

Mail Stop 3561

December 30, 2009

J. Michael Walsh
President, Chief Executive Officer, Director
Core-Mark Holding Company, Inc.
395 Oyster Point Boulevard, Suite 415
South San Francisco, CA 94080

**Re: Core-Mark Holding Company, Inc.
Form 10-K for the Fiscal Year Ended December 31, 2008
Filed March 23, 2009
Definitive Proxy Statement on Schedule 14A
Filed April 20, 2009
Form 10-Q for the Fiscal Quarters Ended March 31, 2009, June 30,
2009 and September 30, 2009
Filed May 8, 2009, August 6, 2009 and November 6, 2009
File No. 000-51515**

Dear Mr. Walsh:

We have reviewed your filings and have the following comments. You should comply with the comments in all future filings, as applicable. Please confirm in writing that you will do so and also explain to us in sufficient detail for an understanding of the disclosure how you intend to comply by providing us with your proposed revisions. If you disagree, we will consider your explanation as to why our comments are inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. 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 filings. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the fiscal year ended December 31, 2008

Item 1. Business, page 1

1. In an appropriate place in this section, please discuss the extent to which your business is seasonal. Please refer to Item 101 of Regulation S-K.

Item 1A. Risk Factors, page 10

2. You stated in the introductory paragraph to this section that “[t]he risk and uncertainties described below are not the only ones we face.” This statement may imply that you have not discussed all material risks that you face. Please confirm that you have discussed all material risks that you face and, if not, please discuss those risks. Also, please confirm that in future filings you will omit any statement which may imply that you have not discussed all of your material risks in this section.

We depend on our senior management and key personnel, page 15

3. Please identify the members of senior management and key personnel that you are referring to in this risk factor.

Performance Comparison, page 22

4. You state your cumulative stockholder return is based on an investment of \$100 and is measured by the per share price change for the period by the share price at the beginning of the measurement period. However, Item 201(e) states cumulative total shareholder return should also assume dividend reinvestment. Please advise if your comparison assumed dividend reinvestment for those companies in the peer group, Russell 2000 Index and Nasdaq Index and if not, please revise your table, as appropriate, to assume dividend reinvestment. In the alternative, please tell us why it was not appropriate to assume dividend reinvestment when constructing your comparison. Please refer to Item 201(e) of Regulation S-K.

Net Sales of Food/Non-Food Products, page 31

5. Where changes in your operating results are caused by more than one factor, please quantify the effect of each factor on the change, if possible. For example, rather than stating that your increased sales “was due primarily to increases in our food, candy and other tobacco product categories driven by the Company’s sales and marketing initiatives and the addition of our new Toronto and New England division,” please specify how much of the increase in your net sales of food/non-food products is attributable to each source. Also, your discussion of the increase in your Selling, General and Administrative Expenses was due to several factors. Please discuss how much of the increase in your Selling, General and Administrative Expenses was due to each factor. See Item 303 of Regulation S-K and SEC Release No. 33-8350.

Exhibit 10 – Material Contracts

6. Please file complete copies of material agreements, including all exhibits, schedules and attachments. See Item 601(b)(10) of Regulation S-K. For example, we note that you have not provided all of the schedules and/or exhibits or provided complete schedules and/or exhibits to the following exhibits:

- Exhibit 10.18 – Credit Agreement, dated October 12, 2005;
- Exhibit 10.20 – Pledge and Security Agreement, dated October 12, 2005 (Schedule I – in particular).

While Item 601(b)(2) of Regulation S-K permits you to provide omitted information supplementally, there is not a similar provision in Item 601(b)(10) of Regulation S-K. Please review your material agreements and re-file complete agreements with your next periodic report. Please confirm your understanding in this regard.

Exhibit 10.19

7. We note your reference to this exhibit, however, we are unable to determine where this exhibit can be found. Please include language that incorporates this exhibit by reference. Alternatively, you may file the exhibit with your filing.

Definitive Proxy Statement on Schedule 14A

8. We note that it does not appear that your website contains a list of any beneficial ownership reports filed pursuant to Section 16(a) of the Exchange Act even though several such forms were filed over the last 12-month period. Please revise or advise. Refer to Rule 16a-3(k) of the Exchange Act.

Certain Relationships and Related Transactions, page 10

9. Please expand your discussion to better describe the types of transactions that are covered by your related transaction policies and the standard your audit committee applies when reviewing related party transactions. Please refer to Item 404(b) of Regulation S-K.

Compensation Discussion and Analysis, page 17

How We Determine the Amounts to Pay, page 19

10. Please discuss why you increased the salary of each named executive officers in the amounts noted in this section.

Equity Incentive Program, page 22

11. Please provide the actual results under each of the metrics set for the 2008 equity incentive program and describe how you calculated the “approved award percentage” for each component.

Compensation of the Named Executive Officers for Year Ended..., page 24

12. Please provide in this section or in your “Bonus Parameters and Requirements for 2008 and 2009” section the actual results for each performance metric. In this regard, we note that you indicate at what level each measure was satisfied but it would be helpful to know by exactly how much.
13. We note that a component to certain named executive officer’s bonus is “Various individual non-financial objectives.” Please generally discuss here or in your “Bonus Parameters and Requirements for 2008 and 2009” section these criteria. Also, for each named executive officer whose bonus components include “[v]arious individual non-financial objectives” please explain how the Compensation Committee reached its assessment in each instance.

Other Considerations, page 29

14. We note that the Compensation Committee retained Towers Perrin to review all elements of your compensation and compare them to your peer companies. To the extent to which you engaged in benchmarking, please provide the benchmark and the benchmark components, including component companies. Please refer to Item 402 of Regulation S-K and Question 118.05 of our Regulation S-K Compliance and Disclosure Interpretations located at our web-site, www.sec.gov.

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

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in these filings to be certain that the filings include all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filings;

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- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filings; 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filings or in response to our comments on your filings.

You may contact Robert W. Errett, Staff Attorney, at (202) 551-3225 or Mara Ransom, Legal Branch Chief, at (202) 551-(3264) or me at (202) 551-3720 with any other questions.

Sincerely,

H. Christopher Owings
Assistant Director