



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

DIVISION OF
CORPORATION FINANCE

January 5, 2011

Adrian Goldfarb
Chief Financial Officer
Ecosphere Technologies, Inc.
3515 S.E. Lionel Terrace
Stuart, FL 34997

Re: Ecosphere Technologies, Inc.
Form 10-K for the Year Ended December 31, 2009
Filed March 31, 2010
File No. 000-25663

Dear Mr. Goldfarb:

We have reviewed your letters dated October 29, 2010, November 9, 2010 and December 17, 2010 and have the following comment. 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 comment applies 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 the comment, we may have additional comments.

Item 10. Directors, Executive Officers and Corporate Governance, page 35

1. We continue to evaluate your response to prior comment 2. Please provide us with the documentation that you refer to in your response evidencing when Mr. McGuire was released from probation. We also reissue the final sentence of the comment which requested that you submit the faxed correspondence dated September 13, 2010 as correspondence on EDGAR.

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

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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 connection with responding to our comments, please provide, in writing, a 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 Joseph McCann, Staff Attorney, at (202) 551-6262 or Tim Buchmiller, Reviewing Attorney, at (202) 551-3635 if you have questions on any of our comments.

Sincerely,

Russell Mancuso
Branch Chief

cc (via fax): Michael Harris, Esq.
Harris Cramer LLP