



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

Mail Stop 7010

May 5, 2008

via U.S. mail and facsimile

Richard K. Crump, Chief Executive Officer
Sterling Chemicals, Inc.
333 Clay Street, Suite 3600
Houston, Texas 77002-4109

**RE: Sterling Chemicals, Inc.
Form 10-K
Filed April 11, 2008
File Number 0-50132**

Dear Mr. Crump:

We have reviewed the above referenced filing and have the following comments. Where indicated, we think you should revise your disclosures in future filings in response to these comments. If you disagree, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Please understand that the purpose of our review process is to assist you in your compliance with the applicable disclosure requirements and to enhance the overall disclosure in your filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 10-K for the Fiscal Year Ended December 31, 2007

Note 1 –Revenue Recognition, page 45

1. You disclose that you generate revenue through a profit sharing arrangement with respect to your acetic acid operations and these revenues are estimated and accrued monthly. You indicated to us in your response to our prior comment 26 from our letter dated December 10, 2007, that you produce acetic acid and

recognize the costs and revenues related to the production. Please tell us supplementally and expand your disclosures to better clarify how and when you recognize those costs and revenues. We assume you are recognizing the cost and revenues (i.e. the reimbursement by BP Chemicals for 100% of your fixed and variable costs of production) for your acetic acid products when you meet the criteria set forth in SAB 104.

2. You disclose that you generate revenues from your plasticizers operations through a tolling agreement. Please tell us supplementally and revise future filings to clarify the specific terms of your tolling agreement and how, based on the terms of the agreement, you recognize revenue. In this regard, please clarify how, as indicated in segment revenue and gross profit (loss) information on page 64, your tolling arrangement results in negative profit margins.

Note 9 – Commitments and Contingencies, page 61

3. We note Gulf Hydrogen filed suit on March 4, 2008, but didn't allege a specific amount of money damages in the lawsuit but asked the court to enforce certain Memorandum of Understanding (MOU) provisions which expired on March 1, 2008. Tell us supplementally and expand future filings to discuss these provisions and the impact, if any, to operations or cash flows.

* * * *

As appropriate, please respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested supplemental information. Detailed response letters greatly facilitate our review. Please file your response letter on EDGAR. Please understand that we may have additional comments after reviewing responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors 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 connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in their filings;

Mr. Richard K. Crump
Sterling Chemicals, Inc.
May 5, 2008
Page 3

- 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

You may contact Tracey McKoy at (202) 551-3772 or Jeanne Baker at (202) 551-3691 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

Terence O'Brien
Accounting Branch Chief