

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

Mail Stop 7010

February 25, 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, 2007 File No. 1-14946

Dear Mr. Medina:

We have reviewed your response letter dated February 23, 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, 2007

Note 23 – Subsequent Events, page F-66

1. We have reviewed your response to prior comment 5. To provide context to the potential impairment loss regarding your Venezuelan investment, please provide a convenience translation related to your disclosure that on August 20, 2008 you received from the Government of Venezuela a compensation proposal for US \$650. In this regard, we note your disclosure of the Ps 6,877 net book value of your investment in Venezuela as of December 31, 2008.

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<u>Note 25 – Differences Between Mexican and United States Accounting Principles, page</u> F-67

General

2. We have reviewed your response to prior comment 7. We note that a significant amount of the balance of your definite lived intangible assets at December 31, 2007 arose from the acquisition of Rinker and you did not test these assets for impairment during 2007 considering the proximity between the valuation date and year-end. You also provided us information regarding the methods and assumptions used in the initial valuation of intangible assets arising from the acquisition. Please confirm that you will disclose in future filings the significant methods and assumptions used in your analysis and explain the basis for each such assumption in a manner similar to which you provided us in the table included in your response letter.

* * * *

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