

Mail Stop 6010

August 13, 2008

Via U.S. Mail and Fax (772) 781-4778

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

**Re: Ecosphere Technologies, Inc.
Form 10-KSB for the fiscal year ended December 31, 2007
Filed April 15, 2008
File No. 000-25663**

Dear Mr. Goldfarb:

We have reviewed your filings and correspondence dated July 15, 2008 and August 7, 2008 and have the following comments. Where indicated, we think you should revise your future filings in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comment or on any other aspects of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-KSB for the fiscal year ended December 31, 2007

Item 7. Financial Statements

Note 17. Significant Transaction, page F-33

1. We reference your response to prior comment 4 in our letter dated July 25, 2008. We note that you assert that sales of intellectual property and other assets are activities that constitute ongoing major or central operations. Please tell us your history of developing, patenting, and selling technologies and other assets. Please discuss your previous sales to date and sales that are in progress. Please also tell us whether you developed the ship stripping technology with the intent to sell or with the intent to operate it as part of your central operations. If your intent was to sell, please discuss the length of time between developing and patenting this technology and the eventual sale. Discuss the amount of revenues earned during this period and any previous attempts to sell these assets. Also, please tell us whether you intend to sell the remaining patents and related assets of UES and if so, when. Please tell us why you continue to believe that this transaction should be reflected in revenues rather than as an asset sale.

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a cover letter with your response that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

You may contact Praveen Kartholy, Staff Accountant, at (202) 551-3778 or me at (202) 551-3676 if you have questions regarding these comments and related matters. You may also contact Martin F. James, Senior Assistant Chief Accountant, at (202) 551-3671.

Sincerely,

Brian R. Cascio
Accounting Branch Chief