



DIVISION OF
CORPORATION FINANCE

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

Mail Stop 4631

January 27, 2010

Via U.S. mail and facsimile (989) 638-9723

W.H. Weideman
Vice President and Controller of The Dow Chemical Company
1254 Enclave Parkway
Houston, Texas 77077

**RE: Union Carbide Corporation
Form 10-K for the fiscal year ended December 31, 2008
File No. 001-1463**

Dear Mr. Weideman:

We have completed our review of your Form 10-K and related filings and have no further comments at this time.

You may contact Chambre Malone, Staff Attorney at (202) 551-3262 or Dietrich King, Staff Attorney at (202) 551-3338 if you have any questions.

Sincerely,

Pamela Long
Assistant Director