

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, D.C. 20549-5546

Mail Stop 5546

December 29, 2006

Via Facsimile (989) 638-9723 and US Mail

Andrew N. Liveris President and CEO The Dow Chemical Company 2030 Dow Center Midland, Michigan 48674

Re: The Dow Chemical Company

Form 10-K filed February 17, 2006

File No. 1-3433

Dear Mr. Liveris:

We have limited our review of the above filing to disclosures relating to your contacts with countries that have been identified as state sponsors of terrorism, and we will make no further review of the filing. Our review with respect to this issue does not preclude further review by the Assistant Director group with respect to other issues. At this juncture, unless otherwise directed, we are asking you to provide us with supplemental information so that we may better understand your disclosure. Please be as detailed as necessary in your response. 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 filings. We look forward to working with you in these respects. We welcome any questions you may have about our comments or on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

1. We note from public reports that you may have operations in or resales into Iran, which is identified as a state sponsor of terrorism by the State Department and subject to export controls and sanctions administered by the Commerce Department's Bureau of Industry and Security and the Treasury Department's Office of Foreign Assets Control. Your Form 10-K discloses that you have operations in the Middle East but does not contain information relating specifically to operations in or contacts with Iran. Please describe your current, past

and anticipated operations in and contacts with Iran, if any, including through affiliates, joint ventures and other direct and indirect arrangements.

- 2. Discuss the materiality to you of the operations and contacts described in your response to the foregoing comment, in light of the country's status as a state sponsor of terrorism. Please also discuss whether the operations or contacts constitute a material investment risk to your security holders. Please describe the extent to which the government of Iran or entities controlled by it are intermediaries or receive financing in connection with your operations associated with Iran.
- 3. Your materiality analysis should address materiality in quantitative terms, including the approximate dollar amount of revenues, assets and liabilities associated with Iran. Please address materiality in terms of qualitative factors that a reasonable investor would deem important in making an investment decision, including the potential impact of corporate activities upon your reputation and share value.

For example, we note that Arizona and Louisiana have adopted legislation requiring their state retirement systems to prepare reports regarding state pension fund assets invested in, and/or permitting divestment of state pension fund assets from, companies that do business with countries identified as state sponsors of terrorism. The Missouri Investment Trust has established an equity fund for the investment of certain state-held monies that screens out stocks of companies that do business with U.S.-designated state sponsors of terrorism. We note also that the Pennsylvania legislature has adopted a resolution directing its Legislative Budget and Finance Committee to report annually to the General Assembly regarding state funds invested in companies that have ties to terrorist-sponsoring countries. Your materiality analysis should address the potential impact of the investor sentiment evidenced by such actions directed toward companies that have operations associated with Iran.

Please also address the impact of your regulatory compliance programs that cover operations and contacts associated with Iran, and any internal risk assessment undertaken in connection with business in Iran.

- 4. Please address the applicability to your Iran-related activities, including any direct or indirect payments to the Iranian government or activities that directly or indirectly produce income for the Iranian government, of Section 5(b) of the Iran Sanction Act of 1996, as modified by the Iran Freedom Support Act on September 30, 2006.
- 5. We also note from your 10-K that you have operations in the Middle East and Africa. Please identify for us the countries in the Middle East and Africa with which you have operations, sales or other contacts. We may have further comment.

Please respond to these comments within 10 business days or tell us when you will provide us with a response. Please understand that we may have additional comments after reviewing your responses to our comments. Please submit your response letter on EDGAR.

Andrew N. Liveris
The Dow Chemical Company
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 all information required under the 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 the 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 the filing;

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.

Please contact James Lopez at (202) 551-3536 if you have any questions about the comments or our review. You may also contact me at (202) 551-3470.

Sincerely,

Cecilia D. Blye, Chief Office of Global Security Risk

cc: Pamela Long
Assistant Director
Division of Corporation Finance

John Cash Branch Chief Division of Corporation Finance