fair value of the option grants computed in accordance with FASB ASC Topic 718. Please revise to include a footnote disclosing all assumptions made in the valuation of any stock awards by reference to a discussion of those assumptions in your financial statements, footnotes to your financial statements, or to a discussion in your Management's Discussion and Analysis. Refer to Instruction 1 to Item 402(n)(2)(v) of Regulation S-K.

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.

Thomas P. Schaeffer
Oryon Technologies, Inc.
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You may contact Christine Adams, Senior Staff Accountant, at (202) 551-3363 or Robert Littlepage, Accountant Branch Chief, at (202) 551-3361 if you have questions regarding comments on the financial statements and related matters. Please contact Brandon Hill, Attorney Advisor, at (202) 551-3268 or me at (202) 551-3810 with any other questions.

Sincerely,

/s/ Larry Spigel

Larry Spigel
Assistant Director