



DIVISION OF
CORPORATION FINANCE

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

September 7, 2011

Via facsimile

Mr. Fernando A. González
Chief Financial Officer
CEMEX S.A.B. de C.V.
Avenida Ricardo Margáin Zozaya #325
Colonia Valle del Campestre
Garza García, Nuevo León, México 66265

**Re: CEMEX S.A.B. de C.V.
Form 20-F for the Year Ended December 31, 2010
Filed June 16, 2011
File No. 1-14946**

Dear Mr. González:

We have reviewed your filing and have the following comments. We have limited our review of your filing to those issues we have addressed in our 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, 2010

General

1. Where a comment below requests additional disclosures or other revisions to be made, please show us in your supplemental response what the revisions will look like. These revisions should be included in your future filings. Some of our comments refer to U.S. GAAP literature. If your accounting under Mexican GAAP differs from your accounting under U.S. GAAP, please also show us the additional disclosures that will be included in your U.S. GAAP reconciliation footnote.

Item 5 – Operating and Financial Review and Prospects, page 91

Liquidity and Capital Resources, page 126

Sources and Uses of Cash, page 126

2. You disclose on page 15 that you do not generate sufficient revenue in U.S. dollars to service all of your U.S. denominated obligations. It is unclear to what extent you have historically repatriated funds to the U.S. in order to service your U.S. denominated obligations. Please address the following:
- Revise your MD&A to separately disclose the amount of cash and cash equivalents held by your U.S. subsidiaries, the holding company, and other subsidiaries;
 - Tell us the extent to which you have accrued and paid taxes on any funds repatriated to the U.S. during the periods presented in your filing;
 - To the extent you have not had to repatriate any funds to the U.S., please tell us how you are able to fund your U.S. denominated obligations when you do not generate sufficient revenue in U.S. dollars to service these obligations;
 - Revise your MD&A to explain that you would need to accrue and pay taxes on any funds repatriated to the U.S., if applicable, and
 - Revise your MD&A to include a statement that you do not intend to repatriate any funds to the U.S., if applicable.

Consolidated Financial Statements, F-1

20. Contingencies, page F-54

3. Please revise your footnote disclosures as described below:
- Demonstrate how the accrual amounts disclosed in footnote 20 reconcile back to your tables for current and non-current liabilities in footnote 13 on page F-41;
 - Describe for us, if applicable, how your threshold for “reasonably remote” losses under Mexican GAAP differs from your threshold for “remote” losses under U.S. GAAP;
 - We note several matters described under the heading titled “B – Other Legal Proceedings” starting on page F-55 where you have not quantified the amount of damages being pursued by the complainant. For example, you disclose on the top of page F-56 that the CNC could impose a fine of 10% of the total revenues of CEMEX España’s ready-mix production activities within Navarre for the year preceding imposition of the fine. It is unclear how material such a fine could be to your consolidated financial statements and/or liquidity. Please revise your future filings to quantify the amount of damages being pursued by the complainant for each matter described;
 - Describe how your accrual status and/or possible liability for matters described on pages F-57 and F-58 under the heading titled “C – Other Contingencies for Legal Procedures” differs from your accrual status and/or possible liability for the other contingencies described in sections A and B of footnote 20; and

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CEMEX S.A.B. de C.V.
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- We note that in September 2008, the Supreme Court of Justice ruled that certain amendments to the Mexican income tax law that were effective on January 1, 2005 were constitutional for tax years 2005 to 2007. Based on your disclosures, it is unclear why you have not yet amended your tax returns for 2005 to 2007. Please provide a comprehensive explanation as to why you have not yet determined the amount of tax or the periods affected. Please also clarify if you will incur penalties or interest given the Supreme Court of Justice ruling was over two years ago.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Lisa Etheredge, Staff Accountant, at (202) 551-3424 or Jeanne Baker, Assistant Chief Accountant, at (202) 551-3691 if you have any questions.

Sincerely,

/s/ Rufus Decker

Rufus Decker
Accounting Branch Chief

cc: Via facsimile
Ramiro G. Villarreal Morales, General Counsel