



DIVISION OF
CORPORATION FINANCE

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

March 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. 4 to Registration Statement on Form S-1
Filed March 2, 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. 4 to Registration Statement on Form S-1, filed March 2, 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.

Prospectus Summary, page 1

General

3. We remind you of our prior comment 11 from our letter dated February 16, 2010. Please revise your prospectus summary to discuss and quantify the “significant negative” impact of the recent global recession and credit crisis on your financial results. We note the revised risk factor on page 25 and the revised disclosure on pages 54-55.

Overview, page 1

4. We note your revised disclosure indicating that the statement that production capacity at New Madrid “represents more than 15% of total 2009 U.S. primary aluminum production” is now based on statistics from the Aluminum Association. Please provide us with data to substantiate this statement. Please also refer to our prior comment 7 for guidance regarding substantiating statements. We also note that the data from the Aluminum Association submitted with your response letter dated March 1, 2010 relates to downstream business data, whereas New Madrid is a part of your upstream business.

Risk Factors, page 22

“We have substantial indebtedness”, page 22

“Restrictive covenants under the indentures”, page 22

5. We note your statements regarding potential noncompliance with restrictive covenants and resulting events of default. Disclose whether any of these restrictive covenants provide for events of default with immediate effect and no cure or grace period, and if so, generally describe such events of default. Also include a brief description of any restrictive covenants or events of default that would not be considered usual and customary.

“Our operations have been and will continue to be exposed”, page 31

6. We note your disclosure that you recently reached an “understanding” with the Government of Jamaica and that if the Company and the Government of Jamaica “are unable to finalize definitive documentation consistent with that understanding, possible revisions could result in a net increase in [your] costs.”

Please update this risk factor and related disclosure to provide the status of the finalization of such definitive documentation.

Management's Discussion and Analysis of Financial Condition and Results of Operations

Critical Accounting Policies and Estimates, page 57

7. We note your response to our prior comment number 35. Please tell us what consideration you have given to providing a separate critical accounting policy related to your post-retirement benefit plans, including your discount rate assumption and your expected rate of return on plan assets. We note that your estimates for these assumptions have changed in each period presented.

Liquidity and Capital Resources, page 73

8. Your response indicates in December 2009, you contributed an additional \$20 million to your post-retirement benefit plans. Please expand your liquidity disclosures to discuss this additional funding and how debt covenant restrictions if any, impact your ability to maintain or improve your funded status. Further, please expand your disclosures to describe your pension funding status as defined in the Pension Protection Act of 2006 and any restrictions to your plans associated with the current funding level.

Commodity Price Risks, page 81

Non-Performance Risk, page 83

9. We note your response to our prior comment 23 indicating that the master agreement with Merrill Lynch is a form ISDA Master Agreement. To facilitate a better understanding of the nature of this master agreement, please expand your disclosure to include a general discussion of ISDA master agreements, schedules, and confirmations, similar to the information provided in your response.

Executive Compensation, page 109

10. We note that you have not included any disclosure in response to Item 402(s) of Regulation S-K. Please advise us of the basis for your conclusion that disclosure is not necessary and describe the process you undertook to reach that conclusion.

Elements Used to Achieve Compensation Objectives, page 111

11. Please revise to delete duplicative disclosure. For example, you have repeated on pages 110 and 111 almost verbatim the several sentences that begin “The Company has not in recent years retained Hay Associates...” and end “...we have in place with the executive officer.”
12. We note your disclosure on page 112 that “the performance targets and actual performance achieved . . . will not be disclosed [because such disclosure] would cause significant competitive harm” Please provide on a supplemental basis a detailed explanation for your conclusion that the information should be excluded. Refer to Instruction 4 to Item 402(b) of Regulation S-K. If you have an appropriate basis for omitting these targets, you must discuss how difficult or likely it will be for the named executive officers to achieve the undisclosed target levels. In discussing how difficult or likely it will be to achieve the target levels or other factors, provide as much detail as necessary. Refer to Question 118.04 of the Regulation S-K Compliance and Disclosure Interpretations available at <http://www.sec.gov/divisions/corpfin/guidance/regs-kinterp.htm>.

Financial Statements

Noranda Aluminum Holding Corporation

Note 2. Joint Venture Transaction

13. Your disclosure explains that based on the fair values assigned to the assets acquired and liabilities assumed, you recorded a bargain purchase gain of \$101.8 million. Please tell us if you have reassessed whether you have correctly identified all assets acquired and liabilities assumed as contemplated in ASC 805-30-25-4 and, if so, describe to us in sufficient detail the process you used to perform the reassessment. As part of your response, please tell us the substantive business reasons for the structure of the transaction.

Note 22. Fair Value Measurements

14. We note your disclosure of the fair value of your pension and OPEB plan assets is aggregated within one line of your tabular disclosure. Please tell us how you considered the disclosure requirements of paragraph d.5.ii. of ASC 715-20-50-1.

Note 25. Business Segment Information, page F-64

15. We note your response to our prior comment number 34 and have reviewed the supplemental information provided. Based on your response, it appears the components of your “Upstream segment” (New Madrid Smelter, Gramercy & St. Ann) represent operating segments as defined by ASC 280-10-50-1. Further, the operating results you provide in your materials reviewed by the CODM appear to meet the quantitative thresholds for disclosure prescribed in ASC 280-10-50-12. In addition, the information you have provided thus far, does not appear to indicate that the operating segments comprising your “Upstream segment” meet the quantitative and qualitative aggregation criteria described in ASC 280-10-50-11. In particular, we note significantly different gross margin percentages for these operating segments indicating dissimilar economic characteristics as well as several qualitative differences. As such, please provide segment disclosures for these operating segments or otherwise explain why such disclosure is not necessary.

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;
- 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

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- 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: Via Facsimile
Andrew J. Nussbaum
(212) 403-2376