



DIVISION OF
CORPORATION FINANCE

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

August 25, 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
Response dated August 12, 2014
File No. 1-32734**

Dear Mr. Brizzio:

We have reviewed your response 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 comments apply to your facts and circumstances please tell us why in your response.

1. Please provide us with a detailed explanation as to how the bases for the significant assumptions used in your value in use calculation as of December 31, 2013 were reasonable and supportable, including but not limited to:
 - a. Discount rate;
 - b. Steel and mining shipments in 2013 and beyond; and
 - c. EBITDA margins.

Refer to IAS 36.33.

2. Please tell us how your value in use calculation as of December 31, 2013 captures the risks specific to your investment in Usiminas. In this regard, tell us how you adjusted the projected cash flows or discount rate to reflect those risks. Refer to paragraphs 55 and 56 of IAS 36.
3. We note from your response to our letter dated July 26, 2014 that you do not believe there are indicators of impairment as of June 30, 2014. However, we believe that the significant and prolonged decline in the fair value of Usiminas, coupled with steel and iron shipments through the first half of 2014 that appear to be significantly lower than that projected for 2014, is objective evidence of an impairment that necessitates the performance of an impairment test. Accordingly, notwithstanding the comments above, please provide us with a value-in use calculation as of June 30, 2014. Include in your response a description of any changes in assumptions from the calculation performed as of December 31, 2013, along with an explanation of the reasonable and supportable bases for the significant assumptions used

in the calculation. Further, please quantify the quoted fair value of your Usiminas investment at December 31, 2012 and 2013.

General

4. You state on page 23 that you intend to expand your presence “to the rest of Latin America,” a region that includes Cuba. Cuba is designated as a state sponsor of terrorism by the U.S. Department of State and is subject to U.S. economic sanctions and assets controls. You do not include disclosure in the Form 20-F about any contacts with Cuba. Please describe to us the nature and extent of any past, current and anticipated contacts with Cuba, whether through direct or indirect arrangements. You should describe any goods, technology or services you have provided into Cuba, directly or indirectly, and any agreements, arrangements or other contacts you have had with the government of Cuba or entities it controls.

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