
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

For the years ended December 31, 2003 and 2002

Commission file number 1-9759

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



IMC Global Inc. Profit Sharing and Savings Plan

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

IMC GLOBAL INC.
100 S. Saunders Road Suite 300
Lake Forest, Illinois 60045-2561
847-739-1200

IMC Global Inc. Profit Sharing and Savings Plan
Financial Statements and Supplemental Schedule
Years ended December 31, 2003 and 2002

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Report of Independent Registered Public Accounting Firm

Plan Administrator
IMC Global Inc.
Profit Sharing and Savings Plan

We have audited the accompanying statements of assets available for benefits of the IMC Global Inc. Profit Sharing and Savings Plan as of December 31, 2003 and 2002, and the related statements of changes in assets available for benefits for the years then ended. 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 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. 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 assets available for benefits of the Plan at December 31, 2003 and 2002, and the changes in its assets available for benefits for the years then ended, in conformity with U.S. generally accepted accounting principles.

Our audits were performed for the purpose of forming an opinion on the basic financial statements taken as a whole. The accompanying supplemental schedule of assets (held at end of year) as of December 31, 2003, is presented for purposes of additional analysis and is not a required part of the 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 our audits of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

June 8, 2004
Chicago, IL

Ernst & Young LLP

IMC Global Inc. Profit Sharing and Savings Plan

Statements of Assets Available for Benefits

	<i>December 31</i>	
	<i>2003</i>	<i>2002</i>
Assets		
Cash	\$ 29,828	\$ 69,111
Interest in Master Trust Fund	57,508,762	57,756,646
Investments, at fair value	130,572,178	106,423,118
<i>Receivables:</i>		
Participant contributions	213,752	206,557
Employer contributions	6,446,337	4,167,312
Total receivables	6,660,089	4,373,869
Assets available for benefits	<u>\$194,770,857</u>	<u>\$168,622,744</u>

See accompanying notes.

IMC Global Inc. Profit Sharing and Savings Plan

Statements of Changes in Assets Available for Benefits

	<i>Year ended December 31</i>	
	2003	2002
Additions		
<i>Investment income (loss):</i>		
Interest and dividends	\$ 2,184,640	\$ 2,136,585
<i>Net realized and unrealized appreciation (depreciation) in fair value of investments:</i>		
Mutual funds	15,606,148	(13,736,224)
Common collective trust funds	4,112,335	(3,579,767)
IMC Global Inc. common stock	(663,553)	(2,529,584)
Income from Master Trust Fund	2,793,731	2,898,369
Total investment income (loss)	<u>24,033,301</u>	<u>(14,810,621)</u>
<i>Contributions:</i>		
Participants	7,520,110	7,137,422
Employer	9,979,425	7,614,368
Total contributions	<u>17,499,535</u>	<u>14,751,790</u>
Net transfers from other plans	135,443	511,910
Total additions	<u>41,668,279</u>	<u>453,079</u>
Deductions		
Distributions	15,510,318	12,949,221
Administrative fees	9,848	7,500
Total deductions	<u>15,520,166</u>	<u>12,956,721</u>
Net increase (decrease)	<u>26,148,113</u>	<u>(12,503,642)</u>
Assets available for benefits - Beginning of year	<u>168,622,744</u>	<u>181,126,386</u>
Assets available for benefits - End of year	<u>\$194,770,857</u>	<u>\$168,622,744</u>

See accompanying notes.

IMC Global Inc. Profit Sharing and Savings Plan

Notes to Financial Statements

Years ended December 31, 2003 and 2002

1. DESCRIPTION OF THE PLAN

The following description of the IMC Global Inc. Profit Sharing and Savings Plan (the Plan) provides only general information. Participants should refer to the Plan document for a more complete description of the Plan's provisions.

General

The Plan was established on March 1, 1988. The Plan is a defined-contribution plan maintained by IMC Global Inc. (the Company) for eligible salaried and nonunion hourly employees of IMC Global Operations Inc., IMC Phosphates MP, Inc. (Port Sutton employees only through December 23, 2003), IMC Potash Carlsbad, Inc., and IMC USA Holdings, Inc. Employees are eligible to participate in the Plan immediately upon their date of hire. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended (ERISA).

Background

Effective January 1, 1998, the Company added a profit-sharing provision to the Plan. The Plan became the primary retirement vehicle for all employees not covered by a collective bargaining agreement who were either: (1) not participants in a Company sponsored qualified defined benefit pension plan or (2) hired on or after January 1, 1998. Employees who were participants in the qualified defined-benefit pension plan as of December 31, 1997, were given the option of remaining in such plan, or becoming a participant in the profit sharing feature of this Plan effective January 1, 1998.

Effective January 1, 2003, certain participants in the qualified defined-benefit pension plan who elected, or were deemed to have elected prior to January 1, 1998, to remain in the qualified defined-benefit pension plan or become a participant in this Plan commenced participation in the profit-sharing feature of this Plan.

Contributions

The Plan is funded by contributions from participants in the form of payroll deductions/ salary reductions from 1% to 80% (up to 15% prior to April 1, 2002) of participants' eligible pay (subject to Internal Revenue Service (IRS) limits) in before-tax dollars, after-tax dollars, or a combination of both. Additional before-tax "catch-up" contributions are allowed above the IRS annual dollar limit for employees at least age 50 or who will reach age 50 during a given calendar year. The Plan is also funded by Company matching contributions, which are subject to certain limitations imposed by Section 415 of the Internal Revenue Code (IRC). For the years ended December 31, 2003 and 2002, the Company matched up to 6% of a participant's eligible pay as follows: \$1 for every \$1 a participant contributes to the Plan, up to the first 3% of a participant's eligible pay and \$.50 for every \$1 that a participant contributes to the Plan on the next 3% of a participant's eligible pay. The Company also makes a profit-sharing contribution, subject to

certain limitations and requirements. All or any portion of the profit-sharing or Company matching contributions, initially deposited to the IMC Global Stock Fund, may be in the form of cash or shares of IMC Global Inc. common stock. Generally, a participant must be employed on the last day of the Plan year to be eligible for profit-sharing contributions.

Participants may roll over their vested benefits from other qualified benefit plans to the Plan.

Participant Accounts

Each participant's account is credited with the participant's contributions and allocations of: (a) the Company contributions and (b) Plan earnings and is charged with an allocation of certain administrative expenses. Allocations are based on earnings or account balances as defined. The benefit to which a participant is entitled is the benefit that can be provided from the participant's account.

Administrative Expenses

Certain administrative expenses of the Plan are borne by the Company.

Investment Programs

The Plan's investments are administered by Putnam Fiduciary Trust Company. Participants can choose from among fourteen investment funds, one of which is a pooled fund (Master Trust fund) shared by one other IMC Global Inc. 401(k) plan. Additionally, subject to certain requirements and limitations, a self-directed brokerage account is offered whereby participants can choose from thousands of investments outside the Plan's fund lineup in which to invest a portion of their Plan account.

Participants may elect to change the investment direction of their existing account balances and their future contributions daily.

Vesting

Participants are immediately vested in the portion of their Plan account related to participant contributions, Company matching contributions, and earnings thereon. Participants are vested in the Company profit-sharing portion of their account after either five years of service, attaining age 65, or death while an employee. Forfeitures of nonvested participant accounts are used first to restore profit-sharing accounts for reemployed employees who are entitled to have forfeitures restored and are then used to offset Company profit-sharing contributions.

Withdrawals

Participants may withdraw their vested account balance upon termination of employment. Under certain conditions of financial hardship, participants working for the Company may withdraw certain funds, but their participation in the Plan will be suspended for six months. Certain withdrawals are available after age 59 1/2 or in the event of disability. Additionally, while still employed, in-service withdrawals are available subject to certain requirements and limitations.

Participants who terminate their employment and have a vested account balance in excess of \$5,000 may: (1) receive their distribution in a lump sum; (2) defer their lump sum payment to a later date but no later than age 70 1/2; or (3) receive annual installment payments for up to 10 years beginning immediately or at a later date. Participants may be entitled to additional forms of payment or may need to obtain spousal consent to a distribution or withdrawal if: the participant had an account balance from another qualified plan; and that plan was maintained by a company that was acquired by the Company; and the participant's account balance was transferred to this Plan.

Loans to Participants

Participants in the Plan may be granted loans subject to certain terms and maximum dollar or Plan account balance limits, as defined by the Plan. Principal repayments, which are over one to five years for general purpose loans and over one to ten years for residential loans, and related interest income are credited to the borrowing participant's account. Loan payments are made by payroll deductions. The loan interest that will be charged for both general purpose and residential loans is calculated on a monthly basis using the prime rate, as quoted in the *Wall Street Journal*, plus 1%.

Plan Termination

Although it has not expressed any interest to do so, the Company reserves the right under the Plan to make changes at any time or even suspend or terminate the Plan subject to the provisions of ERISA.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Investment Valuation and Income Recognition

Except for guaranteed investment contracts, investments are stated at fair value. Fair value is the last reported sales price on the last business day of the month for securities traded on a national securities exchange and in the over-the-counter market. Fair value for shares of master trust, mutual and common collective trust funds is the net asset value of those shares or units, as determined by the respective funds. Loans to participants are valued at cost, which approximates fair value. Guaranteed investment contracts are carried at contract value.

Net income or loss from the Master Trust fund is allocated monthly to each participating plan based on the ratio of each plan's equity to the total equity of all participating plans prior to the allocations.

Purchases and sales of securities are accounted for on a trade-date basis. Dividend income is recorded on the ex-dividend date. Interest from investments is recorded on the accrual basis.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States requires the plan administrator to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

Reclassifications

Certain amounts in the 2002 financial statements have been reclassified to conform to the 2003 presentation.

3. INVESTMENT IN MASTER TRUST FUND

Assets of the Stable Value Fund are shared by one other IMC Global Inc. 401(k) plan. The Plan held a 87% and 89% interest in the Stable Value Fund at December 31, 2003 and 2002, respectively.

The equitable shares in the Master Trust fund of a participating plan are proportionate to the fair market value of the assets allocable to such participating plan.

The net assets of the Stable Value Fund as of December 31, 2003 and 2002, were as follows:

	<i>December 31</i>	
	<i>2003</i>	<i>2002</i>
Putnam Stable Value Fund	\$54,877,669	\$42,880,827
<i>Guaranteed Investment Contracts:</i>		
Business Mens Assurance Co.	3,208,624	3,208,624
Rabobank Nederland	435,099	1,311,568
Allstate Life Insurance Co.	4,123,600	4,123,600
Ohio National Life Insurance Co.	-	5,897,213
John Hancock Life Insurance Co.	1,988,483	1,873,983
Connecticut General Life Insurance Co.	-	4,989,480
Protective Life Insurance Co.	1,031,118	1,061,734
Pending investment transactions	264,405	(194,227)
Net assets	<u>\$65,928,998</u>	<u>\$65,152,802</u>

Earnings and expenses in the Stable Value Fund are summarized as follows:

	<i>Year ended December 31</i>	
	<i>2003</i>	<i>2002</i>
Interest income	\$3,180,359	\$3,266,384
Investment expenses	(8,554)	(7,019)
	<u>\$3,171,805</u>	<u>\$3,259,365</u>

4. SIGNIFICANT INVESTMENTS

Individual investments that represent 5% or more of assets available for benefits were as follows:

	<i>December 31</i>	
	<i>2003</i>	<i>2002</i>
<i>Mutual funds:</i>		
Fidelity Magellan Fund	\$21,562,549	\$16,130,902
Putnam Equity Income Fund	25,379,830	22,413,093
Putnam Asset Allocation - Balanced Portfolio	10,989,667	9,423,103
T. Rowe Price Small Cap Stock Fund	12,468,618	*
PIMCO Total Return Fund - Institutional	*	10,467,150
<i>Common collective trust funds:</i>		
Putnam S&P 500 Index Fund	15,640,534	13,044,215
IMC Global Inc. common stock	15,730,748	17,004,266

*Below 5% threshold.

5. FEDERAL INCOME TAX STATUS

The Plan has received a determination letter from the IRS dated September 18, 2002, stating that the Plan is qualified under Section 401(a) of the IRC and, therefore, the related trust is exempt from taxation. Subsequent to this determination by the IRS, the Plan was amended. Once qualified, the Plan is required to operate in conformity with the IRC to maintain its qualification. The plan administrator believes the Plan is being operated in compliance with the applicable requirements of the IRC and, therefore, believes that the Plan, as amended, is qualified and the related trust is tax-exempt.

6. RECONCILIATION OF FINANCIAL STATEMENTS TO FORM 5500

The following is a reconciliation of assets available for benefits and benefits paid to participants per the financial statements to the Form 5500:

	<i>December 31</i>	
	<i>2003</i>	<i>2002</i>
Assets available for benefits per the financial statements	\$194,770,857	\$168,622,744
Deemed distributions of participant loans	(162,541)	(126,796)
Assets available for benefits per the Form 5500	\$194,608,316	\$168,495,948

	<i>Year ended December 31 2003</i>
Benefits paid to participants per the financial statements	\$15,510,318
<i>Add:</i> Deemed distribution of participant loans at December 31, 2003	162,541
<i>Less:</i> Deemed distribution of participant loans at December 31, 2002	<u>(126,796)</u>
Benefits paid to participants per the Form 5500	<u><u>\$15,546,063</u></u>

Deemed distributions are recorded on the Form 5500 but are not recorded on the financial statements.

7. RISKS AND UNCERTAINTIES

The Plan invests in various investment securities. Investment securities are exposed to various risks such as interest rate, market, and credit 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 assets available for benefits.

8. SUBSEQUENT EVENTS

Effective January 1, 2004, in the event a participant is involuntarily terminated within 24 months of a change in control, the participant shall become 100% vested in their Profit Sharing Account. In the event a participant voluntarily terminates employment or is terminated for cause and he/she has not met the Plan's vesting requirement, the participant's Profit Sharing Account will be forfeited.

Supplemental Schedule

IMC Global Inc. Profit Sharing and Savings Plan

Schedule H, Line 4i - Schedule of Assets (Held at End of Year) December 31, 2003

<i>Identity of Issuer</i>	<i>Description</i>	<i>Number of Shares</i>	<i>Current Value</i>
Putnam Fiduciary Trust Company*	Putnam Equity Income Fund	1,612,442	\$ 25,379,830
	Putnam S&P 500 Index Fund	563,014	15,640,534
	Putnam Asset Allocation - Balanced Portfolio	1,112,314	10,989,667
	Putnam International Growth Fund	140,309	2,915,615
	Putnam Investors Fund	59,671	674,879
	Capital Guardian Emerging Markets Equity Fund	355,941	3,021,942
	Putnam Asset Allocation - Growth Portfolio	141,126	1,428,190
	Putnam Asset Allocation - Conservative Portfolio	53,642	473,660
	Self-directed brokerage account	-	2,097,996
Fidelity Management Trust Company	Fidelity Magellan Fund	220,611	21,562,549
T. Rowe Price Trust Company	T. Rowe Price Small Cap Stock Fund	445,626	12,468,618
PIMCO	PIMCO Total Return Fund - Institutional	904,655	9,688,849
Vanguard Fiduciary Trust Company	Vanguard Windsor II Fund	154,084	4,081,696
IMC Global Inc.*	IMC Global Inc. common stock	1,584,164	15,730,748
Loans to participants	Varying maturities with interest rates ranging from 5% to 10%	-	4,254,865
			<u>\$130,409,638</u>

*Indicates party in interest to the Plan.

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 33-22079) pertaining to the IMC Global Inc. Profit Sharing and Savings Plan of our report dated June 8, 2004, with respect to the financial statements and schedule of the IMC Global Inc. Profit Sharing and Savings Plan included in this Annual Report (Form 11-K) for the year ended December 31, 2003.

Chicago, Illinois
June 23, 2004

Ernst & Young LLP

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, I the Undersigned Chairman of the Employee Benefits Committee have duly caused this annual report to be signed on its behalf by the undersigned hereunto duly authorized.

IMC Global Inc. Profit Sharing and Savings Plan

Stephen P. Malia

Stephen P. Malia
Chairman of the Employee Benefits Committee

Date: June 25, 2004

Pursuant to the requirements of the Securities Exchange Act of 1934, this annual report has been signed below by the following persons in their capacities as members of the Employee Benefits Committee and on the dates indicated.

<i>Signature</i>	<i>Title</i>	<i>Date</i>
<u>J. Reid Porter</u> J. Reid Porter	Executive Vice President and Chief Financial Officer	June 25, 2004
<u>Stephen P. Malia</u> Stephen P. Malia	Senior Vice President Human Resources	June 25, 2004
<u>E. Paul Dunn</u> E. Paul Dunn	Vice President and Treasurer	June 25, 2004
<u>Mary Ann Hynes</u> Mary Ann Hynes	Senior Vice President and General Counsel	June 25, 2004
<u>James O. Siemers</u> James O. Siemers	Director of Compensation and Benefits	June 25, 2004

Exhibit Index

<i>Exhibit No.</i>	<i>Description</i>	<i>Incorporated Herein by Reference to</i>	<i>Filed with Electronic Submission</i>
32.1	Certification Pursuant to Section 1350 of Chapter 63 of Title 18 of the United States Code		X
32.2	Certification Pursuant to Section 1350 of Chapter 63 of Title 18 of the United States Code		X