



DIVISION OF
CORPORATION FINANCE

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549-4631

May 13, 2010

Mr. Matthew C. Wolsfeld
Chief Financial Officer, Northern Technologies International Corporation
4201 Woodland Rd.
Circle Pines, MN 55014

**Re: Northern Technologies International Corporation
Form 10-K for the year ended August 31, 2009
File No. 1-11038**

Dear Mr. Wolsfeld:

We have reviewed your response to our letter dated March 4, 2010 and have the following comments. Where indicated, we think you should revise your disclosures in response to these comments. If you disagree, we will consider your explanation as to why our comments are inapplicable or a revision is unnecessary. 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 10-K for the fiscal year ended August 31, 2009

Business — Corporate Joint Ventures and Holding Companies, page 2

1. We note your response to prior comment two; however, please supplementally quantify for us the impact that not consolidating Polymer Energy LLC had on your financial statements during each period that your interest exceeded 50%.

MD&A — Results of Operations, page 32

2. We note that you include a tabular presentation of the net sales of your corporate joint ventures and holding companies for each period presented. In order to avoid any confusion between your product sales and the product sales of your corporate joint ventures, please remove this tabular presentation and other narrative disclosures of joint venture product sales from your MD&A in annual and quarterly filings. It appears to us that it would be more appropriate for you to address changes in fees for technical support and other services provided to corporate joint ventures by disclosing and discussing the percentage change in such fees relative to the percentage change in joint venture product sales.

MD&A — Liquidity and Capital Resources, page 37

3. We note your response to prior comment seven and request that you provide us your proposed disclosures supplementally. Please ensure that your disclosures separately address days outstanding for trade receivables excluding corporate joint ventures, trade receivables from corporate joint ventures, and fees receivable from corporate joint ventures. Also, please tell us the amounts of each type of outstanding receivable as of August 31, 2009 and February 28, 2010 subsequently collected in cash.

Consolidated Financial Statements

Consolidated Statements of Operations, page 45

4. We read your response to prior comment nine; however, it appears to us that your income statement format should be revised. We do not believe that essentially presenting two operating income sub-totals on the face of your statements of operations is appropriate. We also do not believe that the allocations of expenses between North American operations and corporate joint ventures and holding companies are necessarily indicative of the separate operations of each. Therefore, please amend your Form 10-K and subsequent Forms 10-Q to present a one step income statement format with revenues and other income (including gain on asset sales) on top and all operating, joint venture and other expenses and losses below to come to a pretax income line item. Alternatively, we would consider a modified one step income statement format with operating revenues and other income on top and operating expenses and losses below to come to an operating income line item followed by non-operating income and expenses. Since your joint ventures appear to be an integral part of your operations, we would not object to your inclusion of equity income from your joint ventures in operating income.

Notes to the Financial Statements

1. Nature of Business and Significant Accounting Policies, page 48

5. We note your response to prior comment ten. Please separately disclose related party product sales to your joint ventures on the face of your annual and quarterly statements of operations. Also, if applicable, please address in MD&A the extent to which you are recording joint venture fees on a cash basis due to uncertainty regarding collectability.

6. Investments in Corporate Joint Ventures, page 52

6. We read your response to prior comment 13 and have the following additional comments:
- We note the required equity disclosures in Rule 8-03 of Regulation S-X; however, we also note the materiality of your corporate joint ventures to your financial condition and results of operations. Therefore, it appears to us that it may be necessary for you to supplement the required disclosures. Please provide us the additional information we previously requested.
 - We note that you periodically evaluate your investments in corporate joint ventures for impairment. Please explain to us and disclose when and how often this takes place. Additionally, please explain to us and disclose any facts and circumstances that would warrant a non-periodic evaluation. Provide us a schedule of your corporate joint venture investment as of your most recent balance sheet date.

13. Geographic and Segment Information, page 57

7. Your response to our prior comment 14 indicates that you only include North American operating results in your segment and enterprise-wide disclosures. Since fees and expenses related to your corporate joint ventures are material to your operations, it appears to us that they should also be included. In order to help us more clearly understand your segment disclosures, please provide, for the fiscal year ended August 31, 2009 and the period-to-date quarter ended February 28, 2010, copies of the reports reviewed by your chief operating decision maker.

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

If you have any questions regarding these comments, please direct them to Mindy Hooker, Staff Accountant, at (202) 551-3732, Anne McConnell, Senior Staff Accountant, at (202) 551-3709, or to the undersigned at (202) 551-3689.

Sincerely,

John Hartz
Sr. Asst. Chief Accountant