



DIVISION OF
CORPORATION FINANCE

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

September 20, 2012

Via E-mail

Tam Nguyen
Chief Financial Officer
Northcore Technologies Inc.
302 The East Mall, Suite 300
Toronto, Ontario M9B 6C7

**Re: Northcore Technologies Inc.
Form 20-F for the Fiscal Year Ended December 31, 2011
Filed April 3, 2012
File No. 001-14835**

Dear Mr. Nguyen:

We have reviewed your filing and have the following comments. Please note that we have limited our review to only your financial statements and related disclosures. In some of our comments, we may ask you to provide us with information so we may better understand your disclosure.

Please respond to this letter within ten business days by amending your filing, by providing the requested information, or by advising us when you will provide the requested response. If you do not believe our comments apply to your facts and circumstances or do not believe an amendment is appropriate, please tell us why in your response.

After reviewing any amendment to your filing and the information you provide in response to these comments, we may have additional comments.

Form 20-F for the Fiscal Year Ended December 31, 2011

Item 3. Key Information

A. Selected Financial Data

Basis of Presentation, page 7

1. We note that the selected financial data for the years ended December 31, 2009, 2008 and 2007 was derived from your financial statements for those years in accordance with Canadian GAAP and reconciled to U.S. GAAP, however we note that you have not provided the reconciliation. Please revise to provide a reconciliation of the data to U.S.

GAAP and Regulation S-X, pursuant to Item 17 of Form 20-F. Please refer to Instruction 2 to Item 3.A of Form 20-F.

2. Please revise to disclose, if true, that the selected financial data based on Canadian GAAP is not comparable to the data presented based on International Financial Reporting Standards (“IFRS”). Also, please amend your Form 20-F to revise your presentation so that the previous GAAP and IFRS selected financial data are not presented side-by-side. Please refer to Instructions 1 and 3 of General Instruction G of Form 20-F.

Exhibit 15.1

Report of Independent Registered Public Accounting Firm, page 82

3. We note the reference in the Auditor’s Responsibility paragraph to “the standards of the Public Company Accounting Oversight Board.” Please revise to include a revised audit opinion that indicates, if true, that the audit was conducted in accordance with “the standards of the Public Company Accounting Oversight Board (United States).” Please refer to paragraph 3 of PCAOB Auditing Standard No. 1.
4. We note the reference in the Opinion paragraph to IFRS. Please revise to include an audit opinion that indicates, if true, that the financial statements are presented fairly in accordance with IFRS as issued by the International Accounting Standard Board. Please refer to Item 17(c) of Form 20-F. Please also revise your disclosure in Note 3 to the consolidated financial statements accordingly.
5. We note the reference in the Emphasis of Matter paragraph indicating there is “significant doubt” about the company’s ability to continue as a going concern. Please include a revised audit opinion that indicates, if true, that there is “substantial doubt” about the company’s ability to continue as a going concern. Please refer to AU Section 341.12.

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 the information the Securities Exchange Act of 1934 and all applicable Exchange Act rules 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 responding to our comments, please provide a written statement from the company acknowledging that:

- the company is responsible for the adequacy and accuracy of the disclosure in the filing;

Tam Nguyen
Northcore Technologies Inc.
September 20, 2012
Page 3

- 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.

You may contact David Edgar, Staff Accountant, at (202) 551-3459 if you have questions regarding comments on the financial statements and related matters. Please contact me at (202) 551-3406 with any other questions.

Sincerely,

/s/ Patrick Gilmore

Patrick Gilmore
Accounting Branch Chief