

Mail Stop 3561

March 16, 2010

Anthony T. Brausen
VP- Finance and Chief Accounting Officer
The Mosaic Company
3033 Campus Drive, Suite E490
Plymouth, Minnesota 55441

Re: The Mosaic Company
File No. 001-32327
Form 10-K: For the Fiscal Year Ended May 31, 2009
Form 8-K: Filed on December 21, 2009

Dear Mr. Brausen:

We have reviewed your response letter dated March 5, 2010 and have the following comments. Unless otherwise indicated, we believe you should revise future filings in response to these comments. If you disagree, we will consider your explanation as to why a revision is unnecessary. Please be as detailed as necessary in your explanation. We have also asked you to provide us with information so we may better understand your disclosure. After reviewing this information, we may raise additional comments.

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 filings. We look forward to working with you in these respects and welcome any questions. Feel free to call us at the telephone numbers listed at the end of this letter.

Please file your response to our comment via EDGAR, under the label "corresp," within ten business days from the date of this letter.

Form 10-K: For the Year ended May 31, 2009

Management's Discussion and Analysis of Financial Condition and Results of Operations

Fiscal 2009 Compared to Fiscal 2008, page 27

1. We note your response to our prior comments 1 and 2. Please confirm that you will also revise your disclosure as requested for your Potash segment.

Form 8-K Filed on December 21, 2009

2. We note your response to our prior comment 10. Please clarify for us the following:

The Mosaic Company

March 16, 2010

Page 2 of 2

- how as a result of the implementation of the International Distribution Strategy the role of your former Offshore segment changed,
- how as a result of the implementation of the International Distribution Strategy the allocation of resources changed,
- how the SSP production plants in Brazil and Argentina and the former Offshore segment are managed differently, including what specifically changed from prior periods,
- the specifications of the new measure upon which incentive compensation is determined for the former Offshore employees, and
- how international distribution/operations performance will be assessed.

You may contact Aamira Chaudhry at 202-551-3389 with any questions. You may also call me at 202-551-3380.

Sincerely,

Lyn Shenk
Branch Chief