

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

July 3, 2007

By US Mail and Facsimile

Mr. Kenneth Uselton Chief Financial Officer TGC Industries, Inc. 101 E. Park Blvd. Suite 955 Plano, TX 75074

Re: TGC Industries, Inc.

Form 10-KSB for the Fiscal Year Ended December 31, 2006

Filed March 28, 2007

Form 10-QSB for the Quarter ended March 31, 2007

File No. 0-14908

Dear Mr. Uselton:

We have reviewed your Form 10-KSB for the Fiscal Year Ended December 31, 2006 and Form 10-QSB for the quarter ended March 31, 2007 and have the following comments. We have limited our review of your filings to those issues we have addressed in our comments. Please provide a written response to our comments. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Mr. Kenneth Uselton TGC Industries, Inc. July 3, 2007 Page 2

Form 10-KSB for the Year Ended December 31, 2006

Notes to Financial Statements

Note B – Summary of Significant Accounting Policies, page 23

- 1. We note that you recognize revenue using the percentage-of-completion method, based on units-of-production. Please expand your policy note to disclose the nature of the units, duration of the contracts, and terms of service. Also disclose the method applied in determining earned revenue and the cost of earned revenue, as discussed in paragraphs 79 through 81 of SOP 81-1, as well as your policies relating to combining and segmenting contracts, as discussed in paragraphs 35 through 42 of SOP 81-1, to comply with the guidance in paragraph 21. Further disclosure about revenue and costs arising from claims may be necessary and should be provided, if applicable. You may refer to Appendix C for a summary of the disclosure recommendations in SOP 81-1.
- 2. We note that you recognize revenues for the sale of gravity data when services are rendered. Please provide more details on the services provided and explain the method of measuring progress as specified in paragraph 45 of SOP 81-1. It should be clear what you are referring to as gravity data, and how this differs from the other services you provide.

Controls and Procedures, page 36

3. We note that you evaluated and concluded that the disclosure controls and procedures are effective as of December 31, 2006. However, you have included qualifying language indicating that your control system can provide only reasonable assurance that the objectives are met, also stating that there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Please modify your disclosure to clarify whether your determination that your disclosure controls and procedures are effective has been made at the reasonable assurance level.

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your responses to our comments.

Mr. Kenneth Uselton TGC Industries, Inc. July 3, 2007 Page 3

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Nasreen Mohammed at (202) 551-3773 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3686 with any other questions.

Sincerely,

Karl Hiller Branch Chief