

Securities and Exchange Commission
Division of Corporation Finance
100 F Street, N.E.
Mail Stop 7010
Washington, D.C. 20549-0306

RE: CEMEX, S.A.B. de C.V.
Form 20-F for the year ended December 31, 2008
File No. 1-14946

Ladies and Gentlemen:

On behalf of CEMEX, S.A.B. de C.V. (the "Company"), this letter provides responses to the comment letter from the staff (the "Staff") of the Securities and Exchange Commission (the "Commission") to Mr. Héctor Medina, Executive Vice President of Finance and Legal Affairs of the Company, dated August 5, 2009 (the "Comment Letter"), in connection with the Company's annual report on Form 20-F for the year ended December 31, 2008 (the "2008 20-F"), filed with the Commission on June 30, 2009. The Company's responses to the comments raised by the Staff in the Comment Letter are set forth below. For the convenience of the Staff, we have repeated each of the Staff's comments before the corresponding response.

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

General

- 1. Where a comment below requests additional disclosures or other revisions to be made, please show us in your supplemental response what the revisions will look like. Some of our comments refer to U.S. GAAP literature. If your accounting under Mexican GAAP differs from your accounting under U.S. GAAP, please also show us the additional disclosures that will be included in your U.S. GAAP reconciliation footnote. These revisions should be included in your future filings.**

RESPONSE: The Company notes and will comply with the Staff's comment.

Item 3 – Key Information, page 3

- 2. You present operating EBITDA and the ratio of operating EBITDA to interest expense on page 19 because you believe that they are widely accepted as financial indicators of your ability to internally fund capital expenditures and service or incur debt. Since it appears that you are presenting operating EBITDA as a liquidity measure, please revise to reconcile operating EBITDA to cash flows from operations**
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instead of reconciling operating EBITDA to operating income. Refer to Item 10(e)(1)(i)(A) of Regulation S-K.

RESPONSE: The Company notes and will comply with the Staff’s comment in future filings, by changing its current reconciliation table from Operating Income to Net Cash Flows Provided by Operating Activities, as shown in the table below using 2008 for illustrative purposes:

	<u>For the year ended</u> <u>December 31,</u>
	<u>2008</u>
	<u>(in millions of Pesos)</u>
Reconciliation of Operating EBITDA to Net Cash Flows Provided by Operating Activities	
Operating EBITDA	Ps 48,748
Less:	
Depreciation and amortization expense	<u>20,864</u>
Operating income	27,884
Plus / minus:	
Changes in working capital, net of monetary position result, excluding interest expense and income taxes	825
Depreciation and amortization expense	20,864
Other cash expenses, net	(4,725)
Interest expense paid	(9,951)
Income taxes paid	<u>(3,625)</u>
Net cash flows provided by operating activities after interest expense and income taxes	Ps <u>31,272</u>

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

Critical Accounting Policies, page 69

Income Taxes, page 69

3. **Please enhance your disclosure of your income taxes critical accounting policy to include a discussion of the material assumptions you made as well as the financial statement impact if actual results differ from the estimates made by management. Please describe the nature of the positive and negative evidence you considered in your determination of whether your deferred tax assets were recoverable and how that evidence was weighted. Refer to the SEC Interpretive Release No. 33-8350 and SEC Other Release No. 33-8040.**

RESPONSE: The Company notes and will comply with the Staff’s comment, by expanding its current disclosures of income taxes in the Critical Accounting Policies section of the Form 20-F in future filings. The text below presents the proposed revised disclosure marked to show the additions to the Company’s existing disclosure:

Income Taxes

Our operations are subject to taxation in many different jurisdictions throughout the world. Under MFRS, we recognize deferred tax assets and liabilities using a balance sheet methodology, which requires a determination of the temporary differences between the financial statements carrying amounts and the tax basis of assets and liabilities. Our worldwide tax position is highly complex and subject to numerous laws that require interpretation and application and that are not consistent among the countries in which we operate. Significant judgment is required to appropriately assess the amounts of tax assets and liabilities. We record tax assets when we believe that the recoverability of the asset is determined to be more likely than not in accordance with established accounting principles. If this determination cannot be made, a valuation allowance is established to reduce the carrying value of the asset.

For the recognition of deferred tax assets derived from net operating losses and their corresponding valuation reserve, the Company makes an assessment of:

a) the aggregate amount of self-determined tax loss carryforwards included in our income tax returns in each country that we consider the tax authorities would not reject based on the available evidence; and

b) the likelihood of the recoverability of such tax loss carryforwards prior to their expiration through an analysis of estimated future taxable income.

If the Company considers that it is more-likely-than-not that the tax authorities would reject a self-determined deferred tax asset, the Company would decrease its deferred tax assets. Likewise, if the Company considers that it would not be able to use a deferred tax carryforward asset before its expiration, the Company would increase its valuation reserve. Both situations would result in additional income tax expense in the income statement for the period in which such determination is made.

The Company considers all available positive and negative evidence including factors such as market conditions, industry analysis, company expansion plans, projected taxable income, carryforward periods, current tax structure, potential changes or adjustments in tax structure, tax planning strategies, future reversals of existing temporary differences, etc., in the determination of whether it is more likely than not that such deferred tax assets will ultimately be realized.

Every reporting period, the Company analyzes its actual results versus the Company’s estimates and adjusts as necessary its tax asset valuations. If actual results vary from the Company’s estimates, the deferred tax asset and/or valuations may be affected and necessary adjustments will be made based on relevant information. Any adjustments recorded will affect the Company’s net income in such period.

Our overall strategy is to structure our worldwide operations to minimize or defer the payment of income taxes on a consolidated basis. Many of the activities we undertake in pursuing this tax reduction strategy are highly complex and involve interpretations of tax laws and regulations in multiple jurisdictions and are subject to review by the relevant taxing authorities. It is possible that the taxing authorities could challenge our application of these regulations to our operations and transactions. The taxing authorities have in the past challenged interpretations that we have made and have assessed additional taxes. Although we have from time to time paid some of these additional assessments, in general we believe that these assessments have not been material and that we have been successful in sustaining our positions. No assurance can be given, however, that we will continue to be as successful as we have been in the past or that pending appeals of current tax assessments will be judged in our favor.

Impairment of Long-Lived Assets, page 72

4. **We note your disclosure here and on page F-31 regarding your accounting for the impairment of long-lived assets. Please enhance your disclosure by disclosing how the assumptions and methodologies used for assessing goodwill for impairment in the current year have changed since the prior year, highlighting the impact of any changes.**

RESPONSE: The Company notes and will comply with the Staff's comment in future filings, by enhancing its impairment disclosures to discuss any changes in methodologies and assumptions made in the current year versus the prior years, and if applicable, the impact of such changes.

The Company notes that under MFRS, for the years ended December 31, 2008, 2007 and 2006, the Company consistently applied the same methodology for the determination of the value in use of its reporting units. Economic and operating assumptions are revised at the impairment testing date considering then current economic variables and operating forecasts.

Item 18 – Financial Statements

Note 11 – Debt and Financial Instruments, page F-32

5. **You disclose that you and your creditors entered into waivers and amendments to several of your debt instruments relating to a number of financial ratios. In light of this, please tell us what consideration you gave to EITF 86-30 regarding the classification of debt as current and non-current liabilities on the face of your balance sheet.**

RESPONSE: The Company respectfully notes for the Staff that EITF 86-30 is not mandatorily applicable under MFRS. Nonetheless, the Company applies similar considerations at each reporting date in order to assess the proper classification of its debt between current and noncurrent. It is important to mention that, as a legal matter, the Company was not in violation of its financial covenants in any of the reported periods considering that such covenants were modified or waived in advance of the measurement date.

In connection with its balance sheet at December 31, 2008, before the balance sheet date the Company and its creditors entered into modifications (not waivers) of its significant debt contracts by means of which the financial ratio requirements were modified, specifically, the net debt to operating EBITDA ratio, from 3.5 times in September 2008 to 4.5 times on December 31, 2008 and March 31, 2009, increasing to 4.75 times on June 30, 2009, decreasing to 4.5 times in September and December 2009, decreasing to 4.25 times in March and June 2010, decreasing to 4.0 times on September 30, 2010, decreasing to 3.75 times in December 2010, and March and June 2011 and returning to 3.5 times on September 30, 2011 and thereafter. At December 31, 2008, considering its forecasts, the Company assessed the likelihood of compliance with such scheduled financial ratios during the following 12 months and determined that it was not probable the Company would be in violation of the required covenants during the next 12 months and thus classified its debt between current and noncurrent based on the amortization dates as set forth in its debt contracts.

In any subsequent report, the Company will enhance its disclosures to explain the adverse consequences of any failure to satisfy its financial ratio covenants in the future. The Company proposes the following complementary disclosure to address the consequences of non compliance with its financial ratios:

In the Company's balance sheet as of any relevant measurement date on which the Company failed to comply with financial ratios agreed upon under its financing agreements, or in the Company's balance sheet as of any date prior to a subsequent measurement date on which the Company expects not to be in compliance with its financial ratios agreed upon under its financing agreements and, in the absence of: a) amendments and/or waivers covering the next succeeding 12 months; b) high probability that the violation will be cured during any agreed upon remediation period and be sustained for the next succeeding 12 months; and/or c) a signed refinancing agreement to refinance the relevant debt on a long-term basis; the Company would classify all its outstanding debt as current debt, regardless of the contractual maturities to the extent such debt has cross-default provisions. Such reclassification would have a material adverse effect on the Company's liquidity and financial position.

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

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

6. **You disclose that based on the results of goodwill impairment testing as of December 31, 2008 under U.S. GAAP, you recorded an estimated impairment loss and will adjust this amount as necessary upon the completion of the measurement of the impairment charge in a subsequent reporting period. We note that you filed your Form 20-F on June 30, 2009. Please clarify what additional information you were waiting for in order to complete your impairment testing. If you have completed your impairment testing, tell us whether you must make any adjustment to your estimated impairment loss. If you have not completed your testing, please explain why not and when you expect to complete your impairment testing under U.S. GAAP.**

RESPONSE: In contrast with MFRS, where any impairment loss would represent the excess of the net book value over the value in use as of the measurement date, under U.S. GAAP, whenever the net book value exceeds the estimated fair value, a second step process should be followed.

As part of the Company's second step process under U.S. GAAP, in order to fully comply with SFAS 142 and arrive at the ultimate amount of the implied goodwill and consequently at the final determination of the impairment loss, the Company would be required to determine the fair value of 100% of its assets and liabilities at the measurement date.

In connection with the Company's second step valuation as of the filing date of the 2008 20-F, as permitted by paragraph 22 of SFAS 142, if the second step of the goodwill impairment test is not complete before the financial statements are issued and a goodwill impairment loss is probable and can be reasonably estimated, the best estimate of that loss is required to be recognized in those financial statements. For purposes of preparing its reconciliation of net income to U.S. GAAP, considering that the determination of the fair value of the reporting units' identifiable assets and liabilities at the reporting date was underway, the Company determined a best estimate of the fair value. The Company was required to estimate the fair value of the Company's property, plant and equipment considering that the appraisal of such assets needed to be conducted over a significant number of operating sites. After June 30, 2009, the filing date of the 2008 20-F, the Company has continued the required field work, which is expected to be concluded during the fourth quarter of 2009. Based upon the results of appraisals completed as of the current date, the Company does not consider that the final results will vary significantly from its estimated implied fair value of goodwill used in the preparation of the reconciliation to U.S.GAAP included in the 2008 20-F.

7. We note your sensitivity analysis of the discount rates and growth rates based upon reasonably likely changes, and how the changes in these rates would affect the aggregate fair value. Please enhance your disclosure to quantify the additional goodwill impairment charges that would result if these reasonably likely changes occurred.

RESPONSE: The Company notes and will comply with the Staff’s comment in future filings, by quantifying the estimated additional results under the Company’s sensitivity analysis. The Company proposes to include a complementary table for this purpose. The new table, had it been included in the Company’s reconciliation to U.S. GAAP for the year ended December 31, 2008, would had been as follows:

In connection with the Company’s sensitivity analysis disclosed above, the pro forma impairment charges under U.S. GAAP that would have resulted if these reasonably probable changes actually occurred regarding those reporting units that experienced an impairment loss or presented a relative impairment risk in 2008, from an independent change of one percentage point in either the discount rate or the perpetual growth rate, excluding effects that would arise from the second step process under U.S. GAAP, would had been as follows:

(Millions of pesos)		Pro forma impact of one percentage point increase / decrease in the				
		Discount rate		Perpetual growth rate		
Reporting units		Recognized impairment charges	+1 Pt	-1 Pt	+1 Pt	-1 Pt
United States	Ps	62,358	76,986	43,111	51,580	70,574
Thailand ¹		1,047	—	—	—	—
Venezuela ¹		559	—	—	—	—
Ireland ¹		248	—	—	—	—
Australia		—	1,607	—	—	1,209
The Philippines		—	252	—	—	130
United Kingdom		—	161	—	—	—
Total impairment charges	Ps	64,212	79,006	43,111	51,580	71,913

¹ The sensitivity columns in the table above exclude impairment charges for an aggregate amount of approximately Ps1,854 related to Thailand, Venezuela and Ireland, considering that in connection with these reporting units, at December 31, 2008, the entire goodwill balance was completely removed under both MFRS and U.S. GAAP. Therefore, any change in the discount rate or growth rate for these reporting units would not result in any additional impairment charges.

8. For those reporting units in which you recorded a goodwill charge or it is reasonably likely you may be required to record an impairment charge, provide quantified disclosure of all assumptions used for those reporting units.

RESPONSE: The Company notes and will comply with the Staff’s comment in future filings, by providing a quantified disclosure of the significant assumptions used for those reporting units that experienced a goodwill charge or were reasonably close to that point. As an example, for 2008 the Company would have included the following table in addition to its current goodwill impairment disclosures:

The main assumptions used in the impairment testing under U.S. GAAP of those reporting units that experienced impairment charges in 2008, as well as those assumptions used in the reporting units that, according to the sensitivity analysis, presented a relative impairment risk in 2008, were as follows:

