



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

Mail Stop 7010

October 10, 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 reviewed your response letter dated August 25, 2006 and have the following additional comment.

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

Note 21 – Segmented Information, page 31

1. We have reviewed your response to prior comment one in your letter dated August 25, 2006. However, we are not persuaded that, prior to June 2006, you only had two operating segments.

First, your basis for determining that your CEO represents your chief operating decision maker (CODM) is unclear. We note, based on your letter dated July 19, 2006, that the CEO decides how many resources should be allocated to each division. However, in your letter dated August 25, 2006, you state that (1) the CEO is actively involved, with the division presidents, in setting the objectives at the division level and monitoring performance against those objectives and (2) regular meetings are held between the CEO and the division presidents to discuss progress towards achieving the objectives and to develop strategies for achieving success for the company as a whole. These statements suggest that CODM actually consists of your CEO and your division presidents, as it appears that this group, as a whole, allocates resources and assesses performance. To help us better understand your CODM

determination, please tell us whether your Styrenics division president had any involvement in setting the objectives of, monitoring the performance of, or discussing progress towards achieving the objectives of the OPO division, and vice versa. If not, please clarify your statement that the CEO and the division presidents develop strategies for achieving success for the company as a whole. In addition, please tell us the extent to which the Styrenics division president was compensated based on the company's overall performance, rather than his division's individual performance. Please also tell us the same with respect to the OPO division president.

If your CODM consists of your CEO and your division presidents, it would appear that the individual businesses within your Styrenics and OPO divisions represent operating segments, as you have indicated that your division presidents are responsible for allocating resources within the division.

However, even if your CODM only consists of your CEO, we continue to believe that the individual businesses within your Styrenics and OPO divisions represent operating segments, for the following reasons:

- Your CEO receives monthly reports which contain detailed information at the level of your individual businesses. We note your statement that the CEO does not use the monthly report as a primary tool for decision-making, as they are historically oriented. Instead, you state that the CEO uses information such as trade association publications, industry publications, and government reports to make decisions. However, in order to put these external sources of information into the context of the company, we assume your CEO relies on the historical monthly information. In fact, you state that the CEO uses the monthly reports for historical background and reference purposes should he have to answer questions on specific items. This statement indicates that the CEO uses the monthly reports, including the detailed information by individual business, as part of the mix of information he considers in assessing performance and allocating resources.
- You also state that your CEO uses weekly internal information to make decisions. We note that your weekly internal reports include information such as volume, capacity, ending inventory, and days in inventory for each of the individual businesses in your two divisions. Accordingly, it continues to appear that your CEO regularly reviews information at the individual business level for the purposes of decision making.
- Further, you state that your CEO meets weekly with the division presidents and numerous other managers representing all aspects of your business to discuss trends in your cost structure and demand for your products. We assume that these "numerous other managers" represent the individual businesses in each of your two divisions. Accordingly, again, it appears that your CEO regularly considers information, both written and oral, related to the individual businesses in assessing performance and allocating resources.

As such, we have considered your individual businesses from the perspective of paragraph 17 of SFAS 131. Based on the following, we are not persuaded that the individual businesses within the OPO division and the Styrenics division meet the criteria for aggregation in paragraph 17. Specifically:

- Based on your website, it appears that your products have different uses. For example, we note that your LLDPE products are used for flexible food packaging and shrink wrap, whereas your ethylene product appears to be used primarily in the production of polyethylene products. Similarly, it appears that your styrene monomer is used primarily in the production of your other styrenics products, whereas your styrenics products are used in cups, cartons, and a variety of other items. Accordingly, it is unclear how the businesses in each division meet paragraph 17.a of SFAS 131.
- In addition, based on your website, we note that your ethylene production process in your Corunna plant differs from that of your Joffre plant, as the “Corunna ethylene plant has the flexibility to optimize part of its feedstock slate by switching between natural gas liquids, crude oil and crude oil derivatives.” Accordingly, in certain cases, it is unclear how certain of your businesses in each division meet paragraph 17.b of SFAS 131.
- We also note from your response dated September 21, 2006, that your styrene monomer is sold globally, whereas your polystyrene products are typically sold where the product is manufactured. Accordingly, it is unclear how certain of your businesses meet paragraph 17.d of SFAS 131.
- In addition, as previously stated, we note that the performance each of your businesses differs from the performance of the other businesses within the divisions you have presented. We note your explanations of the variances in the performance of some of the individual businesses. However, we believe that these explanations, with the exception of your discussion regarding the start up of one of your new plants, further support a need for disaggregation, rather than an explanation of one-time anomalies, as we believe that your response, as well as more comprehensive discussion of each of your businesses, would better assist readers in understanding your performance, assessing your prospects for future net cash flows and making more informed judgments about you, consistent with paragraph 3 of SFAS 131. Further, your explanations do not account for each of the differences in gross profit margin and operating profit margin for each year presented for all of your businesses.

Accordingly, please restate your segment disclosures in your 2005 Form 40-F to separately present each individual business, to the extent that it is greater than the thresholds in paragraph 18 of SFAS 131 and to the extent that you do not meet the 75% revenue threshold in paragraphs 20-21 of SFAS 131.

General

2. If you conclude that your prior filings should be restated, please tell us when you will file your restated Form 40-F. We remind you that when you file your restated Form 40-F, you should appropriately address the following:
- an explanatory paragraph in the reissued audit opinion,
 - full compliance with SFAS 154, paragraphs 25 and 26,
 - fully update all affected portions of the document, including MD&A,
 - updated disclosures regarding disclosure controls and procedures should include the following:
 - o a discussion of the restatement and the facts and circumstances surrounding it,
 - o how the restatement impacted the CEO and CFO's original conclusions regarding the effectiveness of their disclosure controls and procedures,
 - o changes to internal controls over financial reporting, and
 - o anticipated changes to disclosure controls and procedures and/or internal controls over financial reporting to prevent future misstatements of a similar nature.
 - updated reports from management and your independent auditors regarding your internal controls over financial reporting.
 - updated certifications.

* * * *

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.

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