



DIVISION OF
CORPORATION FINANCE

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

August 4, 2015

Via Email

Curtis E. Espeland
Executive Vice President
Eastman Chemical Company
200 South Wilcox Drive
Kingsport, Tennessee 37662

**Re: Eastman Chemical Company
Form 10-K for Fiscal Year Ended December 31, 2014
Filed February 27, 2015
Response Letter Dated July 20, 2015
File No. 1-12626**

Dear Mr. Espeland:

We have reviewed your response 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 amending your filing, 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 or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Form 10-K for Fiscal Year Ended December 31, 2014

Provision for Income Taxes from Continuing Operations, page 51

1. We have read your response to prior comment 5 in our letter to you dated July 20, 2015. Please confirm that you will expand your disclosure to quantify the impact of factors affecting your effective tax rate, as well as to discuss how the integration of Solutia's business operations and legal entity structures benefited your effective tax rate for fiscal year 2014. In this regard, it remains unclear how integrating the Solutia business operations and legal entity structures resulted in a 3% tax benefit for fiscal year 2014.

Note 11- Retirement Plans, page 110

2. We note your response to prior comment 9. As it relates to your estimate of mortality, please address the following:
- a) Tell us how you determined the estimate of mortality prior to your completion of the five-year experience study.
 - b) Explain to us why your estimate of mortality did not reflect any improvements to mortality, and reconcile your experience with the improvement in mortality between the RP-2000 and RP-2014 tables.
 - c) Tell us why you believe your study provides a better estimate of mortality rates than the RP-2014 tables, with our understanding that the sample sizes for the SOA study are larger. In addition, explain the timeframe covered by your five-year experience study.
 - d) Tell us why you use the RP-2000 tables instead of adjusting the RP-2014 tables to incorporate your plan-specific characteristics.
 - e) Describe to us your process for establishing your mortality assumption going forward. In this regard, tell us whether you plan to continue to perform your own studies or use the RP-2000 tables.

You may contact Tracie Mariner, Staff Accountant, at (202) 551-3744, or Tracey Houser, (202) 551-3736 if you have questions regarding comments on the financial statements and related matters. You may contact me at (202) 551-3355 with any other questions.

Sincerely,

/s/ Terence O'Brien

Terence O'Brien
Branch Chief