



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4631

Mail Stop 4631

November 24, 2009

Mr. Anthony S. Colatrella
Chief Financial Officer
Momentive Performance Materials Inc.
22 Corporate Woods Blvd., 2nd Fl
Albany, NY 12211

**RE: Form 10-K for the fiscal year ended December 31, 2008
Forms 10-Q for the periods ended March 29, 2009, June 28, 2009 and
September 27, 2009
File No. 333-146093**

Dear Mr. Colatrella:

We have reviewed your response letter dated November 10, 2009 and have the following additional comments. If you disagree with a comment, we will consider your explanation as to why our comment is inapplicable or a revision is unnecessary. Please be as detailed as necessary in your explanation. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure. After reviewing this information, we may or may not raise additional comments.

Please understand that 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 filing. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

FORM 10-K FOR THE YEAR ENDED DECEMBER 31, 2008

General

1. Where a comment below requests additional disclosures or other revisions to be made, please show us in your supplemental response what the revisions will look like. These revisions should be included in your future filings.

Item 7 – Management’s Discussion and Analysis of Financial Condition and Results of Operations, page 28

Critical Accounting Policies, page 31

Goodwill and Other Intangible Assets, page 31

2. We have reviewed your response to prior comment 4 from our letter dated October 15, 2009 and have the following additional comments:
 - We note that you believe your determination that you have two reporting units, Quartz and Silicones, is appropriate. Please provide us a comprehensive discussion and revise your disclosure to address how you determined you only have two reporting units pursuant to SFAS 142. Paragraph 30 of SFAS 142 states that a reporting unit is an operating segment or a component of an operating segment for which discrete financial information is available and segment management regularly reviews the operating results of that component. You should also disclose whether you aggregate two or more components in your Silicones reporting unit. Please clarify whether discrete financial information is prepared at any level lower than the Silicones reporting unit level. If so, please tell us who uses this information and for what purpose. Refer also to EITF Topic No. D-101 for additional guidance.
 - Your response indicates that the only change between the goodwill impairment test in 2007 and 2008 was the use of the market multiple method. Please enhance your disclosure in future filings to clarify that the use of the market multiple method was added in 2008 due to the economic environment, significant volatility in the stock market, and the indication of impairment through the discounted cash flow model. Please note that these types of changes should clearly be disclosed in your filings.
 - Please further enhance your disclosure to address the facts and circumstances leading to your goodwill impairment charge during the year ended December 31, 2008. Your disclosure should provide specific information regarding what underlying business conditions in 2008 caused you to change your estimates of future results, and how your estimates changed, instead of simply providing general disclosure that the economic slowdown resulted in significantly lower demand for your products.

Results of Operations, page 33

3. We have reviewed your response to prior comment 6 from our letter dated October 15, 2009. Please further enhance your disclosure to quantify the incremental impact of each individual business reason discussed on the overall change in the cost of sales, excluding depreciation and selling, general and administrative expenses line items. For example, in regards to cost of sales,

excluding depreciation, please individually quantify the amount of the increase that was attributable to an increase in inflation on raw material, energy and transportation costs, as well as changes in foreign currency exchange rates, partially offset by lower sales volume and the inventory fair value step up cost related to purchase accounting in 2007. Please show us what your revised MD&A will look like. See Item 303(a)(3) of Regulation S-K.

Financial Measures that Supplement GAAP, page 43

4. We have reviewed your response to prior comment 8 from our letter dated October 15, 2009. Your definition of Adjusted EBITDA allows you to add back certain non-cash, non-operating or non-recurring charges that are deducted in calculating net income, as well as add estimated cost savings and operating synergies related to operational changes ranging from restructuring to acquisitions to dispositions as if such event occurred on the first day of the four consecutive fiscal quarter period ended on or before the occurrence of such event and/or exclude one-time transition expenditures that you anticipate you will need to incur to realize cost savings before such savings have occurred. While we do not object to your discussion of Adjusted EBITDA in your liquidity section as it relates to your compliance with debt covenants, it is not clear how your use of Adjusted EBITDA as a performance measure complies with Item 10(e) of Regulation S-K and our FAQ Regarding the Use of Non-GAAP Financial Measures dated June 13, 2003. Please advise or revise accordingly.

FORM 10-Q FOR THE PERIOD ENDED JUNE 28, 2009

Item 1 – Financial Statements

Note 6 – Indebtedness, page 11

5. We have reviewed your response to prior comment 16 from our letter dated October 15, 2009. Based on the Form 8-K/A filed on May 12, 2009 in which you announced that you commenced private offers to exchange no more than \$200,000,000 aggregate principal amount of 12.5% notes for certain of your outstanding unsecured notes, we note that Apollo held some of the outstanding unsecured notes that were being offered in the exchange. Please quantify the amount of debt Apollo exchanged, as well as any other related party if applicable. In addition, you disclose in the Form 8-K filed on June 10, 2009 that the exchange offers were oversubscribed. As such, please tell us how you handled the oversubscription, including how the exchange of debt was allocated amongst holders of the previously outstanding unsecured notes. Please also address the guidance set forth in footnote 1 to paragraph 20 of APB 26 with regard to any exchange of debt with Apollo as well as any other related party.

6. Please disclose the primary business reasons for entering into an agreement with Apollo enabling you to purchase some or all of certain of your debt securities acquired by Apollo or its affiliates for a period of 180 days unless such securities are sold or transferred to an unaffiliated third party. Please also address any accounting implication which may occur if you do purchase debt securities from Apollo.

FORM 10-Q FOR THE PERIOD ENDED SEPTEMBER 27, 2009

Item 1 – Financial Statements

Note 6 – Indebtedness, page 11

7. You entered into an amendment with respect to the credit agreement governing your senior secured credit facility. Pursuant to the amendment, your lenders agreed to waive compliance with the senior secured leverage ratio maintenance covenant for the fiscal quarters ending September 27, 2009 and December 31, 2009. In light of this, please tell us how you applied the guidance in EITF 86-30 in determining that a portion of your loan balances as of September 27, 2009 should appropriately be classified as long-term.

* * * *

Please respond to these comments within 10 business days, or tell us when you will provide us with a response. Please provide us with a response letter that keys your responses to our comments and provides any requested information. Detailed letters greatly facilitate our review. Please file your supplemental response on EDGAR as a correspondence file. Please understand that we may have additional comments after reviewing your responses to our comments.

If you have any questions regarding these comments, please direct them to Jeffrey Gordon, Staff Accountant, at (202) 551-3866 or, in his absence, Jeanne Baker, Assistant Chief Accountant, at (202) 551-3691.

Sincerely,

Rufus Decker
Accounting Branch Chief