



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4631

June 10, 2010

Via U.S. mail and facsimile

Mr. Marc C. Rohr
Chairman and Chief Executive Officer
Albemarle Corporation
451 Florida Street
Baton Rouge, LA 70801

**RE: Form 10-K for the year ended December 31, 2009
Form 10-Q for the period ended March 31, 2010
Definitive Proxy Statement on Schedule 14A filed March 9, 2010
File No. 001-12658**

Dear Mr. Rohr:

We have reviewed your filing 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, 2009

Management's Discussion and Analysis of Financial Condition and Results of Operations

Port de Bouc Facility Disposition Charges, page 27

1. Your disclosure on page 27 makes reference to \$12 million in pre-tax charges associated with the final contractual settlement of the Port de Bouc facility disposition. You indicate that most of the monetary obligations associated with these charges were substantially settled using cash flows from operations, however, your consolidated statement of cash flows indicates that \$16 million of cash payments were made in 2009 for this divestiture related to investing activities. Please tell us how your MD&A disclosures correlate to your cash flow statement presentation.

Segment Information Overview, page 28

2. Your table on page 29 presents a subtotal titled “segment operating profit”. To the extent that the segment operating profit subtotal is not the same as GAAP operating profit or that total segment income is not the same as GAAP net income, these measures represent non-GAAP measures when presented outside of your segment footnote in the financial statements. Please show us how you will revise your future filings to either reconcile these measures to the most closely comparable GAAP measures and provide the disclosures required by Item 10(e) of Regulation S-K or confirm that you will revise your future filings to remove any references to or discussion of the subtotals “segment operating profit” and “total segment income” from your MD&A. You may find it helpful to refer to the Compliance & Disclosure Interpretation Questions 104.03 and 104.04 which can be found on our website at <http://www.sec.gov/divisions/corpfin/guidance/nongaapinterp.htm>.

Segment Information Overview, page 28

3. Please revise your MD&A, particularly your segment MD&A, to provide a more robust explanation for the underlying reasons behind each of the significant fluctuations in your financial statement line items. For example, you disclose on page 30 that one of the reasons for the decrease in 2009 net sales for the Polymer Solutions segment was due to volume and mix for your stabilizer and curatives business but you have not quantified how volume and mix fluctuated nor addressed the specific reasons for those fluctuations. Please show us how you will revise your future filings to more fully differentiate between the impacts that price, volume, and foreign currency changes had on your segment operating results and the specific reasons for these changes.

Financial Condition and Liquidity, page 38

4. Your financial statements indicate that while net sales decreased approximately \$460 million in 2009 compared to 2008, your accounts receivable balances increased \$14 million (5%) over the prior year. Please show us how you will revise your future filings to more adequately explain the reasons for this apparent directional inconsistency.

Consolidated Financial Statements

Consolidated Statements of Changes in Equity, page 48

5. Your disclosures on page 28 indicate that some of your noncontrolling interests may be overseas. Therefore, it appears that some of your noncontrolling interests may be impacted by foreign currency translation adjustments. Please tell us how you considered the need to allocate any components of other comprehensive income to

your noncontrolling interests. Please refer to paragraphs 19 and 20 of FASB ASC 810-10-45.

Note 1 – Summary of Significant Accounting Policies, page 51

6. You indicate that in selecting the discount rate for your pension plans, you consider various indices and yield curves. Please tell us and revise your future filings to clarify whether you are using the same indices year over year for various plans or if the indices you use change from period to period. If, for example, you use difference indices each year for the U.S. plan, please explain your reasons for doing so.

Note 15 – Commitments and Contingencies, page 70

7. For the sites and/or facilities on which you have recognized a significant environmental liability as of December 31, 2009, please show us how you will revise your future filings to provide a more robust discussion of the nature of the remediation work performed to date, your best estimates about the remaining amount of remediation to be performed, how long you expect remediation activities to be performed, and how you became aware of your responsibility for the site. We believe that detailed disclosures regarding the judgments and assumptions used to recognize your remediation liabilities would be beneficial to investors. Please refer to SAB Topic 5:Y.

Note 17 – Pension Plans and Other Postretirement Benefits, page 72

8. It appears from your table on page 76 that all of your level three pension assets are classified as “absolute return” investments. Please show us how you will revise your future filings to more clearly explain what these investments represent, the investment strategy associated with these investments, and how you have determined the fair value of these level three investments in the absence of unobservable inputs. Please refer to FASB ASC 715-20-50-1.

Item 15. Exhibits and Financial Statement Schedules, page 90

9. We note that you have not filed on EDGAR all of the exhibits and schedules to your agreements filed as exhibits 10.1 and 10.2 to the Form 10-K. Please advise or file with your next periodic report or with a current report on Form 8-K complete copies of these agreements that include all of the exhibits and schedules. See Item 601(b)(10) of Regulation S-K.

DEFINITIVE PROXY STATEMENT FILED ON MARCH 9, 2010

How much can the named executive officers earn?, page 27

10. Please explain supplementally and include disclosure in future filings as to how you determined the “additional amount” that each NEO can earn in addition to the amounts for achievement of corporate performance measures at the “superior” level.
11. In future filings, please disclose the percentages of base salary that the NEOs would receive as bonus for achieving threshold levels. We note that you have already indicated the amounts they would receive at the target and superior levels.

FORM 10-Q FOR THE PERIOD ENDED MARCH 31, 2010

Condensed Consolidated Financial Statements

12. Please tell us how you considered the need to provide either a consolidated statement of changes in equity or a reconciliation of your total equity, equity attributable to the parent and equity attributable to the noncontrolling interest. Please refer to FASB ASC 810-10-50-1A.

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. Marc C. Rohr
Albemarle Corporation
June 10, 2010
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You may contact Sherry Haywood, Staff Attorney, at (202) 551-3345 or, in her absence, Pamela Long, Assistant Director, at (202) 551-3765 if you have any questions regarding legal matters. Please contact Lisa Haynes, Staff Accountant, at (202) 551-3424 or, in her absence, Jeanne Baker, Assistant Chief Accountant, at (202) 551-3691 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

Rufus Decker
Accounting Branch Chief