



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-7010

Mail Stop 7010

December 4, 2006

via U.S. mail and facsimile

Mr. W. David Wilson
Vice President and Chief Financial Officer
PolyOne Corporation
33587 Walker Road
Avon Lake, OH 44012

**RE: PolyOne Corporation
Form 10-K/A#1 for the Fiscal Year Ended December 31, 2005
Form 10-Q/A#1 for the Quarterly Period Ended March 31, 2006
Form 10-Q/A#1 for the Quarterly Period Ended June 30, 2006
Filed November 30, 2006
File No. 001-16091**

Dear Mr. Wilson:

We have completed our review of these filings and have no further comments at this time.

If you have any further questions regarding our review of your filings, please direct them to Ryan Rohn, Staff Accountant, at (202) 551-3739 or, in his absence, to Al Pavot, Staff Accountant, at (202) 551-3738, or to the undersigned at (202) 551-3689.

Sincerely,

John Hartz
Senior Assistant Chief Accountant