



DIVISION OF
CORPORATION FINANCE

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

December 4, 2012

Via E-mail

Mr. John E. Fischer
Senior Vice President and Chief Financial Officer
Olin Corporation
190 Carondelet Plaza, Suite 1530
Clayton, MO 63105

**RE: Olin Corporation
Form 10-K for the Year ended December 31, 2011
Filed February 24, 2012
Form 10-Q for the Quarter ended September 30, 2012
Filed October 29, 2012
File No. 1-1070**

Dear Mr. Fischer:

We have reviewed your filings 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

General

1. Where a comment below requests additional disclosures or other revisions to be made, please show us in your supplemental response what the revisions will look like. These revisions should be included in your future filings.

Item 7 – Management’s Discussion and Analysis of Financial Condition and Results of Operations, page 20

Consolidated Results of Operations, page 25

2011 Compared to 2010, page 26

2. Please expand your sales discussion to separately quantify the impact of higher ECU prices and increased sales of co-products.
3. Please expand your discussion of gross margin to provide the following additional information:
 - Separately quantify the impact of the Chlor Alkali Products margin due to the contribution from SunBelt and increased ECU netbacks; and
 - Quantify the reduced gross margin for Winchester and explain why commodity and other material costs could not be passed on to your customers.

Segment Results, page 28

Chlor Alkali Products 2011 Compared to 2010, page 29

4. Please expand your discussion of Chlor Alkali segment results to provide the following additional information:
 - Quantify the impact that the 1% increase in chlorine and caustic soda volumes and the 12% increase in bleach volumes had on sales; and
 - Quantify and discuss Chlor Alkali income before taxes and identify the underlying material components impacting this segment measure from period to period. In this regard, discuss the underlying reasons for the change in ECU netback (i.e. increased ECU pricing offset by increase in freight costs included in the ECU netback) and quantify the impact such changes had on Chlor Alkali income before taxes.

Winchester 2011 Compared to 2010, page 29

5. We note that you had a significant decrease in Winchester reported segment income due to the impact of increased commodity and other material costs and higher operating costs. Expand your disclosure to (i) separately quantify these costs, (ii) address why operating costs increased and (iii) what, if anything, management is doing to mitigate this negative trend. In this regard, we also note a significant decrease in backlog from \$178.1 million as of January 31, 2011 to \$136.8 as of January 31, 2012.

Item 8 – Consolidated Financial Statements and Supplementary Data, page 47

Property, Plant and Equipment, page 64

6. The range of useful lives for your machinery and equipment of three to fifteen years is very broad. Please breakout the machinery and equipment category into smaller components and disclose the range of useful lives for each revised category. For categories that still have very broad useful lives, please consider separately discussing the types of assets that fall in each part of the range.

Commitments and Contingencies, page 85

7. With reference to your various legal actions (including proceedings based on alleged exposures to asbestos), please expand your materiality assessment to address cash flows. In addition, please clarify what you mean by “in the near term.” If, beyond the near term, there is at least a reasonable possibility that a loss exceeding amounts already recognized may have been incurred, please either disclose an estimate (or, if true, state that the estimate is immaterial in lieu of providing quantified amounts) of the additional loss or range of loss, or state that such an estimate cannot be made. Please refer to ASC 450-20-50.

Form 10-Q for the Quarter Ended September 30, 2012

General

8. Please address the above comments in your interim filings as well, as applicable.

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.

Mr. John E. Fischer
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You may contact Jeffrey Gordon, Staff Accountant, at (202) 551-3866 or, in his absence, Jeanne Baker, Assistant Chief Accountant, at (202) 551-3691 if you have questions regarding these comments.

Sincerely,

/s/ Rufus Decker

Rufus Decker
Accounting Branch Chief