

UNITED STATES SECURITIES AND EXCHANGE COMMISSION WASHINGTON, DC 20549-4628

April 19, 2010

Via U.S. Mail

Robert B. Mahoney Chief Financial Officer 801 Crescent Centre Drive, Suite 600 Franklin, Tennessee 37067

Re: Noranda Aluminum Holding Corporation

Amendment No. 5 to Registration Statement on Form S-1

Filed March 29, 2010 File Number 333-150760

Dear Mr. Mahoney:

We have reviewed your filing and have the following comments. Where indicated, we think you should revise your filing in response to these comments. If you disagree, 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 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 any other aspect of our review. Feel free to contact us at the telephone numbers listed at the end of this letter.

Amendment No. 5 to Registration Statement on Form S-1, filed March 29, 2010

General

- 1. Please continue to monitor your requirements to provide updated financial statements with your next amendment. Please refer to Rule 3-12 of Regulation S-X.
- 2. Please provide updated consents with your next amendment.

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Prospectus Summary, page 1

Competitive Strengths, page 5

- 3. Your revised disclosure here and in the registration statement refers to CRU and its statistics to substantiate various assertions regarding your Gramercy and St. Ann operations. The source material submitted previously does not substantiate these assertions. To the extent that you rely on published CRU reports in that regard, please provide us with a copy that has been highlighted with a corresponding key to indicate where support for the various assertions may be found. In addition, tell us whether the source of each statistic is publicly available without cost or at a nominal expense. If the source is not publicly available at nominal or no cost, please obtain and file an updated consent from CRU as an exhibit to your next amendment. Please see Rule 436 of Regulation C and Item 601(b)(23) of Regulation S-K for additional guidance. Alternatively, you may adopt these statements as your own.
- 4. In this same regard, please also substantiate the CRU references and statistics in the "Cyclical fluctuations" risk factor on page 27 and in the "We may be unable to continue" risk factor that begins on page 30.

<u>Industry Overview, page 8</u>

5. Here, and throughout the registration statement, please include the source and date for the graphs presented, as you have done for the graph appearing on page 11.

The Offering, page 14

6. Please define the "term B loan" the first time you use it.

Underwriting, page 162

7. With respect to the lead underwriter, we note your reference here to "Merrill Lynch, Pierce, Fenner & Smith, Incorporated" and your reference on the front and back covers of the preliminary prospectus to "BofA Merrill Lynch". Please revise accordingly.

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Financial Statements

Noranda Aluminum Holding Corporation

Note 22. Fair Value Measurements

8. We note your response to prior comment 14 indicates you intend to present in your next Form 10-Q expanded disclosure for your pension plan assets, which will include summarized fair value information by investment category including equity securities and fixed income securities. Please tell us how you considered providing additional details of the composition of your equity securities (i.e. by industry type, company size, or investment objective) and your fixed income securities (i.e. by national, state, or local government; corporate debt; asset backed-securities; structured debt; etc.). See FASB ASC 715-20-50-1(d)(5)(ii).

Note 25. Business Segment Information, page F-64

9. We note your response to our prior comment number 15 and we are continuing to evaluate your response.

Closing Comments

As appropriate, please amend your registration statement in response to these comments. You may wish to provide us with marked copies of the amendment to expedite our review. Please furnish a cover letter with your amendment that keys your responses to our comments and provides any requested information. Detailed cover letters greatly facilitate our review. Please understand that we may have additional comments after reviewing your amendment and responses to our comments.

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 Securities Act of 1933 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 a company's disclosure, they are responsible for the accuracy and adequacy of the disclosures they have made.

Notwithstanding our comments, in the event the company requests acceleration of the effective date of the pending registration statement, it should furnish a letter, at the time of such request, acknowledging that:

should the Commission or the staff, acting pursuant to delegated authority, declare the filing effective, it does not foreclose the Commission from taking any action with respect to the filing;

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- the action of the Commission or the staff, acting pursuant to delegated authority, in declaring the filing effective, does not relieve the company from its full responsibility for the adequacy and accuracy of the disclosure in the filing; and
- the company may not assert staff comments and the declaration of effectiveness 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 connection with our review of your filing or in response to our comments on your filing.

We will consider a written request for acceleration of the effective date of the registration statement as confirmation of the fact that those requesting acceleration are aware of their respective responsibilities under the Securities Act of 1933 and the Securities Exchange Act of 1934 as they relate to the proposed public offering of the securities specified in the above registration statement. We will act on the request and, pursuant to delegated authority, grant acceleration of the effective date.

We direct your attention to Rules 460 and 461 regarding requesting acceleration of a registration statement. Please allow adequate time after the filing of any amendment for further review before submitting a request for acceleration. Please provide this request at least two business days in advance of the requested effective date.

You may contact Kevin Stertzel at (202) 551-3723 or Mark Shannon, Accounting Branch Chief at (202) 551-3299 if you have questions regarding comments on the financial statements and related matters. You may contact Ken Schuler, Mining Engineer, at (202) 551-3718 with questions about engineering comments. Please contact Tracey L. McNeil at (202) 551-3392 or, in her absence, the undersigned at (202) 551-3611 with any other questions.

Sincerely,

Anne Nguyen Parker Branch Chief

cc: <u>Via Facsimile</u> Andrew J. Nussbaum (212) 403-2376