



DIVISION OF
CORPORATION FINANCE

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

May 6, 2016

Mail Stop 4631

Via E-Mail

Randy May
Chief Executive Officer
Ecoark Holdings, Inc.
3333 Pinnacle Hills Parkway I Suite 220
Rogers, AR 72758

**Re: Ecoark Holdings, Inc.
Registration Statement on Form S-1
Filed April 29, 2016
File No. 333-211045**

Dear Mr. May:

Our preliminary review of your registration statement indicates that it fails in numerous material respects to comply with the requirements of the Securities Act of 1933, the rules and regulations under that Act, and the requirements of the form. Specifically, your registration statement should include the disclosure required by Item 11 of Form S-1 for Magnolia Solar, Inc., including audited financial statements; management's discussion and analysis of financial condition and results of operations; and description of business. In addition, your registration statement should include pro forma financial statements for Ecoark Holdings, Inc. in accordance with Article 11 of Regulation S-X. We will not perform a detailed examination of the registration statement and we will not issue comments. We suggest that you consider filing a substantive amendment to correct the deficiencies.

If you were to request acceleration of the effective date of the registration statement in its present form, we would likely recommend that the Commission deny your request. Please call Tracey Houser at 202-551-3736 or Frank Pigott at 202-551-3570 with any questions.

Sincerely,

/s/ Pamela Long

Pamela Long
Assistant Director
Office of Manufacturing and
Construction

cc: Peter DiChiara, Esq.
Carmel, Milazzo & DiChiara LLP