



DIVISION OF
CORPORATION FINANCE

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

August 29, 2014

Via E-mail

David Brooks
Chief Financial Officer
Ecosphere Technologies, Inc.
3515 S.E. Lionel Terrace
Stuart, Florida 34997

**Re: Ecosphere Technologies, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2013
Filed March 17, 2014
File No. 000-25663**

Dear Mr. Brooks:

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.

Form 10-K for the Fiscal Year Ended December 31, 2013

Item 8. Financial Statements

Report of Independent Registered Public Accounting Firm, page F-1

1. We note that neither Management's Report on Internal Control Over Financial Reporting presented on page 39 nor the Report of Independent Registered Public Accounting Firm identify the version of the Committee of Sponsoring Organizations of the Treadway Commission's Internal Control – Integrated Framework that was used to perform your assessment – i.e., whether the 1992 Framework or Updated Framework issued in 2013 was used. Please amend the filing to include reports that identify the version of the COSO Integrated Framework you and your auditor used in the assessment. Otherwise, tell us how management's report complies with Item 308(a)(2) of Regulation S-K and

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how the auditor's report complies with paragraphs 167(l) and (m) of PCAOB Auditing Standard No. 2.

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 Kevin Kuhar, Senior Accountant, at (202) 551-3662 or Kate Tillan, Assistant Chief Accountant, at (202) 551-3604 if you have questions regarding comments on the financial statements and related matters. In this regard, do not hesitate to contact me at (202) 551-3671 with any other questions.

Sincerely,

/s/ Kate Tillan for

Martin James
Senior Assistant Chief Accountant