

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

February 25, 2015

Pierre Courduroux Chief Financial Officer Monsanto Company 800 North Lindbergh Blvd. St. Louis, Missouri 63167

Re: Monsanto Company

Form 10-K for the Fiscal Year Ended August 31, 2014

Filed October 29, 2014 File No. 001-16167

Dear Mr. Courduroux:

We have limited our review of your filing to the financial statements and related disclosures 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 these comments within ten business days by providing the requested information or advise us as soon as possible when you will respond. If you do not believe our comments apply to your facts and circumstances, please tell us why in your response.

After reviewing your response to these comments, we may have additional comments.

Form 10-K for the Fiscal Year Ended August 31, 2014

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

Quantitative and Qualitative Disclosures about Market Risk

Foreign Currency Fluctuations, page 37

1. We note from your disclosure on page 28 and in Note 26 that a substantial portion of your cash is held by foreign subsidiaries and 46% of your net sales to unaffiliated customers for fiscal 2014 were attributed to your foreign subsidiaries, respectively. We believe your market risk disclosures should be enhanced to provide a more robust discussion of the effects of foreign currency risk on your results of operations and financial condition. Additionally, your discussion of this market risk does not appear to comply with the guidance outlined in Item 305 of Regulation S-K. Please revise to expand your discussion of foreign currency risk to comply with one of the disclosure alternatives in Item 305(a) of Regulation S-K.

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Financial Statements

Statement of Consolidated Operations, page 40

2. We note the disclosure in your earnings release transcripts for the first quarter 2015 of several types of services you perform including climate advisory services, climate PRO service, and nitrogen advising. Furthermore, we note disclosure on page 45 of your Form 10-K concerning precision agriculture tools that "assist farmers in decision making." To the extent you derive material revenues from such services, please revise to fully disclose the nature of the services performed and your revenue recognition policy with regards to such services. In addition, please separately state revenues and costs of sales for products and services on the face of the income statement in accordance with Rule 5-03(b)(1) of Regulation S-X or explain why you believe you are not required to do so.

Notes to the Consolidated Financial Statements

Note 17. Postretirement Benefits – Pensions, page 73

3. Please tell us and revise to disclose the reason(s) for the significant decrease in your projected benefit obligation from over \$2 billion in at August 31, 2013 to \$66 million at August 31, 2014. Refer to ASC 715-20-50-1(r).

Form 8-K filed January 7, 2015

4. We note your disclosure of the non-GAAP measures free cash flow, EBIT, and ongoing EPS. Furthermore, your disclosure states that "the presentation of non-GAAP financial measures is intended to supplement investor's understanding of our operating performance." It appears your disclosures are overly general and therefore, not consistent with the objective of Item 10(e)(1)(i) of Regulation S-K. Please revise to include disclosure concerning the reasons why the management believes that presentation of the non-GAAP financial measure provides useful information to investors in accordance with Instruction 2 to Item 2.02 of Form 8-K and Item 10(e)(1)(i) of Regulation S-K.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filing to be certain that the filing includes the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules require. 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 responding to our comments, please provide a written statement from the company acknowledging that:

• the company is responsible for the adequacy and accuracy of the disclosure in the filing;

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- 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.

You may contact Heather Clark at 202-551-3624 if you have questions regarding comments on the financial statements and related matters. Please contact me at 202-551-3379 with any other questions.

Sincerely,

/s/ Melissa Raminpour

Melissa Raminpour Branch Chief