



DIVISION OF
CORPORATION FINANCE

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

April 6, 2012

Via E-mail

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

**Re: Solutia Inc.
Form 10-K
Filed February 24, 2012
File No. 1-13255**

Dear Mr. Sullivan:

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, 2011

8. Debt Obligations, page 64

1. Please confirm to us that none of your outstanding debt instruments contain equity claw language. Otherwise, please provide us with an explanation of these terms along with how you are accounting for the term. Please include the specific reference to the accounting literature that supports your accounting.

16. Commitments and Contingencies, page 82

2. We note that you believe it is remote there will be an unfavorable outcome to you for the legacy tort claims litigation. We further note your statement that it is reasonably possible you would be liable for an amount that could have a material adverse effect on your

consolidated financial statements in the event the legacy tort claims litigation is not within the Monsanto Settlement Agreement. It is unclear what you mean by each of these statements. In this regard, probable and reasonably estimable loss contingencies should not be netted with gain contingencies. Please refer to ASC 450-20 and ASC 450-30 for guidance. In future filings, please revise your disclosures for your assessment of your loss contingencies on a gross basis. Please confirm to us that you continue to believe that the probable loss for the legacy tort claims litigation is immaterial or not reasonably estimable. Please also disclose the amount or range of reasonably possible loss in excess of accrual. If you are unable to estimate the amount or range of this reasonably possible loss, please disclose this fact and provide us with a comprehensive explanation as to why. Please also (1) explain to us the procedures you undertake on a quarterly basis to attempt to develop a range of reasonably possible loss for disclosure and (2) for each material matter, what specific factors are causing the inability to estimate and when you expect those factors to be alleviated. We recognize that there are a number of uncertainties and potential outcomes associated with loss contingencies. Nonetheless, an effort should be made to develop estimates for purposes of disclosure, including determining which of the potential outcomes are reasonably possible and what the reasonably possible range of losses would be for those reasonably possible outcomes. You may provide your disclosures on an aggregated basis. Please include your proposed disclosures to be included in your next periodic report in your response.

3. We note your statement that your environmental liabilities could have a material adverse impact on your operating results but not your financial position. Please expand your disclosure to assess the materiality to your cash flows. Please also disclose the amount or range of reasonably possible loss in excess of accrual. If you are unable to estimate the amount or range of this reasonably possible loss, please disclose this fact and provide us with a comprehensive explanation as to why. Please include your proposed disclosures to be included in your next periodic report in your response.

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

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- 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.

You may contact Jenn Do at (202) 551-3743, Tracey Smith at (202) 551-3736, or me at (202) 551-3355 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

/s/ Terence O'Brien

Terence O'Brien
Branch Chief