



DIVISION OF
CORPORATION FINANCE

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

August 22, 2011

Via E-mail

Douglas A. Johns, Esq.
Momentive Performance Materials Inc.
22 Corporate Woods Blvd, 2nd Floor
Albany, NY 12211

**Re: Momentive Performance Materials Inc.
Registration Statement on Form S-1
Filed July 26, 2011
File No. 333-175800**

Dear Mr. Johns:

We have limited our review of your registration statement to those issues we have addressed in our 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 by amending your registration statement and providing the requested information. Where you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your registration statement and the information you provide in response to these comments, we may have additional comments.

General

1. We note that you have not yet filed a legality opinion. Please allow sufficient time for us to review the legality opinion after you file it as an exhibit to your registration statement.
2. Because of the magnitude of the proposed offering being registered for resale as well as the nature of the selling security holder, it appears that this transaction may not be eligible to be made on a shelf basis under Rule 415(a)(1)(i) and instead represents a primary offering. Please advise us of the company's basis for determining that the transaction is eligible under Rule 415(a)(1)(i). Alternatively, please identify the selling security holder as an underwriter.

Prospectus Cover Page

3. Please revise the cover page to disclose the price of each note to be offered by the selling security holders.

Selling Security Holder, page 208

4. Please revise your disclosure to identify the date on which the notes were originally issued and the exemption relied upon.
5. We note that Apollo is the beneficial owner of the notes. Please revise to disclose the person or persons who have voting or investment control over the company's securities that Apollo owns. Please refer to Questions 140.01 and 140.02 of the Regulation S-K Compliance and Disclosure Interpretations available at:
<http://sec.gov/divisions/corpfin/guidance/regs-kinterp.htm>.
6. Please revise this section to disclose whether the selling security holder is a broker-dealer or an affiliate of a broker-dealer. If the selling security holder is a broker-dealer, please identify the selling security holder as an underwriter in the prospectus. If the selling security holder is an affiliate of a broker-dealer, please revise your prospectus to state that the selling security holder purchased in the ordinary course of business and at the time of the purchase of the securities to be resold, the selling security holder had no agreements or understandings, directly or indirectly, with any person to distribute the securities.
7. Please revise this section to disclose the nature of any material relationship which the selling security holder has had within the past three years with you or your affiliates. In this regard, we note your disclosures on pages 126 and 129 with regard to Apollo.

Plan of Distribution, page 209

8. Please revise the last sentence of the last carryover paragraph on page 210 to indicate that a selling security holder deemed to be an underwriter will be subject to certain statutory liabilities.
9. Please revise to describe the plan of distribution and the terms of any agreement, arrangement, or understanding entered into with any broker or dealer prior to the effective date of the registration statement. See Item 508(c)(2) of Regulation S-K.
10. We note your disclosure in the first full paragraph on page 210. To the extent underwriters or any selling group members intend to engage in passive market making transactions, please indicate such intention and briefly describe the passive market making. Please also describe any transaction that the underwriter or selling security holder intends to conduct during the offering that stabilizes, maintains, or otherwise affects the market price of the offered securities. See Item 508(k)-(l) of Regulation S-K.

Item 15. Recent Sales of Unregistered Securities, page II-4

11. Please revise to disclose the information required by Item 701 of Regulation S-K regarding the sale of the notes to the selling security holder.

Douglas A. Johns, Esq.
Momentive Performance Materials Inc.
August 22, 2011
Page 3

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 Act of 1933 and all applicable Securities 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.

Notwithstanding our comments, in the event you request acceleration of the effective date of the pending registration statement please provide a written statement from the company acknowledging that:

- should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;
- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness as a defense in any proceeding initiated by the Commission or any person under the federal securities laws of the United States.

Please refer to Rules 460 and 461 regarding requests for acceleration. We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. Please allow adequate time for us to review any amendment prior to the requested effective date of the registration statement.

You may contact Chambre Malone at (202) 551-3262 or Craig Slivka at (202) 551-3729 with any questions.

Sincerely,

/s/ Craig Slivka, for

Pamela Long
Assistant Director

Cc: Via E-mail
David S. Huntington, Esq.