

Mail Stop 6010

October 1, 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, August 7, 2008 and August 28, 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 note your response to the prior comment in our letter dated August 13, 2008. Please respond to the following:
  - We note that you have referred to the coating removal business as a separate business segment in your Forms 10-K and 10-Q filings. We also note the references throughout your filings to the ship stripping business, assets or technology. In addition, you indicated in your previous response that the sale of assets of the ship stripping business was not reported as a discontinued operation only because of your significant continuing involvement in this business as defined in SFAS 144. In light of these factors, tell us why you have not recorded this transaction as a gain from the sale of assets or a business rather than revenue.
  - You state that the sale of the ship stripping technology is the first deal to be consummated and no other deals have occurred to date even though you have been in the “business of developing and patenting technologies for more than 10 years.” Considering the lack of history of such sales and your statement that this represents a “onetime event”, tell us how this sale constitutes your ongoing major or central operations. This sale does not appear to meet the definition of revenues in paragraphs 78 and 79 of CON 6.
  - The sale of “intellectual property, net,” in your financial statements appears to be a sale of various assets relating to the ship stripping business. It includes capital leases, other liabilities assumed, settlement of other liabilities, inventory, equipment and patents. In addition, we note that all of your assets sold were in use and were part of your operating business. As such, this appears to meet the definition of gains and losses, as noted in paragraph 85 of CON 6, which includes gains and losses “from dispositions of used equipment, or from settlements of liabilities at other than their carrying amounts.” Furthermore, paragraph 87 of CON 6 states that revenues and expenses “are commonly displayed as gross inflows or outflows of net assets, while gains and losses are usually displayed as net inflows or outflows.” We note that you have netted your cash proceeds from the sale. Also, we note that you did not recognize any cost of good sold or any other costs associated with this revenue, as would be the case in a typical sale of products or services.

- Please revise to include the sale of these assets as gains or other income included in continuing operations.
2. In addition, we reference the discussion of other sales that are in progress at the current time on page 3 of your response. Please tell us how you have accounted and reported these pending sales under SFAS 144.

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