



DIVISION OF  
CORPORATION FINANCE

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

August 27, 2014

Via E-mail

Thomas B. Perkins  
President, Chief Executive Officer and Director  
Core-Mark Holding Company, Inc.  
395 Oyster Point Boulevard, Suite 415  
South San Francisco, California 94080

**Re: Core-Mark Holding Company, Inc.  
Form 10-K for Fiscal Year Ended December 31, 2013  
Filed March 3, 2014  
File No. 0-51515**

Dear Mr. Perkins:

We have reviewed your filing and have the following comments. We have limited our review to only your financial statements and related disclosures and do not intend to expand our review to other portions of your document. 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.

Item 8. Financial Statements and Supplementary Data, page 43

Notes to Consolidated Financial Statements, page 50

17. Quarterly Financial Data (Unaudited), page 77

1. Please refer to Rule 10(e)(1)(ii)(C) of Regulation S-K and remove Adjusted EBITDA from the notes to the consolidated financial statements. Otherwise tell us why you believe you are permitted to include this non-GAAP measure in the notes to the financial statements.

Exhibits 31.1, 31.2, 32.1 and 32.2

2. Please amend the filing to include conformed signatures above the signature lines at the end of the certifications included in Exhibits 31.1, 31.2, 32.1 and 32.2.

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 Adam Phippen, Staff Accountant, at (202) 551-3336 or Robyn Manuel, Staff Accountant, at (202) 551-3823 if you have questions regarding our comments. Please contact me at (202) 551-3344 with any other questions.

Sincerely,

/s/ William H. Thompson

William H. Thompson  
Accounting Branch Chief

cc: Stacy Loretz-Congdon  
Chief Financial Officer