



DIVISION OF  
CORPORATION FINANCE

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

May 27, 2011

Mr. Ronald C. Edmonds  
Controller  
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, 2010  
Definitive Proxy Statement on Schedule 14A Filed March 25, 2011  
Form 8-K Filed April 28, 2011  
Form 10-Q for the Fiscal Quarter Ended March 31, 2011  
File No. 001-03433**

Dear Mr. Edmonds:

We have reviewed your response letter dated May 13, 2011 and have the following comments.

Form 10-K for the Fiscal Year Ended December 31, 2010

Item 1A. Risk Factors, page 18

1. Please tell us what consideration you have given, if any, to including disclosure concerning the risks posed by the handling and transportation of hazardous substances, such as, for example, liquid chlorine.

Definitive Proxy Statement on Schedule 14A Filed on March 25, 2011

Compensation Discussion and Analysis, page 20

Elements of Compensation: Performance Award – Detailed Information, page 23

2. We note your response to comment three of our letter dated May 4, 2011. We note disclosure that the actual award payouts of the performance awards, for named executive officers, was 175% of base salary which was adjusted up by up to 10%. With a view towards future disclosure, as previously requested, please show us how you calculated the actual payouts disclosed in the Summary Compensation Table for each of your named executive officers, including what percentage of increased payout was applied due to committee discretion, for each named executive officer. In future filings, please consider an illustrative example.

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Form 10-Q for the Fiscal Quarter Ended March 31, 2011

Item 2. Management's Discussion and Analysis..., page 39

Changes in Financial Condition, page 54

3. We note that you have significant foreign operations and significant undistributed earnings of foreign subsidiaries for which you have not provided income taxes. To the extent applicable and material, please revise future annual and quarterly filings to address the following:
- Disclose the amount of cash and cash equivalents and short-term investments held by foreign subsidiaries as of each balance sheet date;
  - Discuss the potential tax implications if such funds are needed for your operations in the U.S.; and
  - Discuss your intent to permanently reinvest these funds outside the U.S.

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.

You may contact Dale Welcome at (202) 551-3865 or Anne McConnell at (202) 551-3709 if you have questions regarding comments on the financial statements and related matters. Please contact Sherry Haywood at (202) 551-3345 or Dietrich King at (202) 551-3338 with any other questions.

Sincerely,

John Cash  
Accounting Branch Chief