



DIVISION OF
CORPORATION FINANCE

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

June 18, 2012

Via Facsimile

Mr. Charles D. McClane, Jr.
Chief Financial Officer
Alcoa Inc.
390 Park Avenue
New York, NY 10022-4608

**Re: Alcoa Inc.
Form 10-K for Fiscal Year Ended December 31, 2011
Filed February 16, 2012
Response Letter Dated May 4, 2012
File No. 1-03610**

Dear Mr. McClane:

We have reviewed your response and have the following comments. 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 10-K for Fiscal Year Ended December 31, 2011

Legal Proceedings, page 31

Litigation

General

1. We note your response to our prior comment number two in your letter dated May 4, 2012. The information you provided regarding the cases where you are unable to reasonably predict an outcome or estimate a range of reasonably possible loss, is useful in understanding the basis for your conclusions and would be helpful information for investors. Please expand your disclosures in future filings to provide similar insights.

European Commission Matters, page 34

2. We note your response to our prior comment number three; however, the basis for your accrual regarding the electricity tariff matter in Italy remains unclear to us. Please explain why, despite your expectation that you will be required to make a payment in excess of your accrual, you believe your accrual represents your best estimate of the probable outcome of this contingency. Please describe what amounts might be recovered in the event you make a payment in excess of your accrual and why these recoveries are considered probable. It may be helpful if you provide a more thorough analysis of how you determined the \$230 million liability you recorded in 2009 and how you determined a payment in the range of \$300 to \$500 million will be required.
3. It appears, based on your disclosure and your response, that the \$20 million receivable from the Italian government represented an amount previously owed to the company under the tariff arrangement, which was deemed by the courts as “unlawful state aid.” If our understanding is accurate, please confirm that you are not considering this receivable as an offset against any amounts you might otherwise be required to pay to settle this matter.

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

Segment Information

Alumina, page 54

4. We note your response to our prior comment number five. With regard to your bauxite mining activities, it appears to us that your views and disclosures are not consistent with other major participants in the alumina/aluminum production industry. As your bauxite mining operations represent a key discrete activity and input to your alumina and aluminum production, it appears to us this activity represents material information that is important to understanding the economics of your business. As such, please revise your disclosures to provide the information previously requested. Please provide us your draft disclosure revisions as part of your response.
5. Similar to our observations noted above, we understand that electrical power is a key driver of costs associated with aluminum production in your primary metals segment. We further note that your smelters generally require long-term power supply solutions in order to be economic. As such, it continues to appear to us that a discussion of the key costs of electricity supply inputs to your primary metals segment would be material information to investors. Please revise your disclosures to provide the information we previously requested and provide us your draft disclosure revisions as part of your response.

Critical Accounting Policies and Estimates, Goodwill, page 69

6. We note your response to our prior comment number seven. Please explain to us how you determined which six reporting units to perform a qualitative assessment in 2011, including if or how you considered your market capitalization to determine if a two step review was necessary. Also, since your market capitalization was and continues to be significantly less than your estimate of the fair values of your reporting units, please provide us the actual assumptions you used in assessing the primary metals reporting unit in 2011. Please help us more fully understand why you believe your market capitalization is not representative of the fair values of your reporting units.

Financial Statements

Note A – Summary of Significant Accounting Policies

Property Plants and Equipment, page 81

7. We note your response to our prior comment number eight. Please explain to us how you define a “unit” in your units-of-production calculations for each of the assets you describe in your response (smelter, mine, hydroelectric power facility) and also how you determine total units used as denominators in these calculations.
8. We note your response to our engineer’s comment number 16. Given the absence of mineral “reserves”, please explain what resource base you are using for DD&A calculations and why you believe these estimates of mineral resources are sufficiently reliable to warrant their use in DD&A calculations. Please tell us the full extent of assets, including their description and associated costs, which are being depreciated using a level of mineral resources.
9. You have explained in your response that you do not determine or claim to have mineral reserves at any of your bauxite mines. Please note that under U.S. GAAP, it is not appropriate to capitalize mine development costs in the absence of mineral reserves. As such, please explain to us how and why you determined that capitalizing \$221 million of overburden removal costs at December 31, 2011 is appropriate. In addition, please tell us what amounts, if any, you have capitalized associated with waste dumps, haulage ways, water treatment facilities, and other mine infrastructure.
10. You state you have capitalized \$49 million related to mineral rights. Since, as you also state, you do not establish mineral reserves on your properties, please explain how you determine whether or not mineral rights costs are impaired. To the extent any of your mineral rights are being amortized, please explain your basis for amortization.

Note Q – Segment and Geographic Area Information, page 120

11. We note the supplemental materials you have provided to us as part of your response. The materials provided appear to represent an overview of financial data typically supplied to a board of directors on a quarterly or periodic basis. As previously requested, please provide us copies of the detailed materials your CODM receives on a regular basis, which he uses to assess and discuss results with segment management.

Engineering Comments

12. We note your response to comment 15 stating that you have provided the information requested in aggregate and your present sources of bauxite are sufficient to meet your needs for the foreseeable future. We re-issue comment 15. Please disclose separately the bauxite production from each of your mines along with the expected duration of your mining activities at each mining location.
13. We note your response to comment 16 in which you state you inadvertently referenced reserves and do not believe you are engaged in significant mining operations, but instead are engaged in the aluminum business as a vertically integrated aluminum company, self-sufficient in your feedstock materials. In addition you state that you have no bauxite sales, bauxite mining is incidental to your business, and your mining techniques differ significantly from other mining companies. Further you acknowledge you prepare detailed assessments within your mining areas to achieve a uniform quality/supply of blended feedstock for your refineries. We re-issue comment 16. Neither Regulation S-K nor Industry Guide 7 exempts companies from the reporting requirements due to vertical integration or revenues generated by their ultimate value added products. Your mining and mineral processing operations, i.e. alumina refineries, related infrastructure, and/or aluminum smelters are considered an extension of your mining operations, as mining companies typically concentrate mineral products prior to shipment/sales and are not considered separate unrelated business activities. We acknowledge your belief that aluminum oxide is a common ordinary mineral, but note commercial deposits are found only in select locations globally and the comparison of your surface mining activities presents no significant differences to other mining/processing activities addressed by other companies producing gold, copper, coal, limestone/cement, crushed rock, or sand & gravel products.
14. We note your response to comment 17 in which you state you inadvertently referenced reserves in your filing and will correct this reference in future filings. We re-issue comment 17. Please provide us with the relevant documents which formed the basis for this disclosure.

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Closing Comments

You may contact Kevin Stertzel at (202) 551-3723, or Anne McConnell at (202) 551-3709 if you have questions regarding comments on the financial statements and related matters. You may contact George K. Schuler, Mining Engineer, at (202) 551-3718 with questions about engineering comments. Please contact me at (202) 551-3768 with any other questions.

Sincerely,

/s/ W. John Cash

W. John Cash
Branch Chief