VULCAN MATERIALS CO
Reported by
JAMES DONALD M

FORM 4
(Statement of Changes in Beneficial Ownership)

Filed 12/17/10 for the Period Ending 12/16/10

Address 1200 URBAN CENTER DRIVE
          BIRMINGHAM, AL 35242
Telephone 2052983000
CIK 0001396009
Symbol VMC
Fiscal Year 12/31
United States Securities and Exchange Commission
Washington, D.C. 20549

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
(Last) (First) (Middle)
1200 URBAN CENTER DRIVE
(Bottom)
BIRMINGHAM, AL 35242

10. Name and Address of Issuer

Vulcan Materials CO [ VMC ]

2. Issuer Name and Ticker or Trading Symbol

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

12/16/2010

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

Chairman & CEO

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

6. Individual or Joint/Group Filing (Check Applicable Line)

Form filed by One Reporting Person

Form filed by More than 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>Executed Date, if any</th>
<th>Trans. Code (Instr. 8)</th>
<th>Amount (A) or Disposed of (D)</th>
<th>Price</th>
<th>Amount Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Stock</td>
<td>12/16/2010</td>
<td>M</td>
<td>20000.0000</td>
<td>A</td>
<td>$44.9000</td>
<td>43397.0000</td>
</tr>
<tr>
<td>Common Stock</td>
<td>12/16/2010</td>
<td>S</td>
<td>20000.0000</td>
<td>D</td>
<td>$47.0407</td>
<td>23397.0000</td>
</tr>
<tr>
<td>Common Stock</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>158031.0000</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 Date</th>
<th>Trans. Date</th>
<th>Executed Date, if any</th>
<th>Trans. Code (Instr. 8)</th>
<th>Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)</th>
<th>Date Exercisable and Expiration Date</th>
<th>Title</th>
<th>Amount of Derivative Securities Underlying Derivative Security (Instr. 3 and 4)</th>
<th>Price of Derivative Security (Instr. 5)</th>
<th>Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4)</th>
<th>Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4)</th>
<th>Nature of Indirect Beneficial Ownership (Instr. 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stock Options (Right to Buy)</td>
<td>$44.9000</td>
<td>12/16/2010</td>
<td></td>
<td>M</td>
<td>20000.0000</td>
<td>2/9/2002</td>
<td>Common Stock</td>
<td>20000.0000</td>
<td>$44.9000</td>
<td>73350.0000</td>
<td>Direct (D)</td>
<td>Direct (D)</td>
</tr>
</tbody>
</table>

Examination of Responses:

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</td>
</tr>
<tr>
<td>1200 URBAN CENTER DRIVE</td>
<td>10% Owner</td>
</tr>
<tr>
<td>BIRMINGHAM, AL 35242</td>
<td>Chairman &amp; CEO</td>
</tr>
</tbody>
</table>

Signatures
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.