Walsh Christopher L Form 4

September 14, 2012

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

OMB APPROVAL OMB

Washington, D.C. 20549 Number: Expires:

3235-0287 January 31,

STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF **SECURITIES**

2005 Estimated average

burden hours per response... 0.5

if no longer subject to Section 16. Form 4 or Form 5

Check this box

obligations may continue. See Instruction

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934, Section 17(a) of the Public Utility Holding Company Act of 1935 or Section 30(h) of the Investment Company Act of 1940

1(b).

(Last)

(Print or Type Responses)

1. Name and Address of Reporting Person * Walsh Christopher L

2. Issuer Name and Ticker or Trading Symbol

Issuer

5. Relationship of Reporting Person(s) to

09/13/2012

Core-Mark Holding Company, Inc. [CORE]

(Check all applicable)

Senior VP-US Distribution

6. Individual or Joint/Group Filing(Check

395 OYSTER POINT BLVD.,

(First)

(Street)

(State)

SUITE 415

3. Date of Earliest Transaction (Month/Day/Year)

Officer (give title below)

Director

10% Owner Other (specify

(Zip)

(Middle)

4. If Amendment, Date Original

Filed(Month/Day/Year) Applicable Line)

X Form filed by One Reporting Person Form filed by More than One Reporting

SOUTH SAN

(City)

FRANCISCO, CA 94080

| Table I - Non-Derivative | Securities Acquir | ad Disposed of | or Reneficially Own | han |
|---------------------------|--------------------|------------------|----------------------|-----|
| Table I - Noll-Delivative | s Securries Acquir | eu, Disposeu oi, | or belieficially Owl | neu |

| Tuble 1 Troit Destructive Securities Trequired, Disposed on, or Deficiently Owned | | | | | | | | | |
|---|---|---|---|--------|------------------------|---------------|--|--|---|
| 1.Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction Code (Instr. 8) | | sed of 4 and (A) | ` ' | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) | 6. Ownership Form: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
| | | | Code V | Amount | or (D) | Price | (Instr. 3 and 4) | | |
| Coremark Common Stock | 09/13/2012 | | M | 5,977 | A | \$ 19.19 | 52,752 | D | |
| Coremark Common Stock | 09/13/2012 | | S | 5,977 | D | \$ 47.1126 | 46,775 | D | |
| Coremark Common Stock | 09/14/2012 | | M | 1,306 | A | \$ 19.19 | 48,081 | D | |
| | 09/14/2012 | | S | 1,306 | D | | 46,775 | D | |

Coremark \$

Common 47.0258

Stock

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

Persons who respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB control number.

SEC 1474 (9-02)

Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)

| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | Transaction Code (Instr. 8) | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4, and 5) | erivative Expiration Date urities (Month/Day/Year) uired or oosed of ar. 3, 4, | | 7. Title and Amount of Underlying Securities (Instr. 3 and 4) | |
|---|---|---|---|--------------------------------|---|---|--------------------|---|--|
| | | | | Code V | (A) (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares |
| 07LTIP Stock Option | \$ 19.19 | 09/13/2012 | | M | 5,977 | 01/21/2010 | 01/30/2016 | Coremark Common Stock | 5,977 |
| 07LTIP Stock Option | \$ 19.19 | 09/14/2012 | | M | 1,306 | 01/21/2010 | 01/30/2016 | Coremark Common Stock | 1,306 |

Reporting Owners

| Reporting Owner Name / Address | | | | |
|--------------------------------|----------|-----------|---------|-------|
| | Director | 10% Owner | Officer | Other |

Walsh Christopher L 395 OYSTER POINT BLVD., SUITE 415 SOUTH SAN FRANCISCO, CA 94080

Senior VP-US Distribution

Relationships

Signatures

Shawn Levitt, 09/14/2012 POA

**Signature of Date
Reporting Person

Reporting Owners 2

Explanation of Responses:

- * If the form is filed by more than one reporting person, see Instruction 4(b)(v).
- ** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. See 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure. Potential persons who are to respond to the collection of information contained in this form are not required to respond unless the form displays a currently valid OMB number.