

# FORM 4

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

| OMB APPROVAL                                   |           |
|--|-----------|
| OMB Number:                                    | 3235-0287 |
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Check this box if no longer subject to Section 16. Form 4 or Form 5 obligations may continue. See Instruction 1(b).

## STATEMENT OF CHANGES IN BENEFICIAL OWNERSHIP OF SECURITIES

Filed pursuant to Section 16(a) of the Securities Exchange Act of 1934 or Section 30(h) of the Investment Company Act of 1940

(Print or Type Responses)

|  |  |   |  |   |  |
|--|--|---|--|---|--|
| 1. Name and Address of Reporting Person *<br>MARXE AUSTIN W & GREENHOUSE<br>DAVID M        |  | 2. Issuer Name and Ticker or Trading Symbol<br>TEGAL CORP /DE/ [TGAL]                   |  | 5. Relationship of Reporting Person(s) to Issuer<br>(Check all applicable)<br><input type="checkbox"/> Director <input checked="" type="checkbox"/> 10% Owner<br><input type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below) |  |
| (Last) (First) (Middle)<br>C/O SPECIAL SITUATIONS FUNDS, 527<br>MADISON AVENUE, SUITE 2600 |  | 3. Date of Earliest Transaction (Month/Day/Year)<br>07/13/2006                          |  |   |  |
| (Street)<br>NEW YORK, NY 10022   |  | 4. If Amendment, Date Original Filed(Month/Day/Year)                                    |  | 6. Individual or Joint/Group Filing(Check Applicable Line)<br><input checked="" type="checkbox"/> Form filed by One Reporting Person<br><input type="checkbox"/> Form filed by More than One Reporting Person   |  |
| (City) (State) (Zip)   |  | <b>Table I - Non-Derivative Securities Acquired, Disposed of, or Beneficially Owned</b> |  |   |  |

| 1. Title of Security (Instr. 3) | 2. Transaction Date (Month/Day/Year) | 2A. Deemed Execution Date, if any (Month/Day/Year) | 3. Transaction 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)  |   |  |   |
| Common Stock                    | 07/13/2006                           |  | P                              |   | 64,335  | A \$ 0.3551 | 23,534,399  | I  | By Limited Partnerships                               |
| Common Stock                    | 07/14/2006                           |  | P                              |   | 68,658 (1)  | A \$ 0.3654 | 23,603,057 (1)  | I (1)  | By Limited Partnerships (1)                           |

Reminder: Report on a separate line for each class of securities beneficially owned directly or indirectly.

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**Table II - Derivative Securities Acquired, Disposed of, or Beneficially Owned (e.g., puts, calls, warrants, options, convertible securities)**

| 1. Title of Derivative Security (Instr. 3) | 2. Conversion or Exercise Price of Derivative Security | 3. Transaction Date (Month/Day/Year) | 3A. Deemed Execution Date, if any (Month/Day/Year) | 4. Transaction 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 (Month/Day/Year) |                 | 7. Title and Amount of Underlying Securities (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 |   | Date Exercisable   | Expiration Date |   |  |  |  |  |

## Reporting Owners

| Reporting Owner Name / Address  | Relationships |           |         |       |
|---|---------------|-----------|---------|-------|
|   | Director      | 10% Owner | Officer | Other |
| MARXE AUSTIN W & GREENHOUSE DAVID M<br>C/O SPECIAL SITUATIONS FUNDS<br>527 MADISON AVENUE, SUITE 2600<br>NEW YORK, NY 10022 |               | X         |         |       |

## Signatures

|                                 |  |            |
|---------------------------------|--|------------|
| Austin W. Marxe                 |  | 07/17/2006 |
| **Signature of Reporting Person |  | Date       |
| David M. Greenhouse             |  | 07/17/2006 |
| **Signature of Reporting Person |  | Date       |

## Explanation of Responses:

\* 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).

(1) This is a joint filing by Austin W. Marxe (Marxe) & David M. Greenhouse (Greenhouse). They share voting and investment control over all securities owned by Special Situations Fund III QP, L.P. (QP), Special Situations Cayman Fund, L.P. (Cay), Special Situations Private Equity Fund, L.P. (PE), Special Situations Technology Fund, LP (Tech) & Special Situations Technology II, Fund, L.P. (Tech II), respectively. 7,656,299 shares of CS, 3,776,649 Wts are held by QP, 2,101,323 shares of CS, 1,038,462 Wts with varying terms are held by Cay, 2,211,503 shares of CS, 1,816,712 Wts with varying terms are held by PE, 412,650 shares of CS, 287,292 Wts with varying terms are held by Tech & 2,602,212 shares of CS, 1,699,955 Wts with varying terms are held by Tech II. The interest of Marxe and Greenhouse in the shares of Common Stock owned by QP, Cay, PE, Tech, and Tech II is limited to the extent of his pecuniary interest.

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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