

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

SCHEDULE 13D

Under the Securities Exchange Act of 1934
(Amendment No. ____)*

TEGAL CORPORATION

(Name of Issuer)

COMMON

(Title of Class of Securities)

879008-10-0

(CUSIP Number)

David Nierenberg, The D3 Family Fund, 19605 NE 8th St., Camas, WA 98607

(Name, Address and Telephone Number
of Person Authorized to Receive
Notices and Communications)

9/2/98

(Date of Event which Requires
Filing of this Statement)

*The remainder of this cover page shall be filled out for a reporting person's initial filing on this form with respect to the subject class of securities, and for any subsequent amendment containing information which would alter the disclosures provided in a prior cover page.

The information required in the remainder of this cover page shall not be deemed to be "filed" for the purpose of Section 18 of the Securities Exchange Act of 1934 ("Act") or otherwise subject to the liabilities of that section of the Act but shall be subject to all other provisions of the Act (however, see the Notes).

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SCHEDULE 13D

CUSIP No. 879008-10-0

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- 1) NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

The D3 Family Fund, L.P. (David Nierenberg is President of the General Partner, which is Nierenberg Investment Management Company.)

- 2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*
(a) [X]
(b) []

3) SEC USE ONLY _____

4) SOURCE OF FUNDS

WC

5) CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED
PURSUANT TO ITEMS 2(d) or 2(e) []

6) CITIZENSHIP OR PLACE OF ORGANIZATION

Washington

7) SOLE VOTING POWER
NUMBER OF
SHARES 713,500 common shares (6.7%)

BENEFICIALLY 8) SHARED VOTING POWER

OWNED BY 0
EACH

9) SOLE DISPOSITIVE POWER
REPORTING
PERSON 713,500

WITH 10) SHARED DISPOSITIVE POWER
0

11) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

Aggregate amount owned is 775,500 shares (7.3%)

12) CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN
SHARES* []

13) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

7.3%

14) TYPE OF REPORTING PERSON*

PN
SCHEDULE 13D

CUSIP No. 8790208-10-0

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1) NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Haredale, Ltd.

2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*

(a) [X]
(b) []

3) SEC USE ONLY _____

4) SOURCE OF FUNDS

WC

5) CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED
PURSUANT TO ITEMS 2(d) or 2(e) []

6) CITIZENSHIP OR PLACE OF ORGANIZATION

The Bahamas

7) SOLE VOTING POWER
NUMBER OF
7,333 common shares (0.1%)
SHARES -----

BENEFICIALLY 8) SHARED VOTING POWER

OWNED BY 0

EACH

9) SOLE DISPOSITIVE POWER
REPORTING
7,333
PERSON -----

WITH 10) SHARED DISPOSITIVE POWER

0

11) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

Aggregate amount owned is 772,500 shares (7.3%)

12) CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN
SHARES* []

13) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

7.3%

14) TYPE OF REPORTING PERSON*

CO

SCHEDULE 13D

CUSIP No. 879008-10-0

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1) NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Sharptown Limited

2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*

(a) [X]
(b) []

3) SEC USE ONLY _____

4) SOURCE OF FUNDS

WC

5) CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED
PURSUANT TO ITEMS 2(d) or 2(e) []

6) CITIZENSHIP OR PLACE OF ORGANIZATION

Channel Islands, British Isles

7) SOLE VOTING POWER
NUMBER OF
1,167 common shares (0.0%)
SHARES -----

BENEFICIALLY 8) SHARED VOTING POWER

OWNED BY 0

EACH

9) SOLE DISPOSITIVE POWER
REPORTING
1,167
PERSON -----

WITH 10) SHARED DISPOSITIVE POWER

0

11) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

Aggregate amount owned is 772,500 shares (7.3%)

12) CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN
SHARES* []

13) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

7.3%

14) TYPE OF REPORTING PERSON*

CO

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CUSIP No. 879008-10-0

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1) NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

James Henry Hildebrandt

2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*

(a) [X]

(b) []

3) SEC USE ONLY _____

4) SOURCE OF FUNDS

WC

5) CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED
PURSUANT TO ITEMS 2(d) or 2(e) []

6) CITIZENSHIP OR PLACE OF ORGANIZATION

Canadian Citizen residing in Hong Kong

7) SOLE VOTING POWER

NUMBER OF

2,333 common shares (0.0%)

SHARES

BENEFICIALLY

8) SHARED VOTING POWER

OWNED BY

0

EACH

9) SOLE DISPOSITIVE POWER

REPORTING

2,333

PERSON

WITH

10) SHARED DISPOSITIVE POWER

0

11) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

Aggregate amount owned is 772,500 shares (7.3%)

12) CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN SHARES* []

13) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

7.3%

14) TYPE OF REPORTING PERSON*

IN

SCHEDULE 13D

CUSIP No. 879008-10-0

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1) NAME OF REPORTING PERSON

S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

Toxford Corporation

2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*

(a) [X]

(b) []

3) SEC USE ONLY _____

4) SOURCE OF FUNDS

WC

5) CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED PURSUANT TO ITEMS 2(d) or 2(e) []

6) CITIZENSHIP OR PLACE OF ORGANIZATION

7) SOLE VOTING POWER
NUMBER OF
1,167 common shares (0.0%)
SHARES

8) SHARED VOTING POWER

OWNED BY 0

EACH

9) SOLE DISPOSITIVE POWER
REPORTING
1,167
PERSON

10) SHARED DISPOSITIVE POWER

0

11) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

Aggregate amount owned is 772,500 shares (7.3%)

12) CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN
SHARES* []

13) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

7.3%

14) TYPE OF REPORTING PERSON*

CO

SCHEDULE 13D

1) NAME OF REPORTING PERSON
S.S. OR I.R.S. IDENTIFICATION NO. OF ABOVE PERSON

The Nierenberg Family 1993 Trust

2) CHECK THE APPROPRIATE BOX IF A MEMBER OF A GROUP*

(a) [X]

(b) []

3) SEC USE ONLY _____

4) SOURCE OF FUNDS

OO (Margin)

5) CHECK BOX IF DISCLOSURE OF LEGAL PROCEEDINGS IS REQUIRED
PURSUANT TO ITEMS 2(d) or 2(e) []

6) CITIZENSHIP OR PLACE OF ORGANIZATION

Washington

7) SOLE VOTING POWER
NUMBER OF
50,000 common shares (0.5%)
SHARES -----

BENEFICIALLY 8) SHARED VOTING POWER
OWNED BY 0

EACH
9) SOLE DISPOSITIVE POWER
REPORTING
50,000
PERSON -----

WITH 10) SHARED DISPOSITIVE POWER
0

11) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

Aggregate amount owned is 772,500 shares (7.3%)

12) CHECK IF THE AGGREGATE AMOUNT IN ROW (11) EXCLUDES CERTAIN
SHARES* []

13) PERCENT OF CLASS REPRESENTED BY AMOUNT IN ROW (11)

7.3%

14) TYPE OF REPORTING PERSON*

OO (Revocable Trust)

Item 1. Security and Issuer

Common stock of Tegal Corporation (TGAL), 2201 South McDowell Blvd.,
Petaluma, California 94955.

Item 2. Identity and Background

The D3 Family Fund, L.P., a Washington State partnership, whose
principal business is investing in the equities of public micro-cap
issuers. Located at 19605 N.E. 8th St., Camas, Washington 98607.
No convictions or administrative proceedings as described in
Item 2(d) and (e).

Item 3. Source and Amount of Funds or Other Consideration

Source of funds is money invested in the partnership by its partners.
Aggregate amount invested in TGAL shares purchased by the partnership
is \$2,641,142.50, including commissions.

Item 4. Purpose of Transaction

The purpose of purchasing the shares was for investment. None of the
other actions described in Items 4(a)-(j) are currently contemplated.

Item 5. Interest in Securities of the Issuer

(a,b) D3 owns and has sole voting and dispositive power over, 713,500
common shares of TGAL (6.7%). In addition, 12,000 more common
shares of TGAL are owned by four foreign investors on whose

behalf Mr. Nierenberg is authorized to trade and The Nierenberg Family 1993 Trust, which Mr. Nierenberg is trustee, owns 50,000 more TGAL shares. Aggregating these six investors, the group controls a total of 775,500 TGAL shares (7.3%).

- (c) D3's transactions in the last 60 days were the purchase of 500,000 common shares of TGAL through Robertson Stephens at \$2.9375 per share on September 2, 1998.
- (d) N/A
- (e) N/A

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

N/A

Item 7. Material to be Filed as Exhibits

N/A

Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

September 15, 1998

DAVID NIERENBERG

Date

David Nierenberg
President
Nierenberg Investment Management
Company, Inc., the General Partner
Of The D3 Family Fund, L.P.
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Item 1. Security and Issuer

Common stock of Tegal Corporation (TGAL), 2201 South McDowell Blvd., Petaluma, California 94955.

Item 2. Identity and Background

- (a) Haredale Ltd., a Bahamian corporation.
- (b) P.O. Box N-4465, Nassau, New Providence, The Bahamas.
- (c) Haredale is in the investment business at the address above.
- (d) None
- (e) None
- (f) The Bahamas.

Item 3. Source and Amount of Funds or Other Consideration

Haredale owns, and Mr. Nierenberg has sole voting and dispositive power over, its 7,333 shares.

Item 4. Purpose of Transaction

The purpose of purchasing the shares was for investment. None of the other actions described in Items 4(a)-(j) are currently contemplated.

Item 5. Interest in Securities of the Issuer

- (a,b) D3 owns and has sole voting and dispositive power over, 713,500 common shares of TGAL (6.7%). In addition, 12,000 more common shares of TGAL are owned by four foreign investors on whose

behalf Mr. Nierenberg is authorized to trade and The Nierenberg Family 1993 Trust, which Mr. Nierenberg is trustee, owns 50,000 more TGAL shares. Aggregating these six investors, the group controls a total of 775,500 TGAL shares (7.3%).

(c) No trades during the past 60 days.

(d) N/A

(e) N/A

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

Haredale pays Mr. Nierenberg an annual management fee and a share of its net profits for his personal management of its accounts.

Item 7. Material to be Filed as Exhibits

N/A

Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

September 15, 1998

DAVID NIERENBERG

Date

David Nierenberg
Authorized to trade for
Haredale, Ltd.

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Item 1. Security and Issuer

Common stock of Tegal Corporation (TGAL), 2201 South McDowell Blvd., Petaluma, California 94955.

Item 2. Identity and Background

(a) Sharptown Limited, a Channel Islands corporation.

(b) P.O. Box 404, Pirouet House, Union St., St. Helier, Jersey JE4 9WG, Channel Islands, British Isles.

(c) Sharptown Limited is in the investment business at the address above.

(d) None

(e) None

(f) Channel Islands, British Isles.

Item 3. Source and Amount of Funds or Other Consideration

Sharptown Limited owns, and Mr. Nierenberg has sole voting and dispositive power over, its 1,167 shares.

Item 4. Purpose of Transaction

The purpose of purchasing the shares was for investment. None of the other actions described in Items 4(a)-(j) are currently contemplated.

Item 5. Interest in Securities of the Issuer

(a,b) D3 owns and has sole voting and dispositive power over, 713,500 common shares of TGAL (6.7%). In addition, 12,000 more common shares of TGAL are owned by four foreign investors on whose behalf Mr. Nierenberg is authorized to trade and The Nierenberg

Family 1993 Trust, which Mr. Nierenberg is trustee, owns 50,000 more TGAL shares. Aggregating these six investors, the group controls a total of 775,500 TGAL shares (7.3%).

(c) No trades during the past 60 days.

(d) N/A

(e) N/A

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

Sharptown Limited pays Mr. Nierenberg an annual management fee and a share of its net profits for his personal management of its accounts.

Item 7. Material to be Filed as Exhibits

N/A

Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

September 15, 1998

DAVID NIERENBERG

Date

David Nierenberg
Authorized to trade for
Sharptown Limited

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Item 1. Security and Issuer

Common stock of Tegal Corporation (TGAL), 2201 South McDowell Blvd., Petaluma, California 94955.

Item 2. Identity and Background

(a) James Henry Hildebrandt, an individual who is a citizen of Canada, resident in Hong Kong.

(b) c/o Bain & Company, Tenth Floor, One Pacific Place, 88 Queensway, Hong Kong.

(c) Mr. Hildebrandt is in the management consulting business.

(d) None

(e) None

(f) Canada

Item 3. Source and Amount of Funds or Other Consideration

Mr. Hildebrandt owns, and Mr. Nierenberg has sole voting and dispositive power over, his 2,333 shares.

Item 4. Purpose of Transaction

The purpose of purchasing the shares was for investment. None of the other actions described in Items 4(a)-(j) are currently contemplated.

Item 5. Interest in Securities of the Issuer

(a,b) D3 owns and has sole voting and dispositive power over, 713,500 common shares of TGAL (6.7%). In addition, 12,000 more common shares of TGAL are owned by four foreign investors on whose behalf Mr. Nierenberg is authorized to trade and The Nierenberg

Family 1993 Trust, which Mr. Nierenberg is trustee, owns 50,000 more TGAL shares. Aggregating these six investors, the group controls a total of 775,500 TGAL shares (7.3%).

(c) No trades during the past 60 days.

(d) N/A

(e) N/A

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

Mr. Hildebrandt pays Mr. Nierenberg an annual management fee and a share of its net profits for his personal management of its accounts.

Item 7. Material to be Filed as Exhibits

N/A

Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

September 15, 1998

DAVID NIERENBERG

Date

David Nierenberg
Authorized to trade for
John Henry Hildebrandt
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Item 1. Security and Issuer

Common stock of Tegal Corporation (TGAL), 2201 South McDowell Blvd., Petaluma, California 94955.

Item 2. Identity and Background

- (a) Toxford Corporation, a Channel Islands corporation.
- (b) P.O. Box 3048, St. Andrews House, Le Bordage, St. Peter Port, Guernsey, Channel Islands, British Isles.
- (c) Toxford Corporation is in the investment business at the address above.
- (d) None
- (e) None
- (f) Channel Islands, British Isles.

Item 3. Source and Amount of Funds or Other Consideration

Toxford Corporation owns, and Mr. Nierenberg has sole voting and dispositive power over, its 1,167 shares.

Item 4. Purpose of Transaction

The purpose of purchasing the shares was for investment. None of the other actions described in Items 4(a)-(j) are currently contemplated.

Item 5. Interest in Securities of the Issuer

- (a,b) D3 owns and has sole voting and dispositive power over, 713,500 common shares of TGAL (6.7%). In addition, 12,000 more common shares of TGAL are owned by four foreign investors on whose behalf Mr. Nierenberg is authorized to trade and The Nierenberg Family 1993 Trust, which Mr. Nierenberg is trustee, owns 50,000

more TGAL shares. Aggregating these six investors, the group controls a total of 775,500 TGAL shares (7.3%).

- (c) No trades during the past 60 days.
- (d) N/A
- (e) N/A

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

Toxford Corporation pays Mr. Nierenberg an annual management fee and a share of its net profits for his personal management of its accounts.

Item 7. Material to be Filed as Exhibits

N/A

Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

September 15, 1998

DAVID NIERENBERG

Date

David Nierenberg
Authorized to trade for
Toxford Corporation
Page 13 of 13

Item 1. Security and Issuer

Common stock of Tegal Corporation (TGAL), 2201 South McDowell Blvd., Petaluma, California 94955.

Item 2. Identity and Background

- (a) The Nierenberg Family 1993 Trust, Dated 6/11/93, David and Patricia A. Nierenberg, Trustors and Trustees.
- (b) 19605 N.E. 8th Street, Camas, Washington 98607
- (c) Investment Management. Employed by Nierenberg Investment Management Co., the General Partner at D3, at the address above.
- (d) None
- (e) None
- (f) United States

Item 3. Source and Amount of Funds or Other Consideration

Margin borrowing from the trust's brokerage account at Robertson Stephens & Co. Aggregate amount invested by the trust is \$146,875

Item 4. Purpose of Transaction

The purpose of purchasing the shares was for investment. None of the other actions described in Items 4(a)-(j) are currently contemplated.

Item 5. Interest in Securities of the Issuer

- (a,b) D3 owns, and has sole voting and dispositive power over, 713,500 common shares of TGAL (6.7%). In addition, 12,000 more common shares of TGAL are owned by four foreign investors on whose behalf Mr. Nierenberg is authorized to trade and The Nierenberg Family 1993 Trust, which Mr. Nierenberg is trustee, owns 50,000

more TGAL shares. Aggregating these six investors, the group controls a total of 775,500 TGAL shares (7.3%).

- (c) The trust purchased 50,000 shares of TGAL through Robertson Stephens at \$2.9375 per share on September 2, 1998.
- (d) N/A
- (e) N/A

Item 6. Contracts, Arrangements, Understandings or Relationships with Respect to Securities of the Issuer

N/A

Item 7. Material to be Filed as Exhibits

N/A

Signature

After reasonable inquiry and to the best of my knowledge and belief, I certify that the information set forth in this statement is true, complete and correct.

September 15, 1998

DAVID NIERENBERG

Date

David Nierenberg
Authorized to trade for
The Nierenberg Family 1993 Trust