



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 7010

December 6, 2006

Mr. James M. Sullivan
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, 2005
Filed March 15, 2006
File #1-13255

Dear Mr. Sullivan:

We have reviewed your response letter dated October 10, 2006 and have the following additional comments. If you disagree, we will consider your explanation as to why our comment is inapplicable. In some of our comments, we may ask you to provide us with supplemental information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Form 10-K for the fiscal year ended December 31, 2005

Note 23. Segment and Geographic Data, page 103

1. We have reviewed your response to our prior comment six. Please provide us with a more comprehensive discussion of how you have considered the economic characteristics of CP Films and OPP in determining that these operating segments could be aggregated into the same reporting segment. In this regard, please provide us with a specific analysis of the historical margins of each of these operating segments. In addition, please provide us with a more current version of the internal reports used by your CODM which includes the breakout of CP Films.

* * * *

Mr. James M. Sullivan
Solutia, Inc
December 6, 2006
Page 2

As appropriate, 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 supplemental information. Detailed response letters greatly facilitate our review. Please file your response letter on EDGAR. Please understand that we may have additional comments after reviewing your responses to our comments.

If you have any questions regarding these comments, please direct them to Tricia Armelin, Staff Accountant, at (202) 551-3747, Anne McConnell, Senior Accountant, at (202) 551-3709 or, in their absence, to the undersigned at (202) 551-3768.

Sincerely,

John Cash
Accounting Branch Chief