

(Check One):

- Form 10-K
- Form 20-F
- Form 11-K
- Form 10-Q
- Form 10-D
- Form N-SAR
- Form N-CSR

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549**

SEC FILE NUMBER

000-51515
CUSIP NUMBER

218681104

FORM 12b-25

NOTIFICATION OF LATE FILING

For Period Ended: March 31, 2006

- Transition Report on Form 10-K
- Transition Report on Form 20-F
- Transition Report on Form 11-K
- Transition Report on Form 10-Q
- Transition Report on Form N-SAR

For the Transition Period Ended: _____

Read Instruction (on back page) Before Preparing Form. Please Print or Type.

Nothing in this form shall be construed to imply that the Commission has verified any information contained herein.

If the notification relates to a portion of the filing checked above, identify the Item(s) to which the notification relates:

PART I — REGISTRANT INFORMATION

Core-Mark Holding Company, Inc.

Full Name of Registrant

Former Name if Applicable

395 Oyster Point Boulevard, Suite 415

Address of Principal Executive Office (Street and Number)

South San Francisco, California 94080

City, State and Zip Code

PART II — RULES 12b-25(b) AND (c)

If the subject report could not be filed without unreasonable effort or expense and the registrant seeks relief pursuant to Rule 12b-25(b), the following should be completed. (Check box if appropriate)

- (a) The reason described in reasonable detail in Part III of this form could not be eliminated without unreasonable effort or expense
- (b) The subject annual report, semi-annual report, transition report on Form 10-K, Form 20-F, Form 11-K, Form N-SAR or Form N-CSR, or portion thereof, will be filed on or before the fifteenth calendar day following the prescribed due date; or the subject quarterly report or transition report on Form 10-Q or subject distribution report on Form 10-D, or portion thereof, will be filed on or before the fifth calendar day following the prescribed due date; and
- (c) The accountant's statement or other exhibit required by Rule 12b-25(c) has been attached if applicable.

PART III — NARRATIVE

State below in reasonable detail why Forms 10-K, 20-F, 11-K, 10-Q, 10-D, N-SAR, N-CSR, or the transition report or portion thereof, could not be filed within the prescribed time period.

Core-Mark Holding Company, Inc. (the "Company") is unable to file its quarterly report for the first quarter of 2006 on Form 10-Q by May 15, 2006 because the Company needs additional time to finalize its financial statements for the period.

(Attach extra Sheets if Needed)

PART IV — OTHER INFORMATION

- (1) Name and telephone number of person to contact in regard to this notification

James Wall	650	589-9445
(Name)	(Area Code)	(Telephone Number)

- (2) Have all other periodic reports required under Section 13 or 15(d) of the Securities Exchange Act of 1934 or Section 30 of the Investment Company Act of 1940 during the preceding 12 months or for such shorter period that the registrant was required to file such report(s) been filed? If answer is no, identify report(s). Yes No

- (3) Is it anticipated that any significant change in results of operations from the corresponding period for the last fiscal year will be reflected by the earnings statements to be included in the subject report or portion thereof? Yes No

If so, attach an explanation of the anticipated change, both narratively and quantitatively, and, if appropriate, state the reasons why a reasonable estimate of the results cannot be made.

The Company currently expects net sales of \$1.2 million for the first quarter of 2006, up 9% compared to \$1.1 billion in net sales for the first quarter of 2005. Net income for the three months ended March 31, 2006 is expected to be \$1.7 million or \$0.16 per fully diluted share, compared to \$70,080 or \$0.01 per fully diluted share for the three months ended March 31, 2005. Income from operations is currently expected to be approximately \$3.9 million for the three months ended March 31, 2006, essentially flat compared to the same period last year. The results for the three months ended March 31, 2006 are currently expected to include a pre-tax benefit of \$1.1 million due to favorable settlements related to vendor and customer receivables, \$0.6 million in cigarette holding profits and a LIFO expense of \$1.4 million. Results for the three months ended March 31, 2005 included a pre-tax benefit of \$1.0 million related to an unanticipated insurance recovery, \$2.5 million in cigarette holding profits and a LIFO expense of \$1.6 million.

This Form 12b-25 contains information constituting "forward-looking statements." Forward-looking statements include all statements that do not relate solely to historical or current facts, and can generally be identified by the use of words such as "may," "believe," "will," "expect," "project," "estimate," "anticipate," "plan", "continue", or other similar words. These forward-looking statements are based on the current plans, estimates and expectations of the Company's management and are subject to certain risks and uncertainties that could cause actual results to differ materially from historical results or those anticipated. These factors include, but are not limited to: economic conditions affecting the cigarette and consumable goods industry; adverse effect of legislation and other matters affecting the cigarette industry; increased competition in the distribution industry; the Company's inability to retain and attract customers; the negative affects of product liability claims; failure of the Company's suppliers to provide products; increases in fuel prices; the loss of key personnel or the Company's inability to attract and retain new qualified personnel; currency exchange rate fluctuations; and the negative effects of the Company's reorganization on the Company's customer, supplier and employee relationships. See the "Risk Factors" section included in the Company's most recent Form 10-Q or 10-K and other filings with the Securities and Exchange Commission for a discussion of certain risks that may affect the Company's business.

These forward-looking statements speak only as of the date of this Form 12b-25. Except as may be required by law, the Company undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Core-Mark Holding Company, Inc.

(Name of Registrant as Specified in Charter)

has caused this notification to be signed on its behalf by the undersigned hereunto duly authorized.

Date May 15, 2006

By: /s/ James Wall

James Wall
Chief Financial Officer

INSTRUCTION: The form may be signed by an executive officer of the registrant or by any other duly authorized representative. The name and title of the person signing the form shall be typed or printed beneath the signature. If the statement is signed on behalf of the registrant by an authorized representative (other than an executive officer), evidence of the representative's authority to sign on behalf of the registrant shall be filed with the form.

ATTENTION

Intentional misstatements or omissions of fact constitute Federal Criminal Violations (See 18 U.S.C. 1001).