



DIVISION OF
CORPORATION FINANCE

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

February 16, 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. 3 to Registration Statement on Form S-1
Filed January 14, 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.

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.
3. We do not comment on each place that includes disclosure which requires revision. Please carefully review your document to make corresponding changes wherever applicable. That will eliminate the need for us to issue repetitive comments.

4. We note there are numerous blanks throughout the registration statement, for example, under “Description of Capital Stock”, “Shares Eligible for Future Sale”, and “Underwriting”. Upon completion we will need sufficient time to review the complete filing in its entirety.
5. Prior to the effectiveness of your registration statement, please be sure that we receive a copy of the letter, or a call, from FINRA, stating that FINRA has finished its review and has no additional concerns with respect to any proposed underwriting arrangements.
6. We have been advised by your outside counsel that a request for confidential treatment for certain exhibits is forthcoming. Please be advised that we will not grant effectiveness of the registration statement until we have issued and resolved all comments relating to any outstanding requests for confidential treatment. Comments regarding any confidential treatment request received will be sent under separate cover.
7. Your disclosure refers to CRU and its statistics in numerous places to substantiate various estimates, assertions, and projections presented in the registration statement. 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, it appears that consent of the third party to the use of the information in the prospectus and to the reference to that firm should be obtained and filed as an exhibit. 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.
8. In addition, clarify the dates that such estimates, assertions, and projections were made, as necessary. For example, we note your statement on page 1 that the production capacity at New Madrid “represents more than 15% of total U.S. primary aluminum production, as estimated by CRU”
9. We note assertions and projections throughout your disclosure, including, for example, those found on page 1, (“Our downstream business is one of the largest aluminum foil producers in North America” and “Our upstream business is one of the largest U.S. producers of primary aluminum”). Please specifically disclose the factual basis for, and the context of, the beliefs you express in these assertions, as well as for any similarly optimistic views presented in throughout the registration statement. Revise your disclosure as necessary to remove all beliefs and assertions that cannot be substantiated on a reasonable basis. Also, supplementally provide the staff with copies of all source material utilized for your substantiation of these, and any similar, statements.

10. You use a substantial number of defined terms, such as “Apollo”, “Special Dividend” and “Xstrata Acquisitions”, which definitions are dispersed throughout the document. Please provide a glossary that defines all your capitalized terms in one place.

Prospectus Summary, page 1

11. We remind you of prior comment 10 from our letter dated June 18, 2008 regarding the need for balanced presentation in the summary. In this regard, we note the difference in tone of your summary, which generally highlights only positive aspects of your company, as compared to the tone of your MD&A, which provides a more balanced discussion of factors affecting your company. As an example only, while you discuss strong liquidity position and low cash interest burden relative to debt, you should also discuss the total amount of outstanding indebtedness and the fact that you did not meet required performance ratios relating to your senior credit facilities and Notes. As another example, please discuss and quantify the “significant negative” impact of the recent global recession and credit crisis on your financial results. Please include an updated discussion of Standard & Poor’s and Moody’s ratings of you and your subsidiaries.
12. Please define “LME” the first time you use it.

Recent Developments, page 3

13. We note your disclosures regarding your hedge settlement agreement. Your disclosure indicates as of “January 4, 2009”, the value has been reduced to approximately \$126 million. It appears you may have intended to provide the information as of January 4, 2010. Please modify your disclosure or otherwise explain.

Competitive Strengths, page 4

14. We note your statement that “As of January 12, 2010, we had \$227.8 million of cash and revolving credit facility available borrowings.” Please break this out into the amount of cash on hand versus the amount of available borrowings under your credit facility. In addition, disclose the total amount of your indebtedness. Finally, discuss why you chose to elect to pay interest in-kind on your notes beginning in the third quarter of 2008 and disclose the amounts of the in-kind payments.

Risk Factors, page 22

“A downturn in general economic conditions...”, page 25

15. In your next amendment, please update the discussion this risk factor.

“Our operations have been and will continue to be exposed”, page 30

16. We note your discussion of a recent understanding reached regarding revisions to a negotiated fiscal structure between Noranda Bauxite Limited and the Government of Jamaica. Tell us whether this recent understanding is the subject of the Exhibit 10.21 Letter Agreement to be filed by amendment.

Use of Proceeds, page 39

17. Please also provide disclosure on the net proceeds that you expect to receive if the underwriters exercise in full their option to purchase additional common stock from you.
18. Once you know the expected size of the offering, and no later than when you provide the price range for the offering, you will need to provide the estimated amounts you intend to allocate to each of the identified uses. In that regard, it is insufficient to indicate only that the proceeds will be used for “general corporate purposes” that include “working capital, the expansion of our production capabilities, research and development, purchases of capital equipment and potential acquisitions of businesses that we believe are complementary to our business.” Instead, provide necessary detail for each intended use, and present the information in tabular form to facilitate clarity. If you have no specific plan for a significant portion of the proceeds, state this explicitly, and discuss the principal reasons for the offering at this time. Refer generally to Item 504 of Regulation S-K.

Selected Historical Consolidate Financial Data, page 45

19. Please modify your presentation of external alumina and bauxite shipments on page 47 to express the quantities in millions of pounds, similar to your other shipment data.

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

Critical Accounting Policies and Estimates

Share-based Payments, page 61

20. Please tell us your estimated offering price. In addition, please consider enhancing your disclosure to discuss each significant factor contributing to the

difference between the estimated offering price and the fair value of your common stock as of the date of your most recent stock option grant.

Results of Operations, page 62

21. Please provide expanded disclosure of “the December 2008 workforce reduction.”

Nine months ended September 30, 2008 compared to nine months ended September 30, 2009, page 70

22. We note your response to our prior comment 17 and we reissue the comment in part. Regarding the decrease in external shipments that contributed in part to a decrease in your sales results, discuss whether you anticipate any further decreases and discuss the factors that might lead to any future increase or decrease in external shipments and your sales results.

Quantitative and Qualitative Disclosures about Market Risk, page 83

23. We remind you of prior comment 52 to our letter dated June 6, 2008. Please disclose the counterparty to your hedging arrangements. Additionally, please tell us if you have filed the material agreements relating to these arrangements, including the master agreement with Merrill Lynch.

Business

Primary Metal – Upstream Business, page 93

24. We note your disclosures that indicate you have acquired the remaining interest in the St. Ann Bauxite Mine in the third quarter of fiscal 2009. We further note you believe this mine is vertically integrated into your upstream business. Please tell us how you considered providing pro forma proven and probable reserve disclosures to facilitate investor’s understanding of the reliability of the bauxite supply to your upstream operations. Please refer to Rule 11-01(a)(8) of Regulation S-X. In addition, please refer to Industry Guide 7 for guidance on reserve reporting.

Rolling Mills—Downstream Business, page 97

25. Please provide us with your analysis as to whether you are required to identify and file as an exhibit the agreement with the one customer that represented 14% of your downstream net year-to-date sales.

Executive Compensation, page 110

Role of the Compensation Committee, page 111

26. You disclose that the aggregate level of executive compensation opportunities for your executive officers should be consistent with the range of compensation paid by your peer companies. You further disclose that you generally endeavor to set compensation “in proximity to the midpoint of peer company levels” but that you make “individualized determinations based on the particular goals of each compensation decision.” Expand your disclosure to include a discussion of the actual compensation paid to your executive officers in comparison to the peer group with respect to total compensation and each element of compensation. To the extent actual compensation fell outside of a targeted goal or percentile, please explain why.
27. In addition, if you have benchmarked different elements of your compensation against different benchmarking groups, please identify the peer companies that comprise each such group.

Elements Used to Achieve Compensation Objectives, page 111

Base Salaries, page 111

28. You provide little analysis of the effect of individual performance on compensation, despite disclosure that each executive officer’s position, scope and duration of responsibilities, and overall performance are factors upon which their base salaries depend. Please provide additional disclosure and analysis of how individual performance contributed to the actual 2009 compensation for your named executive officers. For example, disclose the elements of individual performance, both quantitative and qualitative, and specific contributions the Compensation Committee considered in its evaluation, and if applicable, how they were weighted and factored into specific compensation decisions. See Item 402(b)(2)(vii) of Regulation S-K.
29. Expand your disclosure to include a discussion of Mr. Lorentzen’s “increased roles and responsibilities” related to his \$115,000 base salary increase. Also expand your disclosure to discuss the elements of Mr. Lorentzen’s performance related to the \$200,000 bonus paid to him on March 31, 2009, noted on page 112.

Management Equity Investments, page 112

30. Here, and elsewhere, you cross reference disclosure under the subheading “Director Independence – Security Holders Agreement”. This subheading is not used in the registration statement. Please revise accordingly.

Material United States Federal Income Tax Considerations . . . , page 144

31. Please eliminate the statement that prospective holders “should consult with their tax advisors regarding the tax consequences to them”, although you may suggest this course of action.

Financial Statements

Independent Auditors’ Report

St. Ann Bauxite Limited and Its Subsidiary, page F-4

32. Please provide us with your calculations pursuant to Rule 3-09 of Regulation S-X for periods in fiscal 2007 with respect to your investment in St. Ann Bauxite Limited

Noranda Aluminum Holding Corporation

Interim Financial Statements for the Nine Months Ended September 30, 2009

Note 2 – Joint Venture Transaction, Page F-61

33. We note disclosure throughout your document that the sales of Bauxite from your St. Ann mine to external third parties, “reduce the net cost of bauxite transferred to Gramercy”. Please clarify how you are presenting these third party bauxite sales in your Consolidated Statements of Operations for the interim period ended September 30, 2009.
34. We note your disclosures elsewhere in your document which indicate the operations of St. Ann have been considered integrated with your Upstream Segment. Please tell us if you have considered, whether the acquired St. Ann operations now represent a separate reportable segment. As part of your response, please provide us with the most recently available CODM package.

Note 14 – Pensions and Other Post-Retirement Benefits, Page F-76

35. You disclose you have contributed \$1.3 million to the Noranda pension plan during the nine months ended September 30, 2009 and you expect to contribute a minimum of \$0.4 million to the Noranda pension plan during the remainder of 2009. We further note that your accumulated benefit obligation was significantly in excess of the fair value of your plan assets at December 31, 2008. Please tell us how you have considered the impact of the Pension Protection Act of 2006 and the Worker, Retiree, and Employer Recovery Act of 2008 on your obligation to fund the Noranda pension plan.

Engineering Comment

Primary Metal — Upstream Business, page 95

36. We note your disclosure that your bauxite feed material is provided by your St. Ann Bauxite Mine through Noranda Bauxite Ltd. Supplementally provide us with an estimate of your mining - transport related assets, total bauxite sales (internal transfer-price and external), and net income for this segment of your upstream operations. This would encompass your mining operations, transportation and ship-loading port facilities up to the point of your bauxite sales.

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
- 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.

Robert B. Mahoney
Noranda Aluminum Holding Corporation
February 16, 2010
Page 9

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 Stertzell 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