**FORM 4**

[ ] Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

**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** *
   MUELLER EDWARD A
   
   (Last) (First) (Middle)

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

3. **Date of Earliest Transaction (MM/DD/YYYY)**
   9/30/2010

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)
   _____ 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 Acquired, Disposed of or Beneficially Owned</th>
<th>Trans. Code</th>
<th>Date Acquired</th>
<th>Amount of Securities Acquired</th>
<th>Date Exercisable</th>
<th>Expiration Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred Stock Units</td>
<td>A</td>
<td>8/13/2010</td>
<td>80,000</td>
<td></td>
<td></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</th>
<th>Trans. Date</th>
<th>Exercisable Date</th>
<th>Expiration Date</th>
<th>Amount of Shares</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred Stock Units</td>
<td>9/30/2010</td>
<td></td>
<td></td>
<td>355,750</td>
</tr>
</tbody>
</table>

### Explanation of Responses:

(1) 1-for-1

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

(3) 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.

(4) Receipt of Deferred Stock Units in lieu of receipt of quarterly director's fees.

**Reporting Owners**

<table>
<thead>
<tr>
<th>Reporting Owner Name / Address</th>
<th>Relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUELLER EDWARD A</td>
<td>X</td>
</tr>
<tr>
<td>1221 BROADWAY</td>
<td>10% Owner</td>
</tr>
<tr>
<td>OAKLAND, CA 94612-1888</td>
<td>Other</td>
</tr>
</tbody>
</table>
By Angela Hilt, Attorney-in-Fact for 10/4/2010

** 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.