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
1221 BROADWAY
OAKLAND, CA 94612-1888

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

5. Relationship of Reporting Person(s) to Issuer
( Check all applicable)
___ X ___ Director
_____ 10% Owner
_____ Officer (give title below)
_____ Other (specify below)

3. Date of Earliest Transaction (MM/DD/YYYY)
12/31/2009

6. Individual or Joint/Group Filing (Check Applicable Line)
_ X _ Form filed by One Reporting Person
___ Form filed by More than One Reporting Person

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

| 1. Title of Security (Instr. 3) | 2. Trans. Date | 2A. Deemed Execution Date, if any | 3. Trans. Code (Instr. 8) | 4. Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | 5. Amount of Securities Beneficially Owned Following Reported Transaction(s) (Instr. 3 and 4) | 6. Ownership Form of Reportee: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|-------------------------------|---------------|----------------------------------|---------------------------|-------------------------------------------------------------------|---------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------|
| Deferred Stock Units          | 11/13/2009    |                                  | A (2)                     | 52.19 (3)                                                          | 0 (3)                                                                            | Common Stock                                                                                   |
| Deferred Stock Units          | 12/31/2009    |                                  | A (4)                     | 1783.33 (3)                                                      | 0 (3)                                                                            | Common Stock                                                                                   |
| Deferred Stock Units          | 12/31/2009    |                                  | A (5)                     | 389.3443 (3)                                                      | 0 (3)                                                                            | Common Stock                                                                                   |

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

<table>
<thead>
<tr>
<th>1. Title of Derivative Security (Instr. 3)</th>
<th>2. Conversion or Exercise Price of Derivative Security</th>
<th>3. Trans. Date</th>
<th>3A. Deemed Execution Date, if any</th>
<th>4. Trans. Code (Instr. 8)</th>
<th>5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5)</th>
<th>6. Date Exercisable and Expiration Date</th>
<th>7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4)</th>
<th>8. Price of Derivative Security (Instr. 5)</th>
<th>9. Number of derivative Securities Beneficially Owned Following Reported Transaction(s) (Instr. 4)</th>
<th>10. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4)</th>
<th>11. Nature of Indirect Beneficial Ownership (Instr. 4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deferred Stock Units</td>
<td>$0 (1)</td>
<td>11/13/2009</td>
<td></td>
<td>A (2)</td>
<td>52.19 (3)</td>
<td>(3)</td>
<td>Common Stock</td>
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<td></td>
<td></td>
<td></td>
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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) Annual award of Deferred Stock Units pursuant to the 2005 Stock Incentive Plan.
(5) Receipt of Deferred Stock Units in lieu of receipt of quarterly director's fees.

Reporting Owners

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**Reporting Owner Name / Address**

<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>MUELLER EDWARD A</td>
<td>X</td>
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**Signatures**

By Angela Hilt, Attorney-in-Fact for  

1/5/2010

**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.