VULCAN MATERIALS CO
Reported by
JAMES DONALD M

FORM 4
(Statement of Changes in Beneficial Ownership)

Filed 09/20/10 for the Period Ending 09/16/10

Address 1200 URBAN CENTER DRIVE
         BIRMINGHAM, AL 35242
Telephone 2052983000
CIK 0001396009
Symbol VMC
Fiscal Year 12/31
1. Name and Address of Reporting Person *

JAMES DONALD M

1200 URBAN CENTER DRIVE

BIRMINGHAM, AL 35242

2. Issuer Name and Ticker or Trading Symbol

Vulcan Materials CO [ VMC ]

3. Date of Earliest Transaction (MM/DD/YYYY)

9/16/2010

4. If Amendment, Date Original Filed (MM/DD/YYYY)

5. Relationship of Reporting Person(s) to Issuer (Check all applicable)

X Director

10% Owner

Officer (give title below)

Chairman & CEO

Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned

<table>
<thead>
<tr>
<th>Title of Security</th>
<th>Trans. Date</th>
<th>Deemed Execution Date, if any</th>
<th>Securities Acquired (A) or Disposed of (D)</th>
<th>Amount of Securities Beneficially Owned Following Reported Transaction(s)</th>
<th>Ownership Form: Direct (D) or Indirect (I)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phantom Stock (Deferred Compensation)</td>
<td>9/16/2010</td>
<td>I</td>
<td>10253.1900</td>
<td>Common Stock 10253.1900</td>
<td>$37.1600 26394.8600</td>
</tr>
</tbody>
</table>

Explanation of Responses:

(1) Each share of phantom stock is the economic equivalent of one share of VMC common stock. Shares of phantom stock are payable in cash following the reporting person's termination of employment with VMC, and may be transferred by the reporting person into an alternative investment account at any time.

Reporting Owners

Reporting Owner Name / Address | Relationships
---|---
JAMES DONALD M 1200 URBAN CENTER DRIVE | Chairman & CEO

Signatures

Amy M. Tucker, Attorney-in-Fact 9/20/2010

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

* If the form is filed by more than one reporting person, see Instruction 4(b)(v).


Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, see Instruction 6 for procedure.

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