



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4631

Mail Stop 4631

November 4, 2010

via U.S. mail and facsimile

Pablo Brizzio, CFO
Ternium S.A.
46a, Avenue John F. Kennedy – 2nd Floor
L-1855 Luxembourg

**RE: Ternium S.A.
Form 20-F for the Fiscal Year Ended December 31, 2009
Filed June 30, 2010
File No. 1-32734**

Dear Mr. Brizzio:

We have reviewed your response letter dated November 1, 2010, and have the following comment. We may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information or by advising us when you will provide the requested response. If you do not believe our comment applies to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to this comment, we may have additional comments.

29 Discontinued operations, page 46
(ii) Nationalization of Sidor, page 46

1. We note the calculations you provided for the US\$136 million gain recognized for the accretion of the receivable. It is unclear how these calculations comply with the guidance provided in IAS 39 for the measurement of loans and receivables in accordance with paragraphs 45-46 of IAS 39. Please provide us with a detailed explanation as to how you determined your accounting complies with IAS 39, including the specific references that support your accounting. Please also refer to paragraphs AG5 – AG8 of IAS 39 for additional guidance.

Mr. Brizzio
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You may contact Tracey Houser, Staff Accountant, at (202) 551-3736, or in her absence, Jeanne Baker, Assistant Chief Accountant, at (202) 551-3691, or me at (202) 551-3355, if you have questions regarding comments on the financial statements and related matters.

Sincerely,

Terence O'Brien
Accounting Branch Chief