

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

FORM 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 or 15d-16
UNDER THE SECURITIES EXCHANGE ACT OF 1934

Date of Report: August 19, 2008

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

(Exact name of Registrant as specified in its charter)

CEMEX Corp.

(Translation of Registrant's name into English)

United Mexican States

(Jurisdiction of incorporation or organization)

Av. Ricardo Margáin Zozaya #325, Colonia Valle del Campestre

Garza García, Nuevo León, México 66265

(Address of principal executive offices)

Indicate by check mark whether the registrant files or will file annual reports under cover Form 20-F or Form 40-F.

Form 20-F Form 40-F

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934.

Yes No

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b):

N/A

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CEMEX ACKNOWLEDGES IMPLEMENTATION OF NATIONALIZATION DECREE IN VENEZUELA

MONTERREY, MEXICO, August 18, 2008- CEMEX, S.A.B. de C.V. (NYSE: CX) announced today that, according to a press release issued by Petroleos de Venezuela S.A. (PDVSA), PDVSA will proceed to take operational control of the plants of CEMEX Venezuela on Monday, August 18, 2008, on behalf of the Government of Venezuela.

CEMEX is a growing global building materials company that provides high quality products and reliable service to customers and communities in more than 50 countries throughout the world. CEMEX has a rich history of improving the well-being of those it serves through its efforts to pursue innovative industry solutions and efficiency advancements and to promote a sustainable future. For more information, visit www.cemex.com.

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This press release contains forward-looking statements and information that are necessarily subject to risks, uncertainties and assumptions. Many factors could cause the actual results, performance or achievements of CEMEX to be materially different from those expressed or implied in this release, including, among others, changes in general economic, political, governmental and business conditions globally and in the countries in which CEMEX does business, changes in interest rates, changes in inflation rates, changes in exchange rates, the level of construction generally, changes in cement demand and prices, changes in raw material and energy prices, weather conditions, changes in business strategy and various other factors. Should one or more of these risks or uncertainties materialize, or should underlying assumptions prove incorrect, actual results may vary materially from those described herein. CEMEX assumes no obligation to update or correct the information contained in this press release.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, CEMEX, S.A.B. de C.V. has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CEMEX, S.A.B. de C.V.
(Registrant)

Date: August 19, 2008

By: /s/ Rafael Garza

Name: Rafael Garza

Title: Chief Comptroller