

FORM 3

UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

OMB APPROVAL	
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INITIAL STATEMENT OF 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 * MARXE AUSTIN W & GREENHOUSE DAVID M <small>(Last) (First) (Middle)</small> 153 E 53RD ST, 55TH FL <small>(Street)</small> NEW YORK, NY 10022 <small>(City) (State) (Zip)</small>	2. Date of Event Requiring Statement <small>(Month/Day/Year)</small> 09/19/2005	3. Issuer Name and Ticker or Trading Symbol TEGAL CORP /DE/ [TGAL]	
		4. Relationship of Reporting Person(s) to Issuer <small>(Check all applicable)</small> <input type="checkbox"/> Director <input checked="" type="checkbox"/> 10% Owner <input type="checkbox"/> Officer (give title below) <input type="checkbox"/> Other (specify below)	5. If Amendment, Date Original Filed <small>(Month/Day/Year)</small> 6. Individual or Joint/Group Filing <small>(Check Applicable Line)</small> <input checked="" type="checkbox"/> Form filed by One Reporting Person <input type="checkbox"/> Form filed by More than One Reporting Person

Table I - Non-Derivative Securities Beneficially Owned

1. Title of Security <small>(Instr. 4)</small>	2. Amount of Securities Beneficially Owned <small>(Instr. 4)</small>	3. Ownership Form: Direct (D) or Indirect (I) <small>(Instr. 5)</small>	4. Nature of Indirect Beneficial Ownership <small>(Instr. 5)</small>
Common Stock	7,169,230 <u>(1)</u>	I <u>(1)</u>	By Limited Partnerships <u>(1)</u>

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

SEC 1473 (7-02)

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

1. Title of Derivative Security <small>(Instr. 4)</small>	2. Date Exercisable and Expiration Date <small>(Month/Day/Year)</small>		3. Title and Amount of Securities Underlying Derivative Security <small>(Instr. 4)</small>		4. Conversion or Exercise Price of Derivative Security	5. Ownership Form of Derivative Security: Direct (D) or Indirect (I) <small>(Instr. 5)</small>	6. Nature of Indirect Beneficial Ownership <small>(Instr. 5)</small>
	Date Exercisable	Expiration Date	Title	Amount or Number of Shares			
Warrants	06/30/2003	06/30/2011	Common Stock	760,509 <u>(2)</u>	\$ 0.5	I <u>(2)</u>	By Limited Partnerships <u>(2)</u>
Warrants	09/09/2003	09/09/2011	Common Stock	497,296 <u>(2)</u>	\$ 0.5	I <u>(2)</u>	By Limited Partnerships <u>(2)</u>
Warrants	07/14/2005	07/14/2010	Common Stock	652,400 <u>(2)</u>	\$ 1	I <u>(2)</u>	By Limited Partnerships <u>(2)</u>
Warrants	09/19/2005	09/19/2010	Common Stock	2,932,216 <u>(2)</u>	\$ 1	I <u>(2)</u>	By Limited Partnership <u>(2)</u>

Reporting Owners

Reporting Owner Name / Address	Relationships			
	Director	10% Owner	Officer	Other
MARXE AUSTIN W & GREENHOUSE DAVID M 153 E 53RD ST				

55TH FL
NEW YORK, NY 10022

X

Signatures

Austin W. Marxe		09/21/2005
<small>**Signature of Reporting Person</small>		<small>Date</small>
David M. Greenhouse		09/21/2005
<small>**Signature of Reporting Person</small>		<small>Date</small>

Explanation of Responses:

* If the form is filed by more than one reporting person, *see* Instruction 5(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) and David M. Greenhouse (Greenhouse). They share voting and investment control over all securities owned by Special Situations Cayman Fund, L.P. (Cayman), Special Situations Private Equity Fund, L.P. (PE), Special Situations Technology Fund, LP (Tech) and Special Situations Technology II, Fund, L.P. (Tech II), respectively. 2,076,923 shares of Common Stock are held by Cayman, 2,141,538 shares of Common Stock are held by PE, 404,615 shares of Common Stock are held by Tech and 2,546,154 shares of Common Stock are held by Tech II. The interest of Marxe and Greenhouse in the shares of Common Stock owned by Cayman, PE, Tech, and Tech II is limited to the extent of his pecuniary interest.

(2) This is a joint filing by Austin W. Marxe (Marxe) and David M. Greenhouse (Greenhouse). They share voting and investment control over all securities owned by Special Situations Cayman Fund, L.P. (Cayman), Special Situations Private Equity Fund, L.P. (PE), Special Situations Technology Fund, LP (Tech) and Special Situations Technology II, Fund, L.P. (Tech II), respectively. 1,038,462 Warrants with varying terms are held by Cayman, 1,816,712 Warrants with varying terms are held by PE, 287,292 Warrants with varying terms are held by Tech and 1,699,955 Warrants with varying terms are held by Tech II. The interest of Marxe and Greenhouse in the shares of Common Stock owned by Cayman, 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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