SECURITIES AND EXCHANGE COMMISSION

Washington, DC 20549

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of report (Date of earliest event reported): December 20, 2004

POLYONE CORPORATION

(Exact name of registrant as specified in charter)

Ohio	1-16091	34-1730488		
(State or other	(Commission	(I.R.S. Employer		
jurisdiction of incorporation)	File Number)	Identification No.)		
PolyOne Center, 33587 Walker Road, Avon Lake, Ohio		44012		
(Address of principal executive offices)		(Zip Code)		
Registrant's telephone number, including area code: (440) 930-1000				
(Former name or former address, if changed since last report.)				
Check the appropriate box below if the Form 8-K filing following provisions:	is intended to simultaneously satisfy the filing	requirements of the registrant under any of the		
	the Committies Act (17 CED 220 425)			

[] Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

[] Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

[] Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

[] Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13E-4(c))

Item 7.01. Regulation FD Disclosure.

On December 20, 2004, the Registrant issued a press release, furnished herewith as Exhibit 99.1, updating its fourth-quarter 2004 financial outlook. The press release shall not be deemed to be "filed" under the Securities Exchange Act of 1934.

Item 9.01. Financial Statements and Exhibits.

(c) Exhibits.

Exhibit 99.1 — Press release dated December 20, 2004, furnished herewith.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

POLYONE CORPORATION

By: /s/ Michael J. Meier

Michael J. Meier Corporate Controller

Dated: December 21, 2004



For Immediate Release

PolyOne Updates Fourth-Quarter 2004 Outlook

- · Announcement reflects commitment to provide regular mid-quarter updates
- Operating business unit revenues track early expectations
- Higher raw material costs reduce margins and operating income projections
- · Company expects debt reduction and pension contributions to total approximately \$235 million in 2004

CLEVELAND – December 20, 2004 – PolyOne Corporation (NYSE: **POL**), a leading global polymer compounding and North American distribution company, today began, as previously announced, to provide regular mid-quarter updates of its quarterly financial outlook. The Company stated in its October 27, 2004, earnings release that it would begin such updates in the fourth quarter to inform investors of any material changes to major business drivers.

Today, PolyOne reaffirmed its expectation that revenues from continuing operations in fourth-quarter 2004 will increase between 5 percent and 10 percent over fourth-quarter 2003 revenues. As anticipated, revenues from continuing operations likely will decrease from the third quarter of 2004 due to seasonal slowing. The European business, however, is slowing more than expected, due primarily to the strong euro and high energy costs.

All of PolyOne's North American and International operating units are experiencing margin pressure from higher raw material, additive and freight costs. Particularly affected are the Company's Vinyl Compound, International and Formulators units. Ethylene and its derivatives inflated cost faster than previously anticipated, resulting in higher raw material costs. In addition, plant utility costs are now expected to be higher than previously anticipated due to higher energy costs.

While the Company is working to mitigate these adverse effects by raising product prices and other means, it has revised its operating income outlook. PolyOne continues to expect improved operating income improvement compared with the fourth quarter of 2003. Even so, because of the combinations of factors above including a slower European business, the Company now projects that its Performance Plastics segment operating income will be \$5 million to \$8 million lower than the range discussed in the October 27, 2004.

Despite the margin squeeze, PolyOne continues to generate good cash flow and to reduce debt. PolyOne also made a substantial pension contribution in December. The Company expects that the aggregate debt reduction and pension contribution in 2004 will be approximately \$235 million.

Additionally, in the fourth quarter, PolyOne will recognize an expense of between \$2 million and \$3 million due to the partial vesting of stock appreciation rights under its long-term incentive program.

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This expense was triggered when PolyOne's share price exceeded price performance targets of \$8 and \$9 per share.

All other factors discussed in the fourth-quarter 2004 outlook contained in its third-quarter earnings release of October 27, 2004, remain unchanged, including the following:

- PolyOne continues to anticipate that operating income from its Resin & Intermediates business will decline between \$2 million and \$4 million compared with the third quarter of 2004. Stronger-than-anticipated polyvinyl chloride (PVC) resin demand as well as higher PVC and caustic prices are expected to offset higher ethylene costs in the fourth quarter.
- PolyOne expects positive cash generation in the quarter. PolyOne estimates that it will have generated more than \$100 million in cash during 2004.
- Net income from discontinued operations should be lower compared with the third quarter of 2004 due to the August 2004 sale of the Elastomers and Performance Additives unit, continuing margin pressure, and lower seasonal demand for Specialty Resins and Engineered Films products. As a result, the discontinued businesses should contribute between \$3 million and \$4 million less in net income in the fourth quarter than in the third quarter of 2004.
- Cost levels should approximate third-quarter levels. Interest expense should decline by about \$1 million from the third quarter due to early retirement of debt. The Company expects that the premium paid with continuing early debt retirement will be significantly lower than the \$3 million incurred in the third quarter.

PolyOne Fourth-quarter 2004 Earnings Release and Conference Call

PolyOne will release its fourth-quarter 2004 earnings after the close of business on Thursday, February 3, 2005, and will host a conference call at 9 a.m. Eastern time on Friday, February 4, 2005. The conference dial-in number is 888-489-0038 (domestic) or 706-643-1611 (international), conference topic: PolyOne Earnings Call. The replay number is 800-642-1687 (domestic) or 706-645-9291 (international). The conference ID for the replay is 9931951. The call will be broadcast live and then via replay for two weeks on the Company's Web site at http://www.polyone.com.

About PolyOne

PolyOne Corporation, with 2003 annual revenues of approximately \$2 billion, is a leading global compounding and North American distribution company with continuing operations in thermoplastic compounds, specialty polymer formulations, color and additive systems, and thermoplastic resin distribution. Headquartered in northeast Ohio, PolyOne has employees at manufacturing sites in North America, Europe, Asia and Australia, and joint ventures in North America, South America and Asia. Information on PolyOne's products and services can be found at http://www.polyone.com.

PolyOne Investor & Media Contact:

Dennis Cocco Vice President, Investor Relations & Communications 440.930.1538

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Forward-looking Statements

In this press release, statements that are not reported financial results or other historical information are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements give current expectations or forecasts of future events and are not guarantees of future performance. They are based on management's expectations that involve a number of business risks and uncertainties, any of which could cause actual results to differ materially from those expressed in or implied by the forward-looking statements. You can identify these statements by the fact that they do not relate strictly to historic or current facts. They use words such as "anticipate," "estimate," "expect," "project," "intend," "plan," "believe" and other words and terms of similar meaning in connection with any discussion of future operating or financial performance. In particular, these include statements relating to future actions; prospective changes in raw material costs, product pricing or product demand; future performance or results of current and anticipated market conditions and market strategies; sales efforts; expenses; the outcome of contingencies such as legal proceedings; and financial results. Factors that could cause actual results to differ materially include, but are not limited to:

- an inability to achieve or delays in achieving or achievement of less than the anticipated financial benefit from initiatives related to restructuring programs, including cost reduction and employee productivity goals;
- a delay or inability to achieve targeted debt level reductions through divestitures and/or other means;
- the effect on foreign operations of currency fluctuations, tariffs, nationalization, exchange controls, limitations on foreign investment in local businesses and other political, economic and regulatory risks;
- changes in U.S., regional or world polymer consumption growth rates affecting PolyOne's markets;
- changes in global industry capacity or in the rate at which anticipated changes in industry capacity come online in the polyvinyl chloride (PVC), chlor-alkali, vinyl chloride monomer (VCM) or other industries in which PolyOne participates;
- fluctuations in raw material prices, quality and supply and in energy prices and supply, in particular fluctuations outside the normal range of industry cycles;
- production outages or material costs associated with scheduled or unscheduled maintenance programs;
- · costs or difficulties and delays related to the operation of joint venture entities;
- lack of day-to-day operating control, including procurement of raw materials, of equity or joint venture affiliates;
- partial control over investment decisions and dividend distribution policy of the OxyVinyls partnership and other minority equity holdings of PolyOne;
- an inability to launch new products and/or services within PolyOne's various businesses;
- the possibility of further goodwill impairment;
- an inability to maintain any required licenses or permits;
- an inability to comply with any environmental laws and regulations;
- the cost of compliance with environmental laws and regulations, including any increased cost of complying with new or revised laws and regulation;
- unanticipated developments that could occur with respect to contingencies such as litigation and environmental matters, including any developments that would require any increase in PolyOne's costs and/or reserves for such contingencies;
- an inability or delay in finding buyers of discontinued operations or other non-core assets for reasonable and acceptable terms;
- an inability to access the revolving credit facility and/or the receivables sale facility as a result of breaching covenants due to not achieving anticipated earnings performance;
- any poor performance of our pension plan assets and any obligation on PolyOne's part to fund its pension plan;
- any delay and/or inability to bring the North American Color and Additives Masterbatch and the Engineered Materials product platforms to profitability;
- an inability to raise prices or sustain price increases for products; or
- an inability to complete the sale of discontinued businesses due to problems or delays associated with legal proceedings, regulatory approvals and/or buyers receiving financing for the transaction or any other reasons.

We cannot guarantee that any forward-looking statement will be realized, although we believe we have been prudent in our plans and assumptions. Achievement of future results is subject to risks, uncertainties and inaccurate assumptions. Should known or unknown risks or uncertainties materialize, or should underlying assumptions prove inaccurate, actual results could vary materially from those anticipated, estimated or projected. Investors should bear this in mind as they consider forward-looking statements. We undertake no obligation to publicly update forward-looking statements, whether as a result of new information, future events or otherwise. You are advised, however, to consult any further disclosures we make on related subjects in our reports on Form 10-Q, 8-K and 10-K provided to the Securities and Exchange Commission. You should understand that it is not possible to predict or identify all risk factors. Consequently, you should not consider any such list to be a complete set of all potential risks or uncertainties. (Ref. #122004)