



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

Mail Stop 4631

June 29, 2010

James M. Sullivan  
Chief Financial Officer  
Solutia, Inc.  
575 Maryville Centre Drive, P.O. Box 66760  
St. Louis, Missouri 63166-6760

**Re: Solutia, Inc.**  
**Form 10-K for Fiscal Year Ended December 31, 2009**  
**File No. 1-13255**

Dear Mr. Sullivan:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your document 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 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, 2009

Item 7. Management's Discussion and Analysis of Financial Condition . . . , page 23  
Financial Condition and Liquidity, page 41

1. We note your tabular disclosure regarding your compliance with the financial covenants in your Financing Agreements. In future filings, please provide complimentary narrative disclosure as to whether you are in compliance with the material covenants in your Financing Agreements. In addition, in future filings please include a cross-reference to the discussion of your debt obligations in the notes to the financial statements.

Item 9A. Controls and Procedures, page 105

2. We note your disclosure in response to the requirements of Item 307 of Regulation S-K. Your disclosure raises a number of concerns. First, in the first sentence, you appear to be attempting to limit the scope of the required evaluation to the design and operation of your disclosure controls and procedures. Second, you appear to have bifurcated your effectiveness conclusion into two separate conclusions, as set forth in the second and third sentences of your disclosure. Third, you appear to have attempted to qualify the effectiveness conclusion in the third sentence with reference to a reasonable assurance standard. Please confirm to us that your disclosure controls and procedures are effective insofar as they are designed to ensure that information required to be disclosed by you in the reports you file or submit under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Commission's rules and forms, and they include, without limitation, controls and procedures designed to ensure that information required to be disclosed by you in the reports you file or submit under the Exchange Act is accumulated and communicated to your management, including your principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. In addition, in future filings please either use the full definition of disclosure controls and procedures or state that your disclosure controls and procedures are effective or ineffective, without defining them.

Exhibit Index, page 110

3. We note that you do not appear to have filed on EDGAR all of the schedules and exhibits to the documents filed as exhibits 10(x), 10(y), 10(aa), 10(bb) and 10(cc) to the Form 10-K. We also note that only part of exhibit 10(cc) was filed. Please file complete copies of each of these documents, including all schedules and exhibits, with your next periodic report or with a current report on Form 8-K. Please refer to Item 601(b)(10) of Regulation S-K.

DEFINITIVE PROXY STATEMENT

General

4. We note that you have not included any disclosure in response to Item 402(s) of Regulation S-K. Please advise us of the basis for your conclusion that disclosure is not necessary and describe the process you undertook to reach that conclusion.

The Board of Directors and its Committees, page 5

Board Leadership Structure and Role in Risk Oversight, page 10

5. With a view towards future disclosure, please tell us what effect, if any, the board's role in risk oversight has on the board's leadership structure. Please refer to Item 407(h) of Regulation S-K.

Compensation Discussion and Analysis, page 17

Administration of the Executive Compensation Program, page 18

6. In future filings, please disclose how you benchmark total compensation (e.g., identify the percentile or range that you target) and disclose where actual compensation fell for each named executive officer with respect to the targeted percentile or range. To the extent actual compensation was outside a benchmarked targeted percentile or range, please explain why.

Long-Term Incentives, page 20

2009 LTIP Equity Awards, page 20

7. With a view towards future disclosure, please tell us how you define "total shareholder return." In addition, please describe for us all of the adjustments that you intend to make to determine "adjusted EBITDA," including all of the categories of items that you intend to exclude from the calculation. Finally, please tell us how you intend to determine the "total shareholder return" and "adjusted EBITDA" of the peer group companies for purposes of determining whether your performance conditions have been satisfied.

Employment Agreements with Named Executive Officers, page 32

8. We note your statement that "[t]he descriptions below are only summaries of the agreements that we have with our Named Executive Officers . . . ." In future filings, please clarify that the summaries comprise all of the material terms of the agreements.

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 information. Detailed letters greatly facilitate our review. 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 to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment 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.

You may contact Bret Johnson, Staff Accountant, at (202) 551-3753 or Anne McConnell, Senior Staff Accountant, at (202) 551-3709 if you have questions regarding our comments on the financial statements and related items. Please contact Sherry Haywood, Staff Attorney, at (202) 551-3345 or Dietrich King, Senior Staff Attorney, at (202) 551-3338 with any other questions.

Sincerely,

John Hartz  
Senior Assistant Chief  
Accountant