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 *
   MURLEY JAN L
   1221 BROADWAY
   OAKLAND, CA 94612-1888

2. Issuer Name and Ticker or Trading Symbol
   CLOROX CO /DE/ [ CLX ]

3. Date of Earliest Transaction (MM/DD/YYYY)
   5/31/2011

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)
   ___ Other (specify below)

6. Individual or Joint/Group Filing (Check Applicable Line)
   _X_ 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>Code</th>
<th>V</th>
<th>Amount</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Common Stock</td>
<td>5/31/2011</td>
<td>M</td>
<td></td>
<td>$8000.0000</td>
<td>$38.5000</td>
</tr>
<tr>
<td>Common Stock</td>
<td>5/31/2011</td>
<td>S</td>
<td></td>
<td>$8000.0000</td>
<td>$70.0171</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>Trans. Date</th>
<th>Code</th>
<th>V</th>
<th>(A)</th>
<th>Amount</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred Stock Units</td>
<td>2/14/2011</td>
<td>A</td>
<td></td>
<td>117.4300</td>
<td>(4)</td>
<td>Common Stock 117.4300</td>
</tr>
<tr>
<td>Stock Option (Right to Buy)</td>
<td>5/31/2011</td>
<td>M</td>
<td></td>
<td>8000.0000</td>
<td>11/29/2003</td>
<td>11/29/2011</td>
</tr>
</tbody>
</table>

Explanation of Responses:

(1) This transaction was executed in multiple trades at prices ranging from $70.00 to $70.0500. The price reported above reflects the weighted average sale price. The reporting person hereby undertakes to provide upon request to the SEC staff, the issuer or a security holder of the issuer full information regarding the number of shares and prices at which the transaction was effected.

(2) 1-for-1

(3) Deferred Stock Units acquired through dividend reinvestment during the fiscal year pursuant to the Independent Directors' Deferred Compensation Plan.

(4) The Deferred Stock Units will be settled 100% in Clorox stock in connection with the reporting person's retirement or other termination of service as a Director.

Reporting Owners
<table>
<thead>
<tr>
<th>Reporting Owner Name / Address</th>
<th>Director</th>
<th>10% Owner</th>
<th>Officer</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>MURLEY JAN L</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1221 BROADWAY</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>OAKLAND, CA 94612-1888</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Signatures

By Angela Hilt, Attorney-in-Fact for 6/2/2011

** Signature of Reporting Person Date

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.