

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**

OMB APPROVAL
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**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 <small>(Last) (First) (Middle)</small> 1221 BROADWAY <small>(Street)</small> OAKLAND, CA 94612-1888 <small>(City) (State) (Zip)</small> | 2. Issuer Name and Ticker or Trading Symbol CLOROX CO /DE/ [CLX] | 5. Relationship of Reporting Person(s) to Issuer (Check all applicable) <input checked="" type="checkbox"/> Director _____ 10% Owner <input type="checkbox"/> Officer (give title below) _____ Other (specify below) |
| 3. Date of Earliest Transaction (MM/DD/YYYY) <p align="center">12/30/2011</p> | | 6. Individual or Joint/Group Filing (Check Applicable Line) <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person |
| 4. If Amendment, Date Original Filed (MM/DD/YYYY) | | |

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: Direct (D) or Indirect (I) (Instr. 4) | 7. Nature of Indirect Beneficial Ownership (Instr. 4) |
|---------------------------------|----------------|-----------------------------------|---------------------------|---|-------------------------------------------------------------------|------------|-------|-----------------------------------------------------------------------------------------------|----------------------------------------------------------|-------------------------------------------------------|
| | | | Code | V | Amount | (A) or (D) | Price | | | |

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

| 1. Title of Derivate Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Trans. Date | 3A. Deemed Execution Date, if any | 4. Trans. Code (Instr. 8) | | 5. Number of Derivative Securities Acquired (A) or Disposed of (D) (Instr. 3, 4 and 5) | | 6. Date Exercisable and Expiration Date | | 7. Title and Amount of Securities Underlying Derivative Security (Instr. 3 and 4) | | 8. Price of Derivative Security (Instr. 5) | 9. Number of derivative Securities Beneficially Owned Following Reported Transaction (s) (Instr. 4) | 10. Ownership Form of Derivative Security: Direct (D) or Indirect (I) (Instr. 4) | 11. Nature of Indirect Beneficial Ownership (Instr. 4) |
|------------------------------------------|--------------------------------------------------------|----------------|-----------------------------------|---------------------------|---|----------------------------------------------------------------------------------------|-----|-----------------------------------------|-----------------|-----------------------------------------------------------------------------------|----------------------------|--------------------------------------------|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------|
| | | | | Code | V | (A) | (D) | Date Exercisable | Expiration Date | Title | Amount or Number of Shares | | | | |
| Deferred Stock Units | (1) | 11/14/2011 | | A (2) | V | 124.1000 | | (3) | (3) | Common Stock | 124.1000 | \$ 0 | 13749.6805 | D | |
| Deferred Stock Units | (1) | 12/30/2011 | | A (4) | | 1830.6100 | | (3) | (3) | Common Stock | 1830.6100 | \$ 0 | 15581.3531 | D | |
| Deferred Stock Units | (1) | 12/30/2011 | | A (5) | | 413.1600 | | (3) | (3) | Common Stock | 413.1600 | \$ 0 | 15994.5131 | D | |

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

| | |
|--|---------------|
| | Relationships |
|--|---------------|

| Reporting Owner Name / Address | Director | 10% Owner | Officer | Other |
|-------------------------------------------------------------|----------|-----------|---------|-------|
| MUELLER EDWARD A 1221 BROADWAY OAKLAND, CA 94612-1888 | X | | | |

Signatures

By Angela Hilt, Attorney-in-Fact for

1/4/2012

** 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).

** Intentional misstatements or omissions of facts constitute Federal Criminal Violations. *See* 18 U.S.C. 1001 and 15 U.S.C. 78ff(a).

Note: File three copies of this Form, one of which must be manually signed. If space is insufficient, *see* Instruction 6 for procedure.

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