

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

SCHEDULE 13D

Under the Securities Exchange Act of 1934  
(Amendment No.   2  )\*

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)

12/28/99

-----  
(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.)  
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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 0

BENEFICIALLY 8) SHARED VOTING POWER

OWNED BY 0  
EACH

9) SOLE DISPOSITIVE POWER  
REPORTING  
PERSON 0

WITH 10) SHARED DISPOSITIVE POWER  
0

11) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

Aggregate amount owned is 0

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

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

0

14) TYPE OF REPORTING PERSON\*

PN

SCHEDULE 13D

CUSIP No. 8790208-10-0

Page 3 of 13

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  
0  
SHARES -----

BENEFICIALLY 8) SHARED VOTING POWER

OWNED BY 0  
-----  
EACH

9) SOLE DISPOSITIVE POWER  
REPORTING  
0  
PERSON -----

WITH 10) SHARED DISPOSITIVE POWER  
0  
-----

11) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

Aggregate amount owned is 0  
-----

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

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

0  
-----

14) TYPE OF REPORTING PERSON\*

CO  
-----  
SCHEDULE 13D  
-----

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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

0

SHARES -----

BENEFICIALLY 8) SHARED VOTING POWER

OWNED BY

0

EACH -----

9) SOLE DISPOSITIVE POWER

REPORTING

0

PERSON -----

WITH 10) SHARED DISPOSITIVE POWER

0  
-----

11) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

Aggregate amount owned is 0  
-----

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

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

0  
-----

14) TYPE OF REPORTING PERSON\*

CO  
-----

SCHEDULE 13D  
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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

0

SHARES

-----

BENEFICIALLY

8) SHARED VOTING POWER

OWNED BY

0

-----

EACH

9) SOLE DISPOSITIVE POWER

REPORTING

0

PERSON

-----

WITH

10) SHARED DISPOSITIVE POWER

0

-----

11) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

Aggregate amount owned is 0

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

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

0

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14) TYPE OF REPORTING PERSON\*

IN

-----

SCHEDULE 13D

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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

Toxford Corporation

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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  
0  
SHARES

BENEFICIALLY 8) SHARED VOTING POWER

OWNED BY 0  
EACH

9) SOLE DISPOSITIVE POWER  
REPORTING  
0  
PERSON

WITH 10) SHARED DISPOSITIVE POWER  
0

11) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

Aggregate amount owned is 0

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

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

0

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  
0  
SHARES -----

BENEFICIALLY 8) SHARED VOTING POWER  
OWNED BY 0  
-----  
EACH

9) SOLE DISPOSITIVE POWER  
REPORTING  
0  
PERSON -----

WITH 10) SHARED DISPOSITIVE POWER  
0  
-----

11) AGGREGATE AMOUNT BENEFICIALLY OWNED BY EACH REPORTING PERSON

Aggregate amount owned is 0  
-----

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

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

0  
-----

14) TYPE OF REPORTING PERSON\*

OO (Revocable Trust)  
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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

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 \$3,321,142.50, 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) 0

(c) D3 sold 800,000 shares through Black & Company on December 27

at \$6.20 a share and 233,500 on December 28 at \$7.17 a share.

(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.

January 3, 2000

DAVID NIERENBERG

-----  
Date

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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 37,333 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) 0
- (c) On December 27 Haredale sold 37,333 shares through Bank of America Securities, LLC at \$6.64 a share.
- (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.

January 3, 2000

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 7,167 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) 0
- (c) On December 27 Sharptown sold 7,167 shares through Bank of America Securities, LLC at \$6.64 a share.
- (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.

January 3, 2000

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 6,833 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) 0
- (c) On December 27 Hildebrandt sold 6,833 shares through Bank of  
America Securities, LLC at \$6.64 a share.
- (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.

January 3, 2000

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 7,167 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) 0
- (c) On December 27 Toxford sold 7,167 shares through Bank of America Securities, LLC at \$6.64 a share.
- (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.

January 3, 2000

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 \$248,062.50 (93,500 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)
- (c) On December 27 Nierenberg Family 1993 Trust sold 93,500 shares through Black & Company at \$6.03 a share.
- (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.

January 3, 2000

DAVID NIERENBERG

-----  
Date

-----  
David Nierenberg  
Authorized to trade for  
The Nierenberg Family 1993 Trust

