



UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION  
WASHINGTON, D.C. 20549-4631

Mail Stop 4631

August 26, 2009

Mr. Hector Medina  
Executive VP of Planning and Finance  
CEMEX, S.A.B. de C.V.  
Av. Ricardo Margain Zozaya #325  
Colonia Valle del Campestre  
Garza Garcia, Nuevo Leon, Mexico 66265

**RE: Form 20-F for the year ended December 31, 2008  
File No. 1-14946**

Dear Mr. Medina:

We have reviewed your response letter dated August 19, 2009 and have the following additional comments. If you disagree with a comment, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

FORM 20-F FOR THE YEAR ENDED DECEMBER 31, 2008

Item 5 – Operating and Financial Review and Prospects, page 67

Critical Accounting Policies, page 69

Impairment of Long-Lived Assets, page 72

1. We have reviewed your response to prior comment 4 of our letter dated August 5, 2009. We note based on your response that you have consistently applied the same methodology for the years ended December 31, 2008, 2007 and 2006. Please show us in your supplemental response how you will enhance your disclosure in future filings regarding how the assumptions used for assessing

goodwill for impairment in the current year have changed since the prior year. This disclosure should include quantification of the underlying assumptions in the current and prior year.

Item 18 - Financial Statements

Note 25 – Differences Between Mexican and United States Accounting Principles, page F-66

(l) Impairment of Long-Lived Assets, page F-75

2. We have reviewed your response to prior comment 7 of our letter dated August 5, 2009. Based on your disclosure on page F-76 and your response to prior comment 8, it appears you also utilize operating EBITDA multiples in your goodwill impairment testing. As such, please disclose in future filings a sensitivity analysis of operating EBITDA multiples based upon reasonably likely changes and quantify the impact if these reasonably likely changes occurred. Please show us in your supplemental response what the revisions will look like.

\* \* \* \*

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

If you have any questions regarding these comments, please direct them to Jeffrey Gordon, Staff Accountant, at (202) 551-3866 or, in his absence, Jeanne Baker, Assistant Chief Accountant, at (202) 551-3691.

Sincerely,

Rufus Decker  
Accounting Branch Chief