



DIVISION OF
CORPORATION FINANCE

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

December 20, 2012

Via E-mail

Mr. Richard J. Diemer, Jr.
Senior Vice President and Chief Financial Officer
PolyOne Corporation
33587 Walker Road
Avon Lake, OH 44012

**Re: PolyOne Corporation
Form 10-K
Filed February 17, 2012
File No. 1-16091**

Dear Mr. Diemer:

We have reviewed your filing and have the following comments. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the year ended December 31, 2011

Management's Discussion and Analysis, page 16

Liquidity and Capital Resources, page 21

1. We note your disclosure on page 22 that 69% of your cash and cash equivalents resides outside the US and your risk factors on pages 9 and 10 regarding your indebtedness and the ability to pay dividends or make other payment restrictions with respect to subsidiaries. Given the foregoing disclosure, please tell us how you considered the requirements under Rule 5-04 to provide condensed parent only financial statements of the registrant in Schedule I. Explain any restrictions of foreign governments on distributions of dividends and assets and how you considered them in your analysis of your requirements under this rule.

Critical Accounting Policies and Estimates, page 24

2. We have made the following observations based on information in the Employee Benefit Plans footnote:

- The \$38.4 million of actuarial losses (page 46) materially impacted the funded status of your pension plans; and
- The (\$15.9) million actual return on plan assets (page 46) decreased significantly in 2011 and adversely impacted the funded status of your pension plans.

Since plan contributions are material to operating cash flows and liquidity, and since the \$84.3 million pension expense (page 48) is 49% of 2011 net income, in future filings, please disclose in MD&A any factors that materially impacted the funded status of your plans and/or OCI for each period presented. The expected future impact of these material factors should also be disclosed in MD&A, such as a potential decrease in the assumed return on plan assets. The existing critical accounting pension disclosures on page 25 do not explain the adverse results that occurred in 2011.

Form 10-Q for the period ended September 30, 2012

Management's Discussion and Analysis, page 14

3. We note the actions undertaken beginning in the second quarter to realign production capacities and improve return on invested capital. Given the expense has been material to quarterly net income to date, please revise future filings to disclose whether you anticipate incurring additional expenses and to the extent known and material, quantify such expenses.

Cash Flows, page 19

4. Please revise future filings to discuss investing and financing cash flows for the prior year period. Refer to Sections 501.13 and 501.13.b. of the FRC.

Definitive Proxy Statement on Schedule 14A

Executive Compensation, page 19

Compensation Discussion and Analysis, page 19

Analysis of 2011 Compensation Decisions and Actions, page 29

5. We note from your disclosure on page 24 that you target total compensation relative to the median of the competitive market data. Similar to your disclosure on page 29 regarding how named executive officer base salaries compared to the market median, please disclose in future filings how actual annual incentives and long-term incentives compare to the market median.

Long-Term Incentive, page 32

6. In future filings, please clarify whether your earnings per share goal is used to determine the amount of stock-settled SARs and RSUs granted to the named executive officers. In this regard, we note you allocate certain percentages to the different types of long-term awards, but you only discuss the performance goal with respect to the cash-settled performance units. If you measure stock-settled SARs and RSUs by some other goal, please discuss that goal in future filings.

Cash-Settled Performance Units, page 32

7. We note that you do not disclose the actual earnings per share targets for the cash-settled performance units because you believe such disclosure would cause competitive harm. Please provide us with your analysis supporting this conclusion.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. Since the company and its management are in possession of all facts relating to a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

In responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;
- staff comments or changes to disclosure in response to staff comments do not foreclose the Commission from taking any action with respect to the filing; and
- the company may not assert staff comments as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

You may contact Jenn Do at (202) 551-3743, Al Pavot at (202) 551-3738, or me at (202) 551-3355 if you have questions regarding comments on the financial statements and related matters. Please contact Craig Slivka, Special Counsel, at (202) 551-3729, with any other questions.

Sincerely,

/s/ Terence O'Brien

Terence O'Brien
Branch Chief