



DIVISION OF
CORPORATION FINANCE

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

June 16, 2014

Via E-mail
Pablo Brizzio, CFO
Ternium S.A.
29, Avenue de la Porte-Neuve — 3rd floor
L-2227 Luxembourg

**RE: Ternium S.A.
December 31, 2013 Form 20-F filed April 30, 2014
File No. 1-32734**

Dear Mr. Brizzio:

We have reviewed your filing and have the following comments. 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 the comments we may have additional comments.

Note 14, page F-46

1. We understand that the carrying value of your equity investment in Usiminas was \$1.37 billion on December 31, 2013. The disclosure on page F-16 describes the material impairment you recognized on this asset in 2012. If you own 115 million Usiminas common shares, and the quoted price of these shares (USNZY) on December 31, 2013 was \$6.02/share, then it appears that the fair value of your equity investment was only \$692 million. Subsequently, the quoted price has declined further to \$4.40/share and \$3.60/share at March 31, 2014 and June 16, 2014, respectively. Please tell us whether you performed an impairment test on the equity investment at December 31, 2013, and at March 31, 2014, and explain to us how you determined that an additional impairment charge was not required at either of those dates. In this regard, paragraph 61 of IAS 39 states that a significant or prolonged decline in the fair value of an investment in an equity instrument below its cost is an objective evidence of impairment. Please quantify and support any material assumptions used in estimating the recoverable amount. Please provide any December 31, 2013, and March 31, 2014, value in use calculations and tell us the actual cash flow derived from the asset in 2013. Please correlate any value in use calculations with the requirements outlined in paragraphs 30-57 of IAS 36.
2. Please tell us whether you expect any material changes in the carrying value of your Usiminas equity investment during the quarter ending June 30, 2014.
3. In future filings, please disclose the fair value of the Usiminas equity investment as required by IFRS 12.21(b)(iii).

4. In future filings, please expand the risk factor disclosures on pages 11-12 to quantify the difference between the fair value and the carrying value of your Usiminas equity investment. Further, please identify all known factors which materially impact the recoverability of this asset.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filings include the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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 responding to our comments, please provide a written 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.

You may contact Al Pavot at (202) 551-3738 or the undersigned Accounting Branch Chief at (202) 551-3355 if you have any questions.

Sincerely,

/s/ Terence O'Brien

Terence O'Brien
Accounting Branch Chief