CEMEX, S.A.B. de C.V.

Av. Ricardo Margáin Zozaya #325 Colonia Valle del Campestre Garza García, Nuevo León México 66265

September 20, 2012

VIA FEDERAL EXPRESS AND EDGAR

Mr. Rufus Decker Securities and Exchange Commission Division of Corporation Finance 100 F Street N.E., Mail Stop 4631 Washington, D.C. 20549

Re: CEMEX, S.A.B. de C.V. (File No. 001-14946)

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

Dear Mr. Decker:

We have received your letter of September 10, 2012, and thank you for your comments to our 2011 Annual Report on Form 20-F. We are in the process of diligently preparing our response, but respectfully request an extension of time. As discussed with you on September 20, 2012, we plan to file our response with the Commission on or before October 1, 2012. While we do not anticipate any difficulties in meeting that schedule, if for any reason we are unable to make that date, we would of course contact you in advance.

If you have any questions or require additional information, please contact Adam G. Waitman at (212) 735-2896 of our U.S. counsel, Skadden, Arps, Slate, Meagher & Flom LLP, or the undersigned at (212) 317-6005.

Very truly yours,

<u>/s/ Guillermo Francisco Hernández Morales</u> Guillermo Francisco Hernández Morales Attorney-in-Fact / General Counsel North America and Trading

cc: Nudrat Salik

Securities and Exchange Commission Division of Corporation Finance

Adam G. Waitman Skadden, Arps, Slate, Meagher & Flom LLP