



DIVISION OF
CORPORATION FINANCE

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

September 5, 2012

Via E-mail

Mr. John D. Grampa
Senior Vice President Finance and Chief Financial Officer
Materion Corporation
6070 Parkland Blvd.
Mayfield Hts., OH 44124

**Re: Materion Corporation
Form 10-K
Filed February 29, 2012
File No. 1-15885**

Dear Mr. Grampa:

We have reviewed your response dated August 16, 2012 and have the following comments.

Please respond to this letter within ten business days 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, please tell us why in your response.

After reviewing the information you provide in response to these comments, we may have additional comments.

Form 10-K for the year ended December 31, 2011

Note J – Contingencies and Commitments, page 83

1. In response to prior comment 8, you address environmental loss contingencies and state you “do not believe that it is reasonably possible that the resolution of these sites will be at a cost that is materially in excess of the current reserves.” Please provide a similar statement in your future footnote disclosure that addresses ASC 450-20-50. The language in your proposed future disclosure regarding sites where investigative work and work plan development are substantially complete does not clearly state there is no reasonable possibility that a material additional loss may have been incurred.

Form 10-Q for the period ended June 29, 2012

Management's Discussion and Analysis, page 13

2. We note your disclosure throughout that the demand from a number of key markets, especially and including consumer electronics, remained soft during the second quarter of 2012. On page 17, you disclose that sales of precious metal products for applications within consumer electronics were lower in the second quarter and half of 2012 compared to the same periods of 2011, and the overall demand has "remained sluggish." We also note from page 19 that you experienced weaker demand from the automotive electronics market and that there were no sales of beryllium hydroxide in the second quarter. However, in each of these instances, you do not provide a discussion of the macro- and micro-economic forces and trends that you believe had a material impact on demand for these products, which resulted in an adverse impact on your results of operations. Therefore, please tell us and revise future filings as applicable to discuss the prominent applications within each market, and identify and discuss the macro- and micro-economic factors impacting those applications particular to that period. For example, we note from the recent investor presentations included in the Forms 8-K filed August 6, and 17, 2012, the "key drivers" in the consumer electronics market include smartphone growth, tablet computers and LEDs, and miniaturization. It would appear that the market for smartphones and tablet computers has not yet reached saturation. In this particular instance, you should discuss why demand has remained weak, despite perceptions to the contrary.

You may contact Jenn Do at (202) 551-3743, 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