



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

Mail Stop 7010

October 17, 2006

via U.S. mail and facsimile

Richard J. Diemer, Jr.
Senior Vice President and Chief Financial Officer
Albemarle Corporation
330 South Fourth Street
Richmond, Virginia 23219

**Re: Albemarle Corporation
Form 10-K for the Fiscal Year Ended December 31, 2005
Forms 10-Q for the Quarters Ended March 31, 2006 and June 30, 2006
File No. 1-12658**

Dear Mr. Diemer:

We have reviewed your filing and have the following comments. We have limited our review of your filing to those issues we have addressed in our comments. Where indicated, we think you should revise your document or revise 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 information so we may better understand your disclosure. After reviewing this information, we may 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 year ended December 31, 2005

General

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

revisions should be included in your future filings, including your interim filings where applicable.

Financial Statements

Note 6 – Property, Plant and Equipment, page 51

2. The range of useful lives currently disclosed of 3 to 60 years for machinery and equipment is very broad. Please breakout the machinery and equipment line item into smaller and more meaningful components and separately disclose the range of useful lives for each new machinery and equipment category presented. For categories that still have very broad useful lives, you should separately discuss the types of assets that fall in each part of the range. For any machinery and equipment with useful lives greater than 30 years, please provide us with a description of the machinery and equipment. Please also help us understand how you determined the appropriate useful life of this machinery and equipment, including how you determined the assets would provide economic benefit to you for this period.

Note 12 – Commitments and Contingencies, page 60

3. You disclosed that you believe you are entitled to be fully indemnified by Sanofi Aventis for all liabilities arising from the environmental claims of the French government. You also disclosed that the remediation could be significant if you do not prevail in the arbitration proceeding and the French government requires additional remediation. We remind you that SAB Topic 5:Y states that environmental liabilities are of such significance that detailed disclosures regarding the judgments and assumptions underlying the recognition and measurement of the liabilities are necessary to inform readers fully regarding the range of reasonably possible outcomes that could have a material effect on your financial condition, results of operations, or liquidity. Given the dispute that appears to exist over the indemnification, please provide additional disclosures regarding the potential losses that could be incurred if you are not fully indemnified. Please also disclose your basis for believing that you are fully indemnified from these liabilities. We also remind you that paragraph 10 of SFAS 5 requires disclosures when there is a reasonable possibility that a loss may have been incurred. Please expand your disclosures in accordance with SFAS 5 and SAB Topic 5:Y.

Form 10-Q for the period ended June 30, 2006

General

4. Please address the comments above in your interim filings as well.

* * * *

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please file your response letter on EDGAR. Please understand that we may have additional comments after reviewing your responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing reviewed by the staff to be certain that they have provided all information investors require for an informed decision. 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 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.

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.

Richard J. Diemer, Jr.
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If you have any questions regarding these comments, please direct them to Gus Rodriguez, Staff Accountant, at (202) 551-3752 or, in his absence, Nudrat Salik, Staff Accountant, at (202) 551-3692.

Sincerely,

Rufus Decker
Accounting Branch Chief