VULCAN MATERIALS CO
Reported by
JAMES DONALD M

FORM 4
(Statement of Changes in Beneficial Ownership)

Filed 03/03/10 for the Period Ending 03/01/10

Address 1200 URBAN CENTER DRIVE
          BIRMINGHAM, AL 35242
Telephone 2052983000
CIK 0001396009
Symbol VMC
Fiscal Year 12/31
STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

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(f) of the Investment Company Act of 1940

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)

3/1/2010

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

5. Relationship of Reporting Person(s) to Issuer

Chairman & CEO

6. Individual or Joint/Group Filing

Form filed by One Reporting Person

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

<table>
<thead>
<tr>
<th>Title of Security</th>
<th>Trans. Date</th>
<th>Code</th>
<th>Amount</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Stock (Restricted Stock Units)</td>
<td>3/1/2010</td>
<td>F</td>
<td>612 (1) D</td>
<td>$43.055</td>
</tr>
<tr>
<td>Common Stock (Restricted Stock Units)</td>
<td>3/1/2010</td>
<td>D</td>
<td>24378 (2) D</td>
<td>$43.055</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Title of Derivative Security (Instr. 3)</th>
<th>Conversion or Exercise Price of Derivative Security</th>
<th>Trans. Date</th>
<th>Code</th>
<th>Amount or Number of Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Phantom Stock (Deferred Comp DSUs/PSUs)</td>
<td>50 (2)</td>
<td>3/1/2010</td>
<td>A</td>
<td>Common Stock 24378 $43.055 152035.14 D</td>
</tr>
</tbody>
</table>

Explanation of Responses:
(1) Represents the portion of the shares of common stock received upon the vesting of the restricted stock units (‘RSUs’) that the reporting person has elected to surrender to the Company in payment of taxes associated with the vesting.
(2) Represents time-based restricted stock units (‘RSUs’) reported as shares of common stock. The reporting person has elected, upon the vesting thereof, to defer the receipt of these shares under the terms of the Company’s Executive Deferred Compensation Plan.

Reporting Owners

<table>
<thead>
<tr>
<th>Reporting Owner Name / Address</th>
<th>Relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>JAMES DONALD M</td>
<td>Director 10% Owner Chairman &amp; CEO</td>
</tr>
<tr>
<td>1200 URBAN CENTER DRIVE</td>
<td>Officer Other</td>
</tr>
<tr>
<td>BIRMINGHAM, AL 35242</td>
<td></td>
</tr>
</tbody>
</table>
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. 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.