

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

DIVISION OF CORPORATION FINANCE

August 15, 2012

<u>Via E-mail</u> Mr. Fernando A. Gonzalez Chief Financial Officer CEMEX, S.A.B. de C.V. Avenida Ricarda Margain Zozaya #325 Colonia Valle del Campestre, Garza Garcia Nuevo Leon, Mexico 66265

> RE: CEMEX, S.A.B. de C.V. Form 20-F for the Year Ended December 31, 2011 Filed April 30, 2012 Response dated August 13, 2012 File No. 1-14946

Dear Mr. Gonzalez:

We have reviewed your response letter dated August 13, 2012 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 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.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 20-F for the Year Ended December 31, 2011

Financial Statements

Consolidated Statements of Operations, page F-4

 We note your response to comment four in our letter dated July 16, 2012. You propose to retitle the line item "Operating income" to "Operating income before other taxes, net." Please confirm that you also intend to retitle the line item "Operating income after other expenses, net" to "Operating income." Mr. Fernando A. Gonzalez CEMEX, S.A.B. de C.V. August 15, 2012 Page 2

Notes to the Financial Statements

Note 14. Goodwill and Intangible Assets 14B) Analysis of Goodwill Impairment, page F-43

2. We note your response to comment eight in our letter dated July 16, 2012. In a similar manner to your responses to comments 17 and 19 in our letter dated June 7, 2012 as well as your response to comment eight in our letter dated July 16, 2012, please expand your disclosures to clarify what your cash-generating units are and correspondingly how you determined it was appropriate to aggregate these units to the operating segment level pursuant to paragraph 80 of IAS 36. Please show us in your supplemental response what the revisions will look like in future filings.

Note 18. Income Taxes, page F-66 Note 18B). Deferred Income Taxes, page F-67

3. We remind you that paragraphs 24, 34, and 56 of IAS 12 state that a deferred tax asset should only be recognized to the extent that it is probable that sufficient taxable profit will be available to allow for the benefit of that deferred tax asset to be utilized. In this regard, it would appear that the deferred tax asset amount rather than a separate valuation allowance would reflect any amounts for which it is not probable that sufficient taxable profit will be available. Please advise what consideration was given to these paragraphs of IAS 12 in the accounting for and presentation of your deferred tax assets.

If you have any questions regarding these comments, please direct them to Nudrat Salik, Staff Accountant, at (202) 551-3692 or, in her absence, to the undersigned at (202) 551-3769.

Sincerely,

/s/ Rufus Decker

Rufus Decker Accounting Branch Chief