

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

January 11, 2012

Via E-mail
Mr. Lynn Amos
Chief Financial Officer
Polypore International, Inc.
11430 North Community House Road, Suite 350
Charlotte, NC 28277

Re: Polypore International, Inc. Form 10-K Filed February 25, 2011 File No. 1-32266

Dear Mr. Amos:

We have reviewed your response dated December 19, 2011 and have the following comment.

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 comment applies to your facts and circumstances, please tell us why in your response.

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

Form 10-K for the year ended January 1, 2011

22. Segment Information, page 72

1. We have reviewed the supplemental information provided to us in response to comment 2 in our letter dated November 30, 2011. Based on our review it continues to appear that you have three reportable segments. That is, based on the economic characteristics we have gleaned from the CODM reports, it appears that the lead-acid and lithium separator product groups are two separate segments. Therefore, please revise your segment presentation accordingly in future filings, beginning with your fiscal 2011 Form 10-K.

Mr. Lynn Amos Polypore International, Inc. January 11, 2012 Page 2

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 this comment.

Sincerely,

/s/ Terence O'Brien

Terence O'Brien Branch Chief