

Mail Stop 3561

August 25, 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 August 12, 2008 correspondence and have the following comment. We believe you should revise your future filings in response this comment. If you disagree, we will consider your explanation as to why a revision is unnecessary. In addition, 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. We note your August 12, 2008 response to our prior comment 1 and the additional clarifying information you provided in our telephone conversation of the same day. We note from your response that expenditures associated with plant turnarounds appear to fall into one of three general categories:
 - major equipment items, which are long-lived components of your production units that you separately capitalize as property, plant, and equipment over the estimated useful life of the component;
 - plant turnaround costs, which include disassembly, inspection, and replacement of plant machinery and rotating equipment, equipment recalibration, and internal equipment efficiency assessments, the costs for which you capitalize and amortize until the next scheduled turnaround; and

- routine repairs and maintenance, which includes routine lubricants, fluids, repair parts, painting, and consumable maintenance supplies, the costs for which you expense as incurred.

On the basis of how you have described these categories to us, we do not object to your accounting for major equipment items or routine repairs and maintenance.

With regard to plant turnaround expenditures, you assert that they can and have resulted in improved production unit efficiency and output after the turnaround. However, it also appears that replacement of major equipment items, which you already separately capitalize, may contribute to these improved levels of efficiency and output and that substantial judgment may be required to determine the extent, if any, to which each contributed to the efficiency and output gains. In addition, you state that plant turnarounds are periodically performed to ensure the long-term safety, reliability, and efficiency of integrated plant machinery at your continuous process production facilities. Based on this statement, it appears that the primary reasons you undertake plant turnarounds are to maintain your production units in proper working condition and to comply with regulatory inspection requirements. Therefore, we continue to be concerned about the appropriateness of capitalizing plant turnaround costs.

We believe that expenditures similar in nature to your plant turnaround costs should normally be expensed as incurred as repair and maintenance expense. However, given that you may have experienced improved efficiency and production output after your turnarounds (as compared to pre-turnaround, optimal working condition-levels of efficiency and output), we believe your plant turnaround expenditures require additional evaluation prior to determining the appropriate accounting for such costs.

Based on the description of plant turnaround costs that you provided, it appears that while certain of the costs you have capitalized may result in improved efficiency and production output, others may not. For example, while it would appear that a higher volume pump or a more efficient motor than that previously used on a production unit may improve the efficiency or production output of the unit, it would also appear that certain other expenditures, such as for equipment recalibration, internal equipment efficiency assessments, and fixed plant overhead costs, would not, in and of themselves, do so (these examples are not intended to be exhaustive). We do not believe it is appropriate to aggregate the costs of all activities performed during a turnaround and capitalize them simply because a subset of the activities were betterments to the production unit. Therefore, we believe you should rigorously assess each plant turnaround expenditure to evaluate whether it improves plant efficiency and production output, with those expenditures that do not improve efficiency or output being expensed as incurred.

To the extent that you continue to capitalize a portion of your plant turnaround costs, given the lack of comparability between your accounting and the

accounting by others who expense plant turnaround costs as incurred, we believe you should revise your critical accounting policies to:

- state that the selection of this method of accounting for plant turnaround costs, as opposed to expensing the costs when incurred, results in you deferring recognition of these expenses and results in you classifying certain cash outflows as investing activities in your statements of cash flows that others classify as operating cash outflows; and

- quantify the amount of plant turnaround costs paid and expensed in each period.

In addition, we believe you should revise your accounting policy for plant turnarounds to state that you capitalize only those expenditures that directly result in betterments to your production units, to state how you are able to conclude such expenditures are betterments, and to state that all other plant turnaround expenditures are expensed as incurred. Also, please clarify that expenditures for major equipment items incurred during your plant turnarounds are separately capitalized as property, plant, and equipment.

Finally, continued deferral of qualifying plant turnaround costs on the basis of improved efficiency or production output implies that your production units will see ever-improving efficiency or production output gains with each periodic plant turnaround. As it appears that you believe this will be the case, we believe you should disclose this material expectation in future filings.

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You may contact Patrick Kuhn at 202-551-3308 or me at 202-551-3380 with any questions.

Sincerely,

Lyn Shenk
Branch Chief