



DIVISION OF  
CORPORATION FINANCE

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

Mail Stop 4631

March 15, 2010

By U.S. Mail and Facsimile

Mr. William H. Weideman  
Chief Financial Officer  
The Dow Chemical Company  
2030 Dow Center  
Midland, Michigan 48674

**Re: Form 10-K for the Fiscal Year Ended December 31, 2009  
File No. 001-03433**

Dear Mr. Weideman:

We have reviewed your filings and have the following comments. Where indicated, we think you should revise your documents 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 information so we may better understand your disclosure. After reviewing this information, we may 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, 2009

General

Environmental Matters

1. We note that you are subject to extensive remediation of hazardous substances and waste materials. At December 31, 2009, you had \$619 million accrued for environmental remediation and restoration costs and the ultimate cost could range up to approximately twice that amount. We also note that environmental, health or safety regulatory matters could result in significant unanticipated costs or liabilities.

You state on page 73 that in your opinion, the possibility is remote that costs in excess of those *disclosed* will have a material adverse impact on your consolidated financial statements. Considering that the reasonably possible amounts in excess of those *accrued* appear to be potentially material (up to an additional \$619 million), please consider clarifying this statement to avoid possible confusion. In other words, it appears that it is reasonably possible that costs in excess of those *accrued* could have a material adverse impact on your consolidated financial statements, and it appears that the possibility is *remote* that costs in excess of the upper range of reasonably possible losses will have a material adverse impact on your consolidated financial statements.

It is also unclear as to whether your assertions regarding materiality on page 73 specifically extend to your financial condition, results of operations and cash flows. Please clarify for us and in future filings.

2. We note that you recorded environmental expenses of \$227 million dollars in 2009, not including accruals related to your restructurings and the acquisition of Rohm and Haas. This amount represents almost half of your pre-tax income from continuing operations. We also note that it appears that you increased your reasonably possible range of loss by at least this amount. Please provide us with a detailed analysis of the underlying reasons for this increase.
3. We note the disclosures about individual sites on pages 72 and 119. Please tell us whether it is reasonably possible that losses associated with any other single location could be material to your financial condition, results of operation, or cash flows. If so, please identify them individually and provide a reasonably detailed description of the location, the stage of remediation and a narrative analysis of the accrual for each period presented, discussing the expenses, expenditures and adjustments. Help us better understand the distinction made concerning the Freeport, Philadelphia and Wood-Ridge sites, such that they are not included in the footnotes to your financial statements.
4. Considering the importance to an understanding of your operations, please disclose separately your non-remediation environmental expenses and capital expenditures, for each period presented. Show us the disclosures you intend to include in future filings.

#### Asbestos-Related Matters of Union Carbide Corporation

5. The current disclosures about your asbestos issue do not provide a full picture of the activity and its affect on your financial statements. Tell us what consideration you have given to providing a roll-forward of the following accounts, showing the beginning and ending balances, additions, expenditures and adjustments, accompanied by a narrative analysis:

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- The asbestos liability;
- The receivable for the asbestos liability; and
- The receivable for defense and resolution costs.

Item 8. Financial Statements and Supplementary Data, page 78

Note N – Commitments and Contingent Liabilities, page 118  
Summary, page 124

6. Please advise us, and revise future filings, to explain whether your assessment of materiality concerning litigation extends specifically to your financial condition, results of operations and cash flows.

\* \* \*

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 furnish 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 filing to be certain that the filing includes all information required under the Securities Exchange Act of 1934 and that they have provided all information 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 filings or in response to our comments on your filings.

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If you have any questions regarding these comments, you may contact Dale Welcome, Staff Accountant, at (202) 551-3865 or, in his absence, to the undersigned at (202) 551-3689.

Sincerely,

John Hartz  
Senior Assistant Chief Accountant