



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

DIVISION OF  
CORPORATION FINANCE

Via E-mail

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

January 13, 2015

**RE: Ternium S.A. File No. 1-32734  
December 31, 2013 Form 20-F filed April 30, 2014  
Response dated December 17, 2014**

Dear Mr. Brizzio:

We have reviewed your response and have the following comments. Please respond within ten business days by providing the requested information or by advising of your timing.

1. Value in use differs from fair value in that value in use considers the inclusion of owner specific synergies and economies of scale that will not be passed on when an asset is sold externally. With reference to the guidance in IAS 36 paragraph 53A, please identify and quantify differences, if any, between the value transacted on October 2, 2014 and your value in use.
2. Provide us with any contemporaneous documentation (e.g., board presentations) that supports how management and the board arrived at and approved the final price.
3. As noted in paragraph 33(a) of IAS 36, greater weight shall be given to external evidence when measuring value in use. In this regard, tell us how you complied with that requirement by having considered the October 2, 2014 transaction price. We continue to have concerns, especially in light of this recent market transaction, that the carrying value of the Usiminas investment is recoverable.
4. Please confirm to us whether PREVI was represented on Usiminas' board of directors. In this regard, it appears from Usiminas' website that one board member, Aloísio Macário Ferreira de Sousa, is also a board member of PREVI.

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