



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

DIVISION OF  
CORPORATION FINANCE

Mail Stop 4631

November 9, 2015

Via US mail

Mr. Joseph P. Kelley  
Vice President, Finance and Chief Financial Officer  
Materion Corporation  
6070 Parkland Blvd  
Mayfield Heights, OH 44124

**Re: Materion Corporation  
Form 10-K  
Filed March 27, 2015  
File No. 1-15885**

Dear Mr. Kelley:

We have reviewed your filing 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 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 year ended December 31, 2014

Note A – Significant Accounting Policies, page 54

1. We note the policy on Mineral Resources and Mine Development on pages 54-55 and the significant investments in 2015 to open a new pit to mine proven reserves of beryllium-bearing bertrandite ore in Juab County, Utah. Please expand this discussion to explain how you determine your unit of account.

Controls and Procedures, page 84

2. We note management had not concluded whether your disclosure controls and procedures were effective as of December 31, 2014. Please address. Please explain how this conclusion is impacted, if at all, by the ineffective conclusion as of October 2, 2015.

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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;
- 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 Jenn Do at (202) 551-3743, Al Pavot at (202) 551-3738 or me at (202) 551-3355 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

/s/ Terence O'Brien

Terence O'Brien  
Branch Chief  
Office of Manufacturing and  
Construction