Mail Stop 3561

July 22, 2008

Daniel D. Greenwell Senior Vice President and Chief Financial Officer Terra Industries Inc. 600 Fourth Street Sioux City, IA 51102-6000

Re: Terra Industries Inc. File No. 001-08520 Form 10-K: For the fiscal year ended December 31, 2007

Dear Mr. Greenwell:

We have reviewed your July 9, 2008 correspondence and have the following comment. The comment requests additional information so that we may better understand your disclosure. After reviewing this information, we may raise additional comments. Please file your response to our comment via EDGAR within ten business days from the date of this letter.

Form 10-K: For the fiscal year ended December 31, 2007

Note 1: Summary of Significant Accounting Policies

Plant Turnaround Costs, page 53

1. In your June 20, 2008 response to our comment about the type and nature of costs deferred as plant turnaround costs you stated that plant turnarounds are performed to replace worn major equipment items and that these replacement items have useful life expectancy of two to three years (consistent with the time until the next turnaround is expected to occur). Based on that description, it appeared that only expenditures for replacing major equipment items (and the associated required direct labor) were capitalized and amortized until the next turnaround is expected to occur (i.e., the turnaround costs) and that all other maintenance and repair expenditures were expensed as incurred. In your July 9, 2008 response to our comment seeking confirmation of whether our initial understanding was correct you state that major equipment replacements which occur in conjunction with a turnaround are assessed to determine if it is a separate capital expenditure which should be capitalized as a separate fixed asset and assigned a different useful life. Based on that description, it appears that expenditures for replacing major equipment items are not capitalized as turnaround costs as your June 20, 2008 response appears to indicate. Therefore please clarify for us the following:

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- Whether expenditures for replacing major equipment items during plant turnarounds are capitalized as plant turnaround costs, as separate fixed assets, or both, and, if both, the specific circumstances under which each particular accounting treatment is prescribed;
- Whether costs other than for replacement of major equipment items (and the associated required direct labor) are incurred during plant turnarounds and, if so, whether those costs are capitalized as plant turnaround costs and, if so, your basis for capitalization of such other costs (please be detailed in describing the basis for your accounting, to the extent applicable);
- With regard to costs other than for replacement of major equipment items (and the associated required direct labor) incurred during plant turnarounds, the nature of such costs in detail, as applicable;
- With regard to costs other than for replacement of major equipment items (and the associated required direct labor) incurred during plant turnarounds and capitalized as plant turnaround costs, whether such expenditures are presented as operating or investing outflows on your statement of cash flows and, to the extent included in investing outflows, your basis for such presentation as compared to the presentation of repair and maintenance expenditures incurred outside the course of a turnaround as operating outflows.

Apart from replacements of major equipment items, we are not clear how expenditures incurred during the turnaround extend the useful life of major equipment. Please tell us how those costs improve/extend the life of the major equipment that is not replaced beyond its existing useful life. If the costs do not significantly improve or extend the life of the major equipment, we believe that they should not be capitalized. For example, if you perform any repairs and maintenance during the turnaround those costs should be expensed in accordance with your accounting policy (including parts and materials used during these repairs.) In addition, we believe that incidental costs should be expensed as incurred as they not provide any future economic benefit and, therefore, do not meet the definition of an asset under CON 6. Please advise.

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You may contact Patrick Kuhn at 202-551-3308 or Lyn Shenk at 202-551-3380 with any questions. You may also call me at 202-551-3816.

Sincerely,

Joseph Foti Senior Assistant Chief Accountant