



DIVISION OF
CORPORATION FINANCE

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

July 20, 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 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 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

Risk Factors, page 8

1. In your letter dated July 2, 2010, in response to comment 1 in our letter dated June 22, 2010, you indicated you would "disclose, as appropriate and to the extent estimable, the impact of project cancellations, if any, that are material to our operating results, liquidity or financial position for the periods presented." We note your current disclosure on page 11 that various projects that have been cancelled "had, and will have, a negative impact on our revenue." Please revise future filings to clarify whether the historical and expected future impact of any cancellations has been material and include appropriate quantified disclosure, when material.
2. Please tell us and revise future filings to clarify how frequently you perform physical inventories and whether the net inventory valuation loss of \$3.6 million in the fourth

quarter of 2011 was the only adjustment during the fiscal year. Please tell us the gross adjustments made during the fiscal year as a result of physical inventories and explain the underlying reasons for the differences.

3. Regarding the risk factor on page 16 about being a holding company and relying on funds from your subsidiaries, in future filings, please clarify to state, if true, that no significant amount of net assets are currently restricted under existing legal and contractual provisions. Alternatively, quantify the amount of restricted net assets, if material. We note your letter dated July 2, 2010, in response to comment 10 in our letter dated June 22, 2010.

Management's Discussion and Analysis, page 24

Working Capital, page 40

4. On page 41 you explain the increase in inventories in part by noting percentage changes in inventories at the segment level with description of underlying reasons. In future filings, please quantify the dollar impact on inventories for the segments so the reader can understand the magnitude of the impact of the reasons described.

Critical Accounting Policies, page 48

5. We note your disclosure on page 50 in your pension critical accounting policy that the projected cash contribution to be made to your pension plans will be \$11.2 million in 2012. Given the unfunded status of your pension plans is material to your consolidated financial statements, please revise future filings to: i) address the materiality of the payment to your results of operations and cash flows and/or liquidity; and ii) discuss the unfunded status of the plan and the potential impact on future operations.

Note G – Leasing Arrangements, page 73

6. In your letter dated July 2, 2010, in response to comment 9 in our letter dated June 22, 2010, you stated that you would disclose whether you were in compliance with the restrictive covenants under your facility lease. Please confirm to us that you were in compliance therewith as of December 31, 2011, and revise future filings accordingly.

Note J – Contingencies and Commitments, page 83

7. You state the resolution of future beryllium proceedings is not expected to have a material adverse effect on financial condition or cash flow but could materially affect results of operations. In future filings, please disclose the amount or range of reasonably possible losses in addition to any amounts accrued or disclose that the amount cannot be estimated. Alternatively, you can disclose that any amount in addition to the amount accrued is not material to the financial statements, if true. However, a statement that it

would not be material to the balance sheet but could be to the income statement does not satisfy the disclosure requirements of ASC 450-20-50. Please note you can aggregate the dollar amount of the reasonably possible range of loss with similar contingencies.

8. You state on page 84 that it is possible that additional environmental losses may occur beyond the current reserve balances, "the extent of which cannot be estimated." It is not clear whether you mean the aggregate amount of additional losses cannot be estimated or whether the amount of reasonably possible loss cannot be estimated for each site or activity where an amount in addition to the amount accrued may be material to the financial statements. Please clarify. Also, (1) explain to us the procedures you undertake on a quarterly basis to attempt to develop a range of reasonably possible loss for disclosure for specific material environmental matters and (2) for each material matter, what specific factors are causing the inability to estimate and when you expect those factors to be alleviated. We recognize that there are a number of uncertainties and potential outcomes associated with loss contingencies. Nonetheless, an effort should be made to develop estimates for purposes of disclosure, including determining which of the potential outcomes are reasonably possible and what the reasonably possible range of loss would be for those reasonably possible outcomes. Please include your proposed disclosures in your response.

Exhibit (4c)

9. We note that you incorporate by reference exhibit 10.1 to the Current Report on Form 8-K filed on July 18, 2011. We note also that you did not file all attachments to that exhibit. Unlike Item 601(b)(2) of Regulation S-K, there is no provision in Item 601(b)(10) of Regulation S-K for excluding attachments. Please refile exhibit 10.1 with all attachments.

Form 10-Q for the period ended March 30, 2012

Management's Discussion and Analysis, page 12

10. We note the increase in accounts receivable of 18% during the first quarter of 2012, compared to a sales increase of only 6%. Given accounts receivable had a material impact on your operating cash flows, please revise future quarterly filings to quantify DSO and provide explanations of material variances therein, in addition to providing such information in your Forms 10-K. We note the limited disclosure made on page 20. Please also explain any historical and expected seasonal changes in accounts receivable.

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

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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, or me at (202) 551-3355 if you have questions regarding comments on the financial statements and related matters. Please contact Edward M. Kelly, Senior Counsel, at (202) 551-3728 or, in his absence, Craig E. Slivka, Special Counsel, at (202) 551-3729, with any other questions.

Sincerely,

/s/ Terence O'Brien

Terence O'Brien
Branch Chief