

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

July 26, 2010

Via U.S. Mail and Facsimile (314) 674-8425

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 for the Fiscal Year Ended December 31, 2009

Filed February 18, 2010

Definitive Proxy Statement on Schedule 14A

Filed March 9, 2010 File No. 001-13255

Dear Mr. Sullivan:

We have reviewed your letter dated July 13, 2010 and have the following comment.

Definitive Proxy Statement

<u>Compensation Discussion and Analysis, page 17</u> Administration of the Executive Compensation Program, page 18

We note your response to comment six in our letter dated June 29, 2010. As previously requested, with respect to benchmarked compensation, please confirm that in future filings you will disclose where actual compensation fell for each named executive officer with respect to the targeted percentile or range.

Please contact Sherry Haywood, Staff Attorney at (202) 551-3345 or, in her absence, Dietrich King, Senior Attorney at (202) 551-3338 with any questions.

Sincerely,

Pamela Long Assistant Director