

December 6, 2007

VIA FACSIMILE AND EDGAR
Ms. Pamela A. Long
Division of
Corporation Finance
Securities and
Exchange Commission
100 F Street N.E.
Washington, D.C.
20549-7010

RE: CEMEX, S.A.B. de C.V. (File No. 1-14946)
Form 20-F for the Fiscal Year Ended December 31, 2006
Filed on June 29, 2007

Dear Ms. Long:

On behalf of CEMEX, S.A.B. de C.V., a publicly traded stock corporation with variable capital (sociedad anonima bursatil de capital variable) organized under the laws of the United Mexican States (CEMEX), set forth below are CEMEXs responses to the comments of the staff of the Securities and Exchange Commission (the Staff) to the above-referenced Form 20-F of CEMEX (the 20-F) set forth in your letter dated November 30, 2007 (the Comment Letter). For the convenience of the Staff, each response has been numbered to correspond with the comments in the Comment Letter. Capitalized terms used but not defined herein shall have the meanings ascribed to them in the 20-F.

FORM 20-F FOR THE YEAR ENDED DECEMBER 31, 2006
Compensation of Our Directors and Members of Our Senior Management

1. Supplementally advise whether you have disclosed or are required to disclose the individual annual compensation for your named senior management under Mexican law. See Item 6.B of Form 20-F.

CEMEX is not required to disclose the individual annual compensation for its named senior management under Mexican law.

Disclosure Controls and Procedures

2. We note that Hector Medina, the Executive Vice President of Planning and Finance, has evaluated your disclosure controls and procedures, and signed the Section 302 certification as principal financial officer; however, you state on page 124 that Rodrigo Trevino is the chief financial officer. Please tell us whether Mr. Medina and Mr. Trevino are principal financial officers. If Mr. Trevino is also a principal financial officer, he should also evaluate the effectiveness of your disclosure controls and procedures and sign a Section 302 certification. Note that Rule 13a-14(a) requires that each principal executive and financial officer must provide the certification.

Although both Hector Medina and Rodrigo Trevino are executive officers and perform significant functions within CEMEX, the principal financial officer of CEMEX is Mr. Medina. Mr. Medina and not Mr. Trevino bears ultimate responsibility for CEMEXs financial reporting and disclosure controls and procedures, which are the matters covered by the Section 302 certification. In CEMEXs internal organization, Mr. Trevino, who bears the title of chief financial officer of CEMEX and has significant responsibilities for CEMEXs financings in both the bank and capital markets, reports to Mr. Medina. Therefore, we consider that Mr. Medina, as CEMEXs principal financial officer, is the appropriate person to make the Section 302 certification.

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In connection with its responses to the Staffs comments, CEMEX acknowledges that:

* CEMEX is responsible for the adequacy and accuracy of the disclosure in its filings;

* Staff comments or changes to disclosure in response to staff comments in the filings reviewed by the Staff do not foreclose the Commission from taking any action in respect of the filing; and

* CEMEX 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.

If you have any questions regarding the responses to the Staffs comments, or require additional information, please contact Robert M. Chilstrom at (212) 735-2588, Adam Waitman at (212) 735-2896, Hugo Triaca at (212) 735-2135 or the undersigned at 011-52-81-8888-4132.

Sincerely,

Ramiro G. Villarreal
General Counsel

cc: Brigitte Lippmann
Securities and Exchange Commission
Division of Corporation Finance

Luis A. Garcia Campuzano
CEMEX, S.A.B. de C.V.

Robert M. Chilstrom
Adam Waitman
Hugo Triaca
Skadden, Arps, Slate, Meagher & Flom LLP