

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549-7010

Mail Stop 7010

April 14, 2006

By U.S. Mail and Facsimile

Mr. Geoffery E. Merszei Executive Vice President and Chief Financial Officer The Dow Chemical Company 2030 Dow Center Midland, Michigan 48674

Re: The Dow Chemical Company

Form 10-K for the Fiscal Year Ended December 31, 2005

File No. 1-3433

Dear Mr. Merszei:

We have reviewed your filing and have the following comments. We have limited our review to your disclosures related to asset retirement obligations and the formation of two joint ventures in 2004 and will make no further review of your documents. Where indicated, we think you should revise your document in response to these comments. If you disagree, we will consider your explanation as to why our comments are 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 supplemental 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 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 Fiscal Year Ended December 31, 2005

<u>Note A – Summary of Significant Accounting Policies and Accounting Changes – Accounting for Asset Retirement Obligations, page 64</u>

1. We note that you have not recognized certain asset retirement obligations because you believe it is not possible to reasonably estimate the fair value of these liabilities since the potential settlement dates cannot be determined. It appears to us that the amount of liabilities you are unable to reasonably estimate could be material to your financial statements and that additional disclosure regarding the potential magnitude

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of these liabilities may be useful. Please revise your critical accounting policies in future filings to: disclose and discuss the material assumptions regarding your asset retirement obligations; quantify the number of manufacturing operations for which you are unable to reasonably estimate an asset retirement obligation; and provide a potential range of cash flows, based on current costs, that would be required to settle your asset retirement obligations if they were settled in the near term. Please provide to us your proposed disclosures on a supplemental basis.

Note C – Divestitures, page 67

- 2. We note your disclosures regarding the gains you recognized in fiscal year 2004 when you formed MEGlobal and Equipolymers with PIC. Please provide the following information related to these transactions and the resultant joint venture entities:
 - Explain any circumstances where you may be obligated to reacquire the assets you sold or contributed to each joint venture entity;
 - Explain any circumstances where you may be obligated to provide funding to either joint venture entity and tell us the amount of any funding you have provided to date;
 - Explain any circumstances where you may be required to purchase PIC's interest or sell your interest in either joint venture entity and tell us how the price would be determined;
 - Explain the material terms of the ethylene supply agreement between you and MEGlobal and tell us how the amount of the pre-payment was determined;
 - Explain why you believe it is appropriate to net the gains you recognized with
 restructuring charges you recorded on the face of the consolidated statement of
 income. We note that you include other gains related to asset sales in sundry
 income. Although, we note that you continue to have an equity interest in these
 assets, it appears to us that separately presenting these gains from restructuring
 charges would provide greater transparency in future filings.

* * *

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 response on EDGAR as a correspondence file. Please understand that we may have additional comments after reviewing your responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings to be certain that the filings include all information required under the Securities Exchange Act of 1934 and that they have provided all information

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investors require for an informed investment decision. 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 connection with responding to our comments, please provide, in writing, a statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in their filings;
- 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.

In addition, please be advised that the Division of Enforcement has access to all information you provide to the staff of the Division of Corporation Finance in our review of your filing or in response to our comments on your filing.

If you have any questions regarding these comments, you may contact Dale Welcome, Staff Accountant, at (202) 551-3865, Anne McConnell, Senior Staff Accountant, at (202) 551-3709 or, in their absence, to the undersigned at (202) 551-3768.

Sincerely,

John Cash Accounting Branch Chief