

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

October 18, 2022

Pablo Brizzio Chief Financial Officer Ternium S.A. 26 Boulevard Royal – 4th floor L-2449 Luxembourg

Re: Ternium S.A.

Form 20-F for the Year Ended December 31, 2021 Form 6-K furnished April 27, 2022 Response Dated August 11, 2022 Response Dated July 19, 2022

File No. 1-32734

Dear Pablo Brizzio:

We have reviewed your August 11, 2022, response to our comment letter and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments. Unless we note otherwise, our references to prior comments are to comments in our August 11, 2022, letter.

Response Letter Dated August 11, 2022

Note 4. Segment Information, page F-40

In the September 27, 2022 conference call with the Staff, you stated that you currently 1. manage and operate your business as two operating and reportable segments: Mining and Steel. Please reconcile the differences in this segment structure to the structure disclosed on page F-40 in your Form 20-F for the year ended December 31, 2021 and also described in your comment letter responses dated July 19, 2022 and August 11, 2022. Specifically, address the change from the previously disclosed aggregation of the Mexico, Southern Region, Brazil, and Other Markets operating segments into the Steel reportable segment. Also, clarify for us whether you have aggregated operating segments within the two

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operating and reporting segments.

- 2. Please provide us with your operating segment identification analysis performed in accordance with paragraphs 5 to 10 of IFRS 8. As part of your response, please provide us with the following:
 - Provide us with details about your management structure and how your company is organized;
 - Describe the role of your CODM and each of the individuals reporting to the CODM;
 - Identify and describe the role of each of your segment managers;
 - Describe the key operating decisions, who makes these decisions, how performance is assessed and how resources are allocated within your business;
 - Tell us how often the CODM meets with his direct reports, the financial information the CODM reviews in conjunction with those meetings, and the other participants at those meetings;
 - Explain how budgets are prepared, who approves the budget at each step of the
 process, the level of detail discussed at each step, and the level at which the CODM
 makes changes to the budget; and
 - Describe the basis for determining the compensation for each individual that reports to the CODM.
- 3. Describe the financial information reviewed by the CODM for the purpose of allocating resources and assessing performance. Tell us how frequently that information is prepared and reviewed. Also describe the financial information reviewed by your Board of Directors and how frequently that information is reviewed. In this regard, we note that you present disaggregated revenue information for Mexico, Southern Region, and Brazil and Other Markets on pages 46, 77, and 81 of your Form 20-F. Tell us whether the CODM or the Board of Directors receives any profitability and/or expense information for these regions separately. If so, describe the nature, type and frequency of that information.

You may contact Charles Eastman at (202) 551-3794 or Claire Erlanger at (202) 551-3301 with any questions.

Sincerely,

Division of Corporation Finance Office of Manufacturing