



UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549-7010

April 2, 2009

Daniel Novegil, Chief Executive Officer  
Ternium S.A.  
46A, Avenue John F. Kennedy—2<sup>nd</sup> floor  
Luxembourg L-1855

**RE: Ternium S.A.**  
**Form 20-F for the Fiscal Year Ended December 31, 2007**  
**Filed June 25, 2008**  
**Form 6-K as of February 24, 2009**  
**Filed February 25, 2009**  
**File No. 001-32734**

Dear Mr. Novegil:

We have reviewed your response letter dated March 3, 2009 and have the following additional comments.

Form 6-K filed February 25, 2009

1. Please tell us the status of your negotiations with the Venezuelan Government. If the Government has made an offer for your Sidor financial asset, please tell us the amount of the offer, how much of your 59.7% ownership is included, and whether the offer is in excess of the carrying value. If you do not have a formal offer, please tell us whether there have been indications of a proposed settlement amount. If so, please tell us the proposed offering price and how much of your 59.7% ownership will be purchased. If it appears the proposed offering price will be lower than the carrying value please tell us how you concluded it was not appropriate to record an impairment loss.
2. Please tell us whether you expect to take the dispute to the ICSID for arbitration. If so, please tell us how long you expect this process to take and whether you discounted expected ICSID settlements. In estimating your expected settlement amount please tell us whether you have considered the length of time it has taken other companies to get their issue heard and resolved by the ICSID and later get compensated. If so, please provide us the names of the other companies. Tell us also whether you are aware of any other companies that have had assets expropriated by Venezuela and the outcome of those cases.
3. Please tell us whether you have obtained legal opinion with respect to your rights to recovery for the expropriated Sidor assets and enforceability of your rights.

4. We have read your response to prior comment 1. Based on your interpretation of paragraphs 31 and 32 of IAS 27 you concluded the cost on initial measurement of the Sidor financial asset was its carrying amount as of March 31, 2008. Although IAS 39 requires subsequent measurement of financial assets, we note that as of December 31, 2008, you continue to record your Sidor financial asset at its carrying value because you determined the variability in the range of fair value estimates was significant and the probabilities of the various estimates within that range could not be reasonably assessed. We further note that you state you test the Sidor financial asset for impairment at each reporting period and as of December 31, 2008, you concluded the estimated fair value of the Sidor asset exceeded the carrying amount of \$1.3 billion. As such, you did not record an impairment loss. In performing your impairment test for your Sidor asset we note you concluded the estimated fair value of the Sidor financial asset exceeded its carrying amount as of December 31, 2008, but you were unable to measure the estimated fair value to be recorded on your balance sheet and continued presenting your financial asset at its carrying value. Please tell us whether Sidor's book value was less than the bottom of the range of fair value estimates under any of methodologies used to estimate fair value. If so, please tell us the positive factors you considered in concluding that an impairment loss was not required in light of such negative evidence. Please tell us whether your auditors agree with your interpretation of IAS 32, as described in your prior comment 3.
5. As part of your impairment test for your Sidor asset, you state you performed fair value estimates, in part, on the basis of discounted cash flows. Please tell us what cash flows were used. For example, was it the settlement amounts, Sidor's operating cash flows or some other cash flow? Also, please explain and quantify the manner in which risk was considered in determining the discount rate and/or probability assessments.
6. You also state that you used FV/EBITDA multiples based on market capitalization and capacity multiples of public steel companies. Please tell us how you determined these other public steel companies were comparable to you. For example, were the other companies comparable in size, geographic location (Venezuela) or had operations expropriated by the government. Please tell us whether your estimates were as of the date of expropriation or as of December 31, 2008. If your estimates were as of the date of expropriation, please tell us whether you believe the Venezuelan Government will consider the subsequent downturn in the steel industry and Sidor's operating results in determining any settlement offer.
7. Given the precipitous decline in oil and gas prices, please tell us whether you have considered competing demands on the Venezuelan Government's resources and the possible impact on settlement.

8. You state that you are entitled to receive compensation in an amount equal to the fair value of Sidor just before the nationalization measures were announced as provided, among others, by Article 4 of the bilateral investment treaty between the Belgian-Luxembourg Economic Union and Venezuela. You further state the amount of the expected compensation for the Sidor financial asset would be higher than the carrying value. We continue to struggle with this conclusion in part because of the downturn of the global economy, as evidenced by the fact that your equity exceeded your market capitalization as of September 30, and December 31, 2008. It is unclear why the Venezuelan Government would compensate you for your Sidor financial asset based on a fair value pre-nationalization rather than on a current fair value, which we expect to be significantly lower than pre-nationalization fair value. Please tell us whether you considered the current economic environment in estimating any settlement offer from the Venezuelan Government. Furthermore, please tell us why you believe the Venezuelan Government will not look to the current economic environment in determining your compensation.
9. Regarding the disclosure you expect to provide in the impending Form 20-F, please tell us the specific critical accounting estimates and assumptions that you deem relevant to this issue.

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested supplemental information. Detailed response letters greatly facilitate our review. Please file your response letter on EDGAR. Please understand that we may have additional comments after reviewing responses to our comments.

You may contact Tracey McKoy, Staff Accountant, at (202) 551-3772 or, in her absence Al Pavot at (202) 551-3738 or the undersigned Accounting Branch Chief at (202) 551-3355 if you have questions regarding comments on the financial statements and related matters. Please contact Hagen Ganem at (202) 551-3330 with any legal related questions.

Sincerely,

Terence O'Brien  
Accounting Branch Chief