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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON D.C. 20549

FORM 11-K

ANNUAL REPORT PURSUANT TO SECTION 15(D) OF THE
SECURITIES EXCHANGE ACT OF 1934

(Mark One)

Annual report pursuant to Section 15(d) of the Securities
Exchange Act of 1934

(No fee required, effective October 7, 1996)

For the fiscal year ended December 31, 2004

Or

Transition report pursuant to Section 15(d) of the Securities
Exchange Act of 1934

(No fee required)

For the transition period from _____ to _____

Commission file number 1-14946

A. Full title of the plan and the address of the plan, if different
from that of the issuer named below:

CEMEX, Inc. Savings and Investment Plan
for Union Employees
840 Gessner Road
Suite 1400
Houston, Texas 77024

B. Name of issuer of the securities held pursuant to the plan and the
address of its principal executive office:

CEMEX, S.A. de C.V.
Av. Ricardo Margain Zozaya #325
Colonia Valle del Campestre
Garza Garcia, Nuevo Leon
Mexico 66265

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CEMEX, INC. SAVINGS AND
INVESTMENT PLAN FOR
UNION EMPLOYEES

Financial Statements and
Supplemental Schedules

December 31, 2004 and 2003
(With Independent Auditors' Report Thereon)

CEMEX, INC. SAVINGS AND INVESTMENT PLAN
FOR UNION EMPLOYEES

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The following schedules required by the Department of Labor's Rules and Regulations are omitted because of the absence of conditions under which they are required:

- Schedule G, Part I - Schedule of Loans or Fixed Income Obligations in Default or Classified as Uncollectible
- Schedule G, Part II - Schedule of Leases in Default or Classified as Uncollectible
- Schedule G, Part III - Nonexempt Transactions
- Schedule H, Line 4(a) - Delinquent Employee Contributions and Loan Repayments
- Schedule H, Line 4(i) - Schedule of Assets (Acquired and Disposed of Within the Plan Year)
- Schedule H, Line 4(j) - Schedule of Reportable Transactions

INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM'S REPORT

Participants and Administrator of
CEMEX, Inc. Savings and Investment Plan
for Union Employees:

We have audited the accompanying statements of net assets available for benefits of the CEMEX, Inc. Savings and Investment Plan for Union Employees (the Plan) as of December 31, 2004 and 2003, and the related statement of changes in net assets available for benefits for the year ended December 31, 2004. These financial statements are the responsibility of the Plan's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with generally accepted auditing standards as established by the Auditing Standards Board (United States) and in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. The Plan is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Plan's

internal control over financial reporting. Accordingly, we express no such opinion. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the net assets available for benefits of the Plan as of December 31, 2004 and 2003, and the changes in net assets available for benefits for the year ended December 31, 2004, in conformity with accounting principles generally accepted in the United States of America.

Our audits were performed for the purpose of forming an opinion on the basic financial statements taken as a whole. The supplemental schedule of assets (held at end of year) is presented for the purpose of additional analysis and is not a required part of the basic financial statements but is supplementary information required by the Department of Labor's Rules and Regulations for Reporting and Disclosure under the Employee Retirement Income Security Act of 1974. This supplemental schedule is the responsibility of the Plan's management. The supplemental schedule has been subjected to the auditing procedures applied in the audit of the 2004 basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the 2004 basic financial statements taken as a whole.

/s/ Mir.Fox & Rodriguez, P.C.

Houston, Texas
June 29, 2005

CEMEX, INC. SAVINGS AND INVESTMENT PLAN
FOR UNION EMPLOYEES

Statements of Net Assets Available for Benefits
December 31, 2004 and 2003

Assets -----	2003 ----	2002 ----
Investments, at fair value:		
Mutual funds	\$ 1,758,295	1,315,532
Common collective trust fund	900,541	906,746
Common stock	583,048	315,291
Participant loans	195,588	175,554
	-----	-----
Total investments	3,437,472	2,713,123
Employee contributions receivable	8,410	
Employer contributions receivable	2,587	
Other accounts receivable	1,969	
Cash	18	2,486
	-----	-----
Total assets	3,450,456	2,715,609
Liabilities -----		
Investment trades payable		2,462
	-----	-----
Net assets available for benefits	\$ 3,450,456	2,713,147

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See accompanying notes to financial statements.

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CEMEX, INC. SAVINGS AND INVESTMENT PLAN
FOR UNION EMPLOYEES

Statement of Changes in Net Assets Available for Benefits
Year Ended December 31, 2004

Additions to net assets:	
Participant contributions	\$ 375,810
Employer contributions	111,016
Net appreciation in fair value of mutual funds	151,791
Net appreciation in fair value of common stock	148,879
Investment income	113,524

Total additions to net assets	901,020

Deductions from net assets:	
Benefits paid to participants	162,409
Administrative fees and expenses	1,302

Total deductions from net assets	163,711

Net decrease in net assets available for benefits	737,309
Net assets available for benefits:	
Beginning of year	2,713,147

End of year	\$ 3,450,456
	=====

See accompanying notes to financial statements.

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CEMEX, INC. SAVINGS AND
INVESTMENT PLAN
FOR UNION EMPLOYEES

Notes to Financial Statements
December 31, 2004 and 2003

1. Plan Description

General

The CEMEX, Inc. Savings and Investment Plan for Union Employees (the Plan) was adopted effective August 1, 1998 for the benefit of certain union employees of CEMEX, Inc. Effective April 1, 2005, the union employees of

the Clinchfield, Georgia plant ceased participating in the Plan and became participants in the CEMEX, Inc. Savings Plan. In connection therewith, assets of \$3,579,136 were transferred from the Plan to the CEMEX, Inc. Savings Plan subsequent to December 31, 2004. Effective September 1, 2003, the union employees of the Charlevoix, Michigan plant ceased participating in the Plan and became participants in the CEMEX, Inc. Savings Plan. In connection therewith, assets of \$3,676,704 were transferred from the Plan to the CEMEX, Inc. Savings Plan during 2003.

The Plan is qualified under section 401(a) of the Internal Revenue Code (IRC) as a defined contribution plan and is subject to the Employee Retirement Income Security Act of 1974, as amended (ERISA). The following is provided for general information purposes only. Participants should refer to the Plan Agreement for a more complete description of the Plan's provisions.

Eligibility

Union employees of the Clinchfield, Georgia plant of CEMEX, Inc. with at least three months of service are eligible to participate in the Plan. Plan entry dates are the first day of the calendar quarter coinciding with or following the completion of service. Effective April 1, 2005, union employees of the Clinchfield, Georgia plant ceased participating in the Plan.

Contributions

Participants may contribute from 1% to 16% of their eligible pay, up to an annual maximum of the lesser of their eligible pay or \$40,000. Participants may also rollover certain amounts from other qualified defined benefit or contribution plans. Participants direct the investment of their participant contributions in the investment options listed in note 3.

CEMEX, Inc. (the Employer and Sponsor) matches 50% of the amount contributed by each participant up to the first 6% of eligible pay. The Employer contributions are in the form of American Depository Shares representing common stock of CEMEX, S.A. de C.V. (CEMEX stock). A participant may, at any time after the CEMEX stock is credited to his or her account, make a diversification election and exercise investment discretion with respect to the Employer matching contribution. The Employer may make additional contributions in accordance with the provisions of the Plan Agreement.

Participant accounts

Separate accounts are maintained for each participant as follows. Participant accounts are credited with the participant's contribution and allocations of the Employer's contributions and Plan earnings. Allocations are based on each participant's earnings or account balance, as defined in the Plan Agreement. Each participant is entitled to the benefit that can be provided from the participant's account.

Continued

CEMEX, INC. SAVINGS AND
INVESTMENT PLAN
FOR UNION EMPLOYEES

Notes to Financial Statements, Continued

Vesting

Participants are immediately and fully vested in all contributions plus actual earnings thereon.

Benefit payments

Benefits are payable from participant account balances, subject to certain restrictions, upon termination of employment, retirement, reaching the age of 59 1/2, or by incurring a disability or financial hardship, as defined in the Plan Agreement. Participants elect the method of distribution which may be either in the form of a direct rollover to an eligible retirement plan, lump sum payment or, if in excess of \$5,000, payment over a period of time not to exceed the shorter of 10 years or certain life expectancies as defined in the Plan Agreement.

Participant loans

A participant may obtain a loan from his or her separate account balance. Each loan is evidenced by a promissory note and may not be less than \$1,000. The loans are secured by the balance in the participant's account and bear interest at the rate established by the Loan Committee. Provisions of the Plan require the aggregate of each loan outstanding not to exceed the lesser of \$50,000 or 50% of the participant's vested account balance. Repayment terms for loans are not to exceed five years and principal and interest is paid ratably through monthly payroll deductions.

Administrative expenses

Loan fees are paid by the borrowing participant and all other administrative costs are paid by the Sponsor.

Plan termination

The Employer has the right under the Plan to terminate the Plan subject to the provisions of ERISA.

2. Significant Accounting Policies

Basis of presentation

The financial statements have been prepared on an accrual basis and present the net assets available for plan benefits and changes in those net assets in accordance with accounting principles generally accepted in the United States of America.

Investment valuation and income recognition

The mutual funds, common collective trust fund and common stock are stated at fair value based on quoted market prices as of the date of the financial statements. Participant loans are valued at their outstanding balances, which approximate fair value. Purchases and sales of securities are recorded on a trade-date basis. Interest income is recorded on the accrual basis. Dividends are recorded on the ex-dividend date.

Benefit payments

Benefits are recorded when paid.

Continued

Use of estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported

amounts of assets, liabilities, and changes therein, and disclosure of contingent assets and liabilities. Actual results could differ from those estimates.

3. Investments

As of December 31, 2004 and 2003, participant contributions to the Plan were invested at the option of the participants in one or more of the following investment funds:

	2004	2003
	----	----
INVESCO Stable Value Fund	\$ 900,541	906,746
CEMEX stock	583,048	315,291
Washington Mutual Investors Fund	428,908	337,645
PIMCO Total Return Fund	328,016	260,485
Growth Fund of America	300,815	
Templeton Foreign Fund	234,156	170,249
Franklin Balance Sheet Investment Fund	163,941	114,267
American Century Investments Real Estate Fund	133,229	
MFS International Fund	81,299	
Templeton Developing Markets Fund	56,647	40,573
Franklin Small Mid-Cap Growth Fund	31,190	22,384
Alliance Capital Reserve Account	94	51
MFS Research Fund		179,368
Franklin Real Estate Securities Fund		78,152
ING International Small Cap Growth Fund		55,139
AIM Constellation Fund		46,591
Putnam New Opportunities Fund		10,628
Participant loans	195,588	175,554
	-----	-----
	\$ 3,437,472	2,713,123
	=====	=====

Investments with a fair value that exceeds \$172,523 and \$135,657 at December 31, 2004 and 2003, respectively, represent 5% or more of Plan net assets.

4. Federal Income Tax Status

The Plan obtained its latest determination letter on June 14, 2002 in which the Internal Revenue Service stated that the Plan, as then designed, was in compliance with the applicable requirements of the IRC. The Plan has been amended since receiving the determination letter. However, the Plan's management believes that the Plan is designed and is currently being operated in compliance with the applicable requirements of the IRC. Therefore, the Plan's management believes that the related trust is tax-exempt and accordingly, no provision for Federal income taxes has been included in the Plan's financial statements.

Continued

CEMEX, INC. SAVINGS AND
INVESTMENT PLAN
FOR UNION EMPLOYEES

Notes to Financial Statements, Continued

5. Risks and Uncertainties

The Plan provides for investment in a common collective trust fund, various mutual funds, and common stock. Investment securities, in general, are exposed to various risks, such as interest rate, credit and overall market volatility risks. Due to the level of risk associated with certain investment securities, it is at least reasonably possible that changes in the values of investment securities will occur in the near term and that such changes could materially affect participants' account balances and the amounts reported in the statements of net assets available for benefits.

Supplemental Schedule H, Line 4(i)
Plan Sponsor No. 72-0296500
Plan No. 010

CEMEX, INC. SAVINGS AND INVESTMENT PLAN
FOR UNION EMPLOYEES

Schedule of Assets (Held at End of Year)
December 31, 2004

(a)	(b)	(c)	(e)
Identity of issue, borrower, lessor, or similar party	Description of investment including maturity date, rate of interest, collateral, par or maturity value	Current value	value
INVESCO Trust Company	Stable Value Fund; 900,541 shares	\$	900,541
* Cemex, S.A. de C.V.	American Depository Shares; 16,009 shares		583,048
Washington Mutual	Washington Mutual Investors Fund; 13,935 shares		428,908
PIMCO	Total Return Fund; 30,742 shares		328,016
American Funds	Growth Fund of America; 10,987 shares		300,815
Franklin Templeton Investor Services, Inc.	Templeton Foreign Fund; 19,037 shares		234,156
Franklin Templeton Investor Services, Inc.	Franklin Balance Sheet Investment Fund; 2,814 shares		163,941
American Century Investments	Real Estate Fund; 5,383 shares		133,229
MFS Fund Distributors, Inc.	MFS International Fund; 3,810 shares		81,299
Franklin Templeton Investor Services, Inc.	Templeton Developing Markets Fund; 3,059 shares		56,647
Franklin Templeton Investor Services, Inc.	Franklin Small Mid-Cap Growth Fund; 913 shares		31,190
Pershing	Alliance Capital Reserve Account; 94 shares		94
* Participant loans	5.24% to 9.50%; 1-5 year term; payable monthly		195,588

			\$ 3,437,472

* Party-in-interest			

SIGNATURES

The Plan. Pursuant to the requirements of the Securities Exchange Act of 1934, the trustees (or other persons who administer the employee benefit plans) have duly caused this annual report to be signed on its behalf by the undersigned, thereunto duly authorized.

CEMEX, INC. SAVINGS AND INVESTMENT PLAN
FOR UNION EMPLOYEES

By: /s/ Andrew M. Miller

Name: Andrew M. Miller
Title: Chairman of Administrative Committee

Date: June 30, 2005

Exhibit
No.

Description

1. Consent of Mir.Fox & Rodriguez, P.C. to the incorporation by reference into the Registration Statement on Form S-8 (File No. 333-86090) of CEMEX, S.A. de C.V. of its report, dated June 29, 2005, with respect to the audited financial statements of the CEMEX, Inc. Savings and Investment Plan for Union Employees as of December 31, 2004.

EXHIBIT 1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Administrator of the
CEMEX, Inc. Savings and Investment Plan
for Union Employees:

We consent to the incorporation by reference in the Registration Statement (No. 333-86090) on Form S-8 of CEMEX, S.A. de C.V. of our report dated June 29, 2005, with respect to the statements of net assets available for benefits of CEMEX, Inc. Savings and Investment Plan for Union Employees as of December 31, 2004 and 2003, the related statement of changes in net assets available for benefits for the year ended December 31, 2004 and the related supplemental schedule of assets (held at end of year) as of December 31, 2004, which report appears in the December 31, 2004 annual report on Form 11-K of CEMEX, Inc. Savings and Investment Plan for Union Employees.

/s/ Mir.Fox & Rodriguez, P.C.

Houston, Texas
June 29, 2005