



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

Mail Stop 7010

June 20, 2006

via U.S. mail and facsimile

Jeffrey M. Lipton
Chief Executive Officer
Nova Chemicals Corporation
1550 Coraopolis Heights Road
Moon Township, Pennsylvania 15108

**RE: Nova Chemicals Corporation
Form 40-F for the Fiscal Year Ended December 31, 2005
File No. 1-13064**

Dear Mr. Lipton:

We have limited our review of the above referenced reports to the matters listed below. If you disagree with a comment, we will consider your explanation as to why our comment is 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 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 on any other aspect of our review. Feel free to call us at the telephone numbers listed at the end of this letter.

Form 40-F for the Fiscal Year Ended December 31, 2005

Note 14 – Restructuring Charges, page 25

1. In future filings please enhance your disclosure to provide the following information:
 - the expected completion date of each restructuring event.

- for each reportable segment, the total amount of costs expected to be incurred in connection with the activity, the amount incurred in the period, and the cumulative amount incurred to date.
- the reasonably likely material effects of your restructuring plans on your financial position, future operating results and liquidity, as well as when you expect those effects to be realized.

Note 21 – Segmented Information, page 31

2. We note that you present ethylene, ethylene co-products and polyethylene resins under your olefins/ polyolefins segment and styrene monomer, polystyrene and expandable polystyrene under your styrenics segment. We further note that you have developed a portfolio of differentiated performance products under each of these segments, whose performance appears to differ from that of your standard products. Given the above, it is unclear why you have only presented two reportable segments. Accordingly, please provide us with the internal financial reports reviewed by the chief operating decision maker as of December 31, 2005 and March 31, 2006. If you aggregate your operating segments, please explain to us, in detail, the basis for the aggregation of your operating segments into two reportable product segments. In this regard, please tell us, for each bullet point below, how you determined that:
 - all of your olefins/ polyolefins and styrenics products are economically similar. For example, you state on page 14 of Exhibit 99.3 to your 2005 Form 40-F that certain of your performance products earn a significant margin above standard polymers because of their unique attributes and value in use. In addition, you state on page 13 of the same Exhibit that your polyethylene performance products are becoming a more significant portion of sales and should provide for greater earnings stability over the long-term cycle, whereas your standard products contribute volatility to your earnings. Please provide us with an analysis that includes historical revenues, gross profits, gross profit margins, operating profits, and operating profit margins, along with any other information you believe would be useful for each of your product operating segments to help us understand how these operations are economically similar. Please also address any differences in the trends these financial indicators depict (e.g. if gross profit margin is decreasing for one operation and increasing for another).
 - all of your operating segments have similar products.
 - the production processes for all of your product-related operating segments are similar.
 - the customers for all of your product-related operating segments are similar,
 - the distribution methods of all of your product-related operating segments are similar.

Mr. Lipton
Nova Chemicals Corporation
June 20, 2006
Page 3

As appropriate, respond to these comments within 10 business days or tell us when you will provide us with a response. Please furnish a letter that keys your responses to our comments and provides any requested supplemental information. Detailed response letters greatly facilitate our review. Please file your response letter on EDGAR. Please understand that we may have additional comments after reviewing responses to our comments.

We urge all persons who are responsible for the accuracy and adequacy of the disclosure in the filings reviewed by the staff to be certain that they have provided all information investors require. 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.

You may contact Tracey McKoy, Staff Accountant, at (202) 551-3772 or, in her absence, me at (202) 551-3255 if you have questions regarding comments on the financial statements and related matters.

Sincerely,

Nili Shah
Accounting Branch Chief