### **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	
(Mar	k One)	
[X]	ANNUAL REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934	
	For the fiscal year ended December 31, 2003	
	OR	
[]	TRANSITION REPORT PURSUANT TO SECTION 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934	ļ
	For the transition period from to	
Com	mission file number 1-16091.	
A.	Full title of the plan and the address of the plan, if different from that of the issuer below:	
	POLYONE RETIREMENT SAVINGS PLAN A (formerly the The Geon Retirement Savings Plan)	
B.	Name of issuer of the securities held pursuant to the plan and the address of its principal executive office:	
	POLYONE CORPORATION 33587 WALKER ROAD AVON LAKE, OHIO 44012	
	REQUIRED INFORMATION	
	The following financial statements and supplemental schedules for the PolyOne Retirement Savings Plan -A, prepared in accordance with the financial reporting requirements of ERISA, are being filed herewith:	
	Audited Financial Statements, December 31, 2003 and 2002 and Year ended December 31, 2003 with Report of Independent Registered Public Accounting Firm	Page No. (in this Report)
	The following exhibits are being filed herewith:	
	23.1 Consent of Ernst & Young LLP	12

### SIGNATURES

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

Date: June 28, 2004 POLYONE RETIREMENT SAVINGS PLAN — A

By: PolyOne Corporation Committee for Employee

Benefits Administration

By: /s/ Michael J. Meier

Michael J. Meier Corporate Controller PolyOne Corporation **Audited Financial Statements** 

PolyOne Retirement Savings Plan—A (formerly The Geon Retirement Savings Plan)

December 31, 2003 and 2002 and Year ended December 31, 2003 With Report of Independent Registered Public Accounting Firm

### **Audited Financial Statements**

December 31, 2003 and 2002, and Year ended December 31, 2003

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#### Report of Independent Registered Public Accounting Firm

#### PolyOne Corporation Retirement Plan Committee

We have audited the accompanying statements of net assets available for benefits of the PolyOne Retirement Savings Plan—A (formerly The Geon Retirement Savings Plan) as of December 31, 2003 and 2002, and the related statement of changes in net assets available for benefits for the year ended December 31, 2003. 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 net assets available for benefits of the Plan at December 31, 2003 and 2002, and the changes in its net assets available for benefits for the year ended December 31, 2003, in conformity with U.S. generally accepted accounting principles.

/s/ Ernst & Young LLP

June 21, 2004

### Statements of Net Assets Available for Benefits

		December 31
	2003	2002
Assets		
Investments, at fair value	11,938,521	\$112,415,490
Receivables:		
Employer contributions	<del>_</del>	205,175
Participant contributions	<del>-</del>	245,439
Dividends and interest	<del>_</del>	127,332
Other	_	33,882
Total receivables		611,828
Total assets	11,938,521	113,027,318
Liabilities		
Other payables	<del>-</del>	186,045
Net assets available for benefits	\$ <mark>11,938,521</mark>	\$112,841,273
See accompanying notes.		
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### Statement of Changes in Net Assets Available for Benefits

Year ended December 31, 2003

Additions	
Investment income:	
Interest	\$ 1,309,018
Dividends	1,388,403
Net appreciation in fair value of investments	25,516,598
	28,214,019
Contributions:	
Participant	5,448,947
Employer	7,133,243
Total additions	12,582,190
	40,796,209
Deductions	
Withdrawals and distributions:	
Cash	12,023,607
Common stock	847,455
	12,871,062
Transfers to:	
PolyOne Retirement Savings Plan	125,732,978
PolyOne Retirement Savings Plan for Collective Bargaining Employees	2,957,471
PolyOne Retirement Savings Plan for Collective Bargaining Employees—A	62,553
	128,753,002
Administrative expenses	74,897
Total deductions	141,698,961
Net decrease	(100,902,752)
Net assets available for benefits:	
Beginning of year	112,841,273
End of year	\$ 11,938,52 <b>1</b>

See accompanying notes.

Notes to Financial Statements

December 31, 2003 and 2002 and Year ended December 31, 2003

#### 1. Summary Description of the Plan

The following summary description of the PolyOne Retirement Savings Plan—A (the Plan), formerly known as the Geon Retirement Savings Plan, is provided for general information purposes only. Participants should refer to the plan document for a more complete description of the Plan's provisions. The Plan is administered by the PolyOne Corporation Retirement Plan Committee.

#### General

The Plan is sponsored by PolyOne Corporation (the Company and Plan Sponsor). The Company was formed by the consolidation of The Geon Company and M. A. Hanna Company on August 31, 2000. The Plan is an amendment and restatement of the Geon Retirement Savings Plan (the Predecessor Plan).

The Plan is a defined contribution plan covering all eligible employees participating in the Predecessor Plan as of May 31, 2003 (except collectively bargained employees located at the Company's Burlington, New Jersey and Louisville, Kentucky facilities). No other employee shall become a participant in the Plan. The Plan is subject to the provisions of the Employee Retirement Income Security Act of 1974 (ERISA).

Effective January 1, 2004, as approved by the Compensation and Governance Committee on January 27, 2003, the Plan was merged with and into the PolyOne Retirement Savings Plan (formerly the M.A. Hanna Company 401(k) and Retirement Plan). On December 31, 2003, all of the assets of the Plan, with the exception of the Brokerage Account, were transferred to the PolyOne Retirement Savings Plan. The Brokerage Account assets were transferred on January 6, 2004.

#### **Contributions**

Each employee who elects to become a participant in the Plan authorizes a bi-weekly payroll deduction from 1% to 15% of eligible earnings. The Retirement Plan Committee has the authority at its discretion to reduce the employees' bi-weekly contribution percentage in order to maintain the tax-qualified status of the Plan.

#### Notes to Financial Statements

#### 1. Summary Description of the Plan (continued)

The Plan offers participants the choice of two savings options: an after-tax savings option and a pre-tax savings option. Participants may elect to participate in either or both of the savings options. Under both savings options, participants may direct that contributions be invested in any eligible funds offered by the Plan. Participants may change their investment options daily.

Prior to June 2003, the Plan provided for a Company matching contribution equal to 100% for each \$1 contributed on the first 6% of eligible employee compensation. The employer match was directed to the PolyOne Stock Fund. Effective June 1, 2003, the Company matching contribution was changed to 100% of the first 3%, and 50% of the next 3% based on a participant's aggregate After-Tax and Pre-Tax Contributions with respect to a payroll period, up to a maximum of 6% of the participant's eligible earnings for the period. For each payroll period, the Company intends to make a retirement contribution for each participant equal to 2% of eligible earnings. Additionally, for each payroll period the Company will also make a transition contribution for each participant in the PolyOne Merged Pension Plan (frozen plan as of December 31, 2002) provided the sum of the participant's age and "benefit service" equaled 45 or more points. The contribution is determined on a sliding percentage scale (ranging from 1% to 4%) dependent on the number of points determined by age and service. Both the employer matching and retirement contributions follow the participant's investment elections.

The Plan provides for the acceptance of rollover contributions from other plans qualified under the Internal Revenue Code (the Code). Rollover contributions can be made only in cash to the Plan's tax-deferred savings option.

#### Vesting

Participant contributions and Company matching and discretionary contributions are fully vested immediately. Company retirement contributions are vested after three years of service.

Notes to Financial Statements (continued)

#### 1. Summary Description of the Plan (continued)

#### **Participant Loans**

Participants may borrow from employee contributions and related earnings in their fund accounts. Participants may borrow a minimum of \$1,000 up to an amount equal to the lesser of one half of the total vested account balance or \$50,000, reduced by the greater of (i) the highest outstanding loan balance in the last 12 months, or (ii) the outstanding balance of loans from the Plan on the date such loan is made. The interest rate on each loan is a fixed rate based on the trustee's prime rate. Payments on loans are made through payroll deductions and must be repaid within five years (personal loans) or five to fifteen years (primary residence loans).

#### Plan Withdrawals and Distributions

Upon retirement or separation from service participants may withdraw from the Plan. Active employees of the Company are entitled to receive the value of their Company matching contributions and discretionary Company contributions made prior to January 1, 1995, and earnings thereon upon reaching age 55. Employee pre-tax contributions and discretionary Company contributions made subsequent to December 31, 1994 and earnings thereon may not be withdrawn until the participant reaches age 591/2, unless under hardship. Employee after-tax contributions may be withdrawn at the discretion of the participant. Distributions are made in payments of cash or common stock.

#### **Plan Termination**

Although it has not expressed any intent to do so, the Company has the right under the Plan to discontinue its contributions at any time and to terminate the Plan subject to the provisions of ERISA. In the event of termination of the Plan, the net assets of the Plan will be distributed to the participants based on the respective value of their accounts.

#### **Administrative Expenses**

All significant accounting and administrative fees are paid by the Company. Trust and custody fees are paid by the Plan.

Notes to Financial Statements (continued)

#### 2. Summary of Significant Accounting Policies

#### **Basis of Accounting**

The financial statements of the Plan are prepared using the accrual basis of accounting.

#### **Use of Estimates**

The preparation of the financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates that affect the amounts reported in the financial statements and accompanying notes. Actual results could differ from those estimates.

#### Valuation of Investments and Income Recognition

Investments are stated at fair value. Securities traded on a national securities exchange are valued at the last reported sales price on the last business day of the Plan year. Investments for which no sale was reported on that date are valued at the average of the last reported bid and ask prices. Shares of mutual funds are valued at quoted market prices, which represent the net asset values of shares held by the Plan at year-end. Common/collective trust funds are stated at fair value, as determined by the trustee. The New York Life Stable Value Option consists primarily of insurance contracts valued at contract value. Investment contracts are recorded at contract value. Participant loans are valued at their outstanding balances, which approximate fair value. Purchases and sales of securities are reported on a trade date basis. Dividend income is recorded on the ex-dividend date and interest income is recorded on the accrual basis. Gains and losses on security transactions are determined using the average cost method.

Notes to Financial Statements (continued)

#### 3. Investments

At December 31, 2003 there were no individual investments greater than 5% or more of the fair value of the Plan's net assets. The fair value of individual investments that represent 5% or more of the fair value of the Plan's net assets at December 31, 2002 are as follows:

	December 31, 2002
PolyOne Corporation Common Stock*	\$26,241,828
State Street Bank S&P 500 Flagship Fund	20,422,126
State Street Bank Yield Enhanced Fund	22,009,496
State Street Bank Par Fund	14,741,522

<sup>\*</sup> Nonparticipant-directed

During 2003, the Plan's investments (including gains and losses on investments bought and sold, as well as held during the year) appreciated in fair value as follows:

	Net Appreciation In Fair Value of Investments
Common stocks	\$15,713,210
Common/collective trust funds	2,129,818
Mutual funds	6,314,540
Brokerage account	1,359,030
	\$25,516,598

### 4. Nonparticipant-Directed Investments

Effective June 1, 2003 all investments became participant directed. At December 31, 2002 and for the period January 1, 2003 to May 31, 2003, the PolyOne Stock fund contained participant account balances that were both participant-directed and nonparticipant-directed. Because the fund contained balances that were nonparticipant-directed, the entire fund is considered nonparticipant-directed for disclosure purposes.

Notes to Financial Statements (continued)

### 4. Nonparticipant-Directed Investments (continued)

Information about the net assets and the significant components of changes in net assets related to the nonparticipant-directed investments is as follows:

	December 31, 2002
Net assets:	
Assets:	
Investments, at fair value:	
PolyOne Common Stock	\$26,241,828
State Street Bank Short-Term Investment Fund	668,824
Total investments	26,910,652
Receivables:	
Dividends and interest	1,261
Contributions	291,586
Other	3,859
Total receivables	296,706
Total assets	27,207,358
Liabilities:	
Other payables	105,793
Total liabilities	105,793
Net assets	\$27,101,565
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Notes to Financial Statements (continued)

#### 4. Nonparticipant-Directed Investments (continued)

	Period January 1, 2003 to May 31, 2003
Changes in net assets:	
Additions:	
Investment income:	
Interest and other income	\$ 2,962
Net appreciation in fair value of investments	7,641,696
Contributions:	
Participant	1,044,340
Employer	2,033,485
Deductions:	
Withdrawals and distributions:	
Cash	672,064
Common stock	310,378
Net transfers to participant-directed investments	36,823,666
Administrative expenses	17,940
Net decrease	\$ <del>(27,101,565)</del>

#### 5. 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 net assets available for benefits.

Notes to Financial Statements (continued)

#### 6. Income Tax Status

The Plan has received a determination letter from the Internal Revenue Service dated March 10, 2004, stating that the Plan is qualified under Section 401(a) of the Internal Revenue Code (the Code). As a result, the related trust is exempt from taxation. Once qualified, the Plan is required to operate in conformity with the Code to maintain its qualification. The Plan Sponsor believes the Plan is being operated in compliance with the applicable requirements of the Code and therefore believes that the Plan is qualified and the related trust is tax exempt.

#### 7. Differences Between Financial Statements and Form 5500

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

Net assets available for benefits per the financial statements	<b>\$ 11,938,521</b>
Amounts transferred to the PolyOne Retirement Savings Plan (formerly the M.A. Hanna Company 401(k) and	
Retirement Plan)	(11,938,521)
Net assets available for benefits per Form 5500	\$ —

Effective January 1, 2004 the Plan was merged with and into the PolyOne Retirement Savings Plan (formerly the M.A. Hanna Company 401(k) and Retirement Plan). On December 31, 2003, all of the assets of the Plan, with the exception of the Brokerage Account, were transferred to the PolyOne Retirement Savings Plan. The Brokerage Account assets were transferred on January 6, 2004. The Form 5500 reflects the Plan transferring the Brokerage Account assets as of December 31, 2003.

#### Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement (Form S-8 No. 333-47796) pertaining to the PolyOne Retirement Savings Plan - A of our report dated June 21, 2004, with respect to the financial statements of the PolyOne Retirement Savings Plan-A included in this Annual Report (Form 11-K) for the year ended December 31, 2003.

/s/ Ernst & Young LLP

Cleveland, OH June 22, 2004