

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

FORM 8-A

**FOR REGISTRATION OF CERTAIN CLASSES OF SECURITIES
PURSUANT TO SECTION 12(b) OR (g) OF THE
SECURITIES EXCHANGE ACT OF 1934**

TGC INDUSTRIES, INC.

(Exact name of registrant as specified in its charter)

Texas
(State of incorporation or organization)

74-2095844
(I.R.S. Employer
Identification No.)

**1304 Summit
Suite 2
Plano, Texas**
(Address of principal executive offices)

75074
(Zip Code)

Securities to be registered pursuant to Section 12(b) of the Act:

**Title of each class
to be so registered:**
Common Stock (\$.01 Par Value)

**Name of each exchange on which
each class is to be registered:**
American Stock Exchange

If this form relates to the registration of a class of securities pursuant to Section 12(b) of the Exchange Act and is effective pursuant to General Instruction A.(c), check the following box.

If this form relates to the registration of a class of securities pursuant to Section 12(g) of the Exchange Act and is effective pursuant to General Instruction A.(d), check the following box.

Securities Act registration statement file number to which this form relates:
(if applicable)

Securities to be registered pursuant to Section 12(g) of the Act:

None
(Title of Class)

Item 1. Description of Registrant's Securities to be Registered.

Reference is made to the information set forth under the caption entitled "Description of Stock-Common Stock" in TGC Industries, Inc.'s Registration Statement on Form SB-2 filed with the Securities and Exchange Commission on September 27, 2004 (File No. 333-119353), which is incorporated herein by reference.

Item 2. Exhibits.

Not applicable

SIGNATURE

Pursuant to the requirements of Section 12 of the Securities Exchange Act of 1934, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereto duly authorized.

TGC INDUSTRIES, INC.

Date: April 13, 2005

By: /s/ Wayne A. Whitener
Name: Wayne A. Whitener

