

Mail Stop 3561

February 19, 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 the above referenced filings 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 disclosure regarding the changes in sale volume tonnes and average selling prices. In addition to providing these metrics, please revise future filings to quantify the impacts of these price and volume changes on net sales. For example, please revise future filings to quantify the actual dollar amount of aggregate net sales change during the period attributed to change in average selling price of all tonnes sold.

2. In future filings, please quantify, discuss, and analyze the changes in costs of goods sold on a stand-alone basis in addition to your current disclosure which is made in the context of gross margin. In your revised disclosure, please quantify and discuss the significant components of costs of sales, such as labor, materials, or any other components, to the extent material.

Fiscal 2008 Compared to Fiscal 2007, page 27

3. We note your statement that international sales volume declined 14% due to the increased volume sold into North America. Please further clarify this statement for us.

Item 8. Financial Statements and Supplementary Data

Consolidated Statement of Cash Flows, page 53

4. Please tell us the nature of the \$51.1 million line item titled "Proceeds from Saskferco Note Receivable."

Notes to Consolidated Financial Statements

Note 2. Summary of Significant Accounting Policies

Statement Presentation and Basis of Consolidation, page 55

5. Please tell us and disclose in future filings which periods in your consolidated financial statements include the equity in net earnings of Fertifos S.A.

Revenue Recognition, page 56

6. Please tell us and disclose in future filings when title transfers to the customer for Offshore sales and North American exports sales.
7. We note that sales to wholesalers and retailers (but not importers) in India are subject to a selling price cap and are eligible for an Indian Government subsidy. However, from your letter to us dated December 13, 2007 related to your 2007 Form 10-K, you state that the cap and subsidy are only related to sales to farmers in India and not to distributors. Please confirm to us and revise future filings to disclose which sales are capped and eligible for the subsidy. Additionally, please tell us and revise future filings to disclose the materiality of these sales both as percentage of total sales in India and total sales. Also, please clarify for us how this subsidy was impacted by the modification made by the Indian government during the fourth quarter of fiscal year 2009.
8. We note that during the second quarter of fiscal year 2009, you determined that the subsidy was not fixed and determinable until it was collected. Given the change in the subsidy program during the fourth quarter of fiscal year 2009, please tell us how you met the fixed and determinable criteria prior to collection.

Note 22. Related Party Transactions

Fertilizer Supply Agreement (Canada), page 90

9. Please tell us and disclose in future filings your accounting policy for the per tonne rebate paid to Cargill.

Form 8-K Filed on December 21, 2009

10. We note that you have realigned your business segments to more clearly reflect your evolving business model. Please tell us in detail how your business model has evolved. Additionally, please tell us what specific factors and circumstances have changed that triggered the realignment.
11. We note that your phosphate segment's reported selling price per tonne for DAP has been adjusted to eliminate intersegment transactions. We note that your Potash segment has historically furnished a portion of the raw material needs for the production of Blends and is expected to continue to do so in the future. Please tell us if you plan to include intersegment transactions in your calculation of average selling prices for MOP and K-Mag. If so, please tell us why you believe it is meaningful to investors to include intersegment sales in the calculation.

\*\*\*\*\*

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in your filings to be certain that the filings include all information required under the Securities Exchange Act of 1934 and that they have provided all information investors require for an informed investment decision. 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 connection with responding to our comment, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in its filings;
- 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
- 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

The Mosaic Company  
February 19, 2010  
Page 4 of 4

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