

May 3, 2013

Via EDGAR and Facsimile

United States Securities and Exchange Commission  
Division of Corporation Finance  
100 F Street, N.E.  
Washington, D.C. 20549-4631

Attention: W. John Cash,  
Branch Chief

**Re: Alcoa Inc.  
Form 10-K for Fiscal Year Ended December 31, 2012  
Filed February 15, 2013  
File No. 1-03610**

Dear Mr. Cash:

On behalf of Alcoa Inc. (the "Company"), set forth below are responses to the comments of the Staff (the "Staff") of the Securities and Exchange Commission (the "Commission") contained in the Staff's letter dated April 1, 2013 (the "Comment Letter"), relating to the Form 10-K for the fiscal year ended December 31, 2012 (file no. 1-03610) (the "2012 10-K"), filed by the Company on February 15, 2013. The headings and numbered paragraphs of this letter correspond to the headings and paragraph numbers contained in the Comment Letter, and to facilitate your review, we have reproduced the text of the Staff's comments in boldfaced print below.

**FORM 10-K FOR FISCAL YEAR ENDED DECEMBER 31, 2012**

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

**Results of Operations, page 53**

- 1. In future filings, please provide a more comprehensive discussion explaining the reasons for changes in your results of operations. Where you cite multiple reasons for changes, please quantify the individual factors that impacted your results.**

**Response:** The Company advises the Staff that we provide three levels of integrated discussion to explain the reason for changes in the Company's results of operations. We first provide a summary (e.g., first three paragraphs under Earnings Summary on page 53 in the 2012 10-K) of the most significant reasons for the changes in the Company's results of operations at the beginning of the Management's Discussion and Analysis of Financial Condition and Results of Operations section in the Company's filings. Secondly, following the summary, we provide further detail and insight into the various changes on a line item-by-line item basis for the consolidated entity (e.g., pages 54 through 59 under Earnings Summary in the 2012 10-K). In this second level, we provide the "why" to the reasons for the changes, as well as a discussion of any additional factors that are significant to the specific line item even if not material to the Company's results of operations as a whole. Thirdly, we supplement the second level with a detailed discussion of the changes as they relate to each of our reportable segments that comprise the consolidated entity (e.g., pages 59 through 65 under Segment Information in the 2012 10-K).

Where practicable, we provide quantitative disclosure of factors we believe to be material that impact the Company's results of operations when the information is reasonably available and reasonably precise. Quantification is typically provided for in the second and third levels of discussion. For example, amounts related to environmental and legal charges, restructuring charges, mark-to-market derivative contracts, gains on asset sales, and discrete income tax items are included in the discussion of the Company's results of operations in the 2012 10-K. However, quantifying the impact of certain factors such as product mix, pricing levels, individual input costs, or overall market fluctuations is inherently less precise due to the assumptions involved in quantifying these items in isolation. Our disclosures have been provided to show qualitative trends and aid in understanding of the underlying financial information provided. We do list factors that impact the Company's results of operations in order of magnitude, beginning with the most significant, when providing such explanation in the Company's filings.

In future filings, the Company will continue to review the disclosures to determine if any additional factors that are material can be practicably quantified and if so, the Company will provide the appropriate additional disclosure.

### Segment Information

#### Alumina, page 59

2. In future filings, please expand your tabular information presentation to disclose, and also discuss changes in:
  - your average realized price per metric ton of alumina.
  - your average cost per metric ton of alumina.

**Response:** The Company advises the Staff that the following explanation relates to Comment Nos. 2, 3, 4, and, in part, 5.

In response to the Staff's comments, in future filings, we will expand the tabular information presentation to disclose the average realized price per metric ton of alumina for the Company's Alumina segment and the average realized price per metric ton of aluminum sales for the Company's Global Rolled Products segment. In addition, we will continue to discuss the changes in the average realized price for both the Alumina and Global Rolled Products segments in future filings.

In regards to the average cost per metric ton of alumina produced for the Alumina segment and aluminum produced for the Primary Metals, Global Rolled Products, and Engineered Products and Solutions segments, we consider this proprietary information and believe this will place the Company at a competitive disadvantage if this information were disclosed. Our cost structure is the basis for how we manage our businesses, and this information should not be visible to our vendors, competitors, and customers. Additionally, we reviewed the filings of a number of other aluminum industry participants and noted, in all instances except one, the filings did not include a presentation of their cost of production. The one exception we noted involved a registrant that made a number of additions and subtractions from its total cost of production prior to calculating the average. As such, we do not believe that presenting an average cost of production for each of our segments is appropriate.

**Primary Metals, page 60**

**3. In future filings, please expand your tabular information presentation to disclose, and also discuss changes in:**

- **your average cost per metric ton of aluminum produced.**

**Response:** We direct the Staff's attention to our response to Comment No. 2 above.

**Global Rolled Products, page 62**

**4. In future filings, please expand your tabular information presentation to disclose, and also discuss changes in:**

- **your average realized price per metric ton of aluminum sales.**
- **your average cost per metric ton of aluminum produced.**

**Response:** We direct the Staff's attention to our response to Comment No. 2 above.

**Engineered Products and Solutions, page 63**

5. **In future filings, please expand your tabular information presentation to disclose, and also discuss changes in:**

- **your average realized price per metric ton of aluminum sales.**
- **your average cost per metric ton of aluminum produced.**

**Response:** We wish to advise the Staff that only a portion of the goods sold by our Engineered Products and Solutions (EPS) segment consists of aluminum products. More than half of the goods sold by EPS are made of special alloys, titanium, nickel, and/or steel. Additionally, the non-aluminum products sold by EPS are not measured based on weight or any other consistent unit of measurement. As such, it is not meaningful to present the average realized price per metric ton of aluminum sales or practicable to present the average realized price per metric ton of non-aluminum sales.

In regards to the average cost per metric ton of aluminum produced, such amount would not be meaningful due to the product composition of the EPS segment. Additionally, we direct the Staff's attention to our response to Comment No. 2 above concerning the presentation of an average cost of production.

**Critical Accounting Policies**

**Goodwill, page 74**

6. **We note you have performed a qualitative assessment of goodwill impairment for six of your nine reporting units. Please refer to the guidance found in ASC 350-20-35-3C, and tell us how you were able to conclude that it was not more likely than not, that the fair value of your six qualitatively assessed reporting units was less than their carrying amount. In your response, please address the events and circumstances presented in paragraph 3C as well as any other events and circumstances you may have considered.**

**Response:** In response to the Staff's comment (and as discussed in our letter to the Staff dated May 4, 2012, in response to the Staff's letter of March 16, 2012), in 2011 we adopted the guidance for the testing of goodwill set forth in ASC 350-20-35 related to qualitative impairment testing. Under the approach we adopted, each of our nine reporting units would be subjected to the two-step quantitative impairment test at least once every three years. For those years when the two-step test is not performed, the Company would perform the qualitative assessment for the relevant reporting units. During 2012, we performed the qualitative assessment for six of our reporting units, including two reporting units for which we performed the quantitative two-step impairment test during 2011. These six reporting units are all included in our portfolio of downstream businesses, and the

date of their most recent quantitative two-step impairment tests are: a) Alcoa Power and Propulsion (APP – 2010); b) Alcoa Fastening Systems (AFS – 2010); c) Alcoa Wheels and Transportation Products (2010); d) Alcoa Forgings and Extrusions (2010); e) Latin American Extrusions (2011); and f) Building and Construction Systems (2011). The total amount of goodwill associated with these six reporting units is approximately \$3 billion, which is primarily concentrated in APP (\$1.6 billion) and AFS (\$1.2 billion).

Our qualitative assessment is a comprehensive analysis of the factors that would likely affect the fair value of the respective reporting units. We consider the factors set forth in ASC 350-20-35-3C, as well as other factors, as appropriate, that may be specific to the reporting unit being analyzed. Each of these factors is first evaluated to gauge its directional impact on the reporting unit's fair value as being positive, neutral or adverse; management then assesses the magnitude of potential impact for each factor as being high, medium or low. After considering the magnitude and weighting of each factor, management forms an overall conclusion as to whether it believes it is more likely than not that the reporting unit's fair value is less than its carrying value.

Some of the specific factors considered in our qualitative assessments of each of the Company's reporting units, consistent with the guidance in ASC 350-20-35-3C, included the following:

- the consistency and quality of earnings and cash flows individually, as well as compared to projected or planned results;
- changes in cost factors, including caustic, energy, alloying materials, scrap;
- changes in or loss of a key customer(s);
- changes in planned capital expenditures;
- other potential effects such as changes in the industry environment, political or regulatory environment, and in business strategy or product mix;
- the excess of the fair value over the carrying value as of the date of the most recent baseline quantitative valuation; and
- the current year weighted average cost of capital (WACC) as compared to the prior year.

In addition to the above reporting unit considerations, the Company evaluates other enterprise-wide factors as part of its qualitative assessment, including:

- global GDP growth estimates and macro-economic trends;
- interest rate trends;
- the current credit environment and access to capital;
- the Purchasing Managers Index; and
- trends in the Company's market capitalization and market capitalization of peer companies (see response to Comment No. 7 below for additional discussion on this item).

One of the more important considerations for the six reporting units subject to qualitative testing in 2012 was the level of cushion that existed as of the most recent quantitative two-step impairment test performed during the last two years. In every instance, there was a significant excess of estimated fair value over carrying value, with cushion levels (calculated as excess fair value over carrying value divided by carrying value) of at least 80%.

Nothing in our qualitative assessments of the six reporting units led us to conclude it was more likely than not that the fair value did not exceed their respective carrying values.

## Financial Statements

### Note A – Summary of Significant Accounting Policies

#### Goodwill and Other Intangible Assets, page 88

7. **We note in recent reporting periods, you state in your filings that you do not believe your market capitalization compared to total shareholder's equity at period end, is an indication that goodwill is impaired. We note you cite various macro-economic events and circumstances as your basis for conclusion. However, we further note in your stock performance graph on page 50, that you compare your stock performance to the S&P 500 Materials Index. We note the Materials Index and the S&P 500 in general have recovered since 2008, while your stock price has not. We also note your debt ratings provided by the three primary rating agencies for your long-term debt. Please further explain to us why you believe at December 31, 2012, your stock price is not depressed as a result of company specific factors.**

**Response:** In response to the Staff's comment, we confirm we did consider our market capitalization as one of many factors used in connection with our annual goodwill impairment testing. Similar to recent years, we concluded our market capitalization does not fully reflect the underlying fundamentals of the aluminum industry and the underlying estimated aggregate future cash flows of the Company's businesses, but rather is more a reflection of depressed commodity prices for aluminum, as discussed more fully below.

As we have previously communicated to the Staff, during the last several years, commodity prices have been highly volatile and have been depressed as compared to pre-2009 historical levels. This trend began with the global financial crisis in 2008 and has continued through today's macroeconomic environment, which is still burdened by significant uncertainty and slow global economic growth. To

help illustrate this point, in the fourth quarter of 2008, during the onset of the global financial crisis, the price of aluminum as quoted on the London Metal Exchange (LME) had dropped more than 50% from its July 2008 high of \$3,270 per metric ton to approximately \$1,500 per metric ton. Prices continued to fall in the first quarter of 2009, when LME averaged \$1,365. Beginning in the second quarter of 2009 and over the ensuing two years, the LME price experienced continued volatility, but generally trended upward, ultimately reaching \$2,786 in early May 2011, its highest point since mid-2008. The European debt crisis began to surface in the third quarter of 2011, at which point LME prices began to decline, averaging approximately \$2,400 and \$2,100 in the third and fourth quarter, respectively. After a brief increase in pricing during the first quarter of 2012 when LME averaged almost \$2,180, concerns over slow growth in China and the fiscal cliff in the U.S. continued to fuel uncertainty for much of the remainder of 2012, with LME prices averaging \$1,920 and \$2,000 in the third and fourth quarter, respectively, and remaining at the \$2,000 level during the first quarter of 2013.

During this same period, the share price for our common stock has become increasingly driven by the LME price of aluminum, experiencing volatility that very closely mirrors that of aluminum prices. Prior to 2008, Alcoa common stock was not necessarily driven by aluminum prices. For example, during the period from 2000 through 2007, the relationship between the price of our common stock and quoted LME aluminum prices had a coefficient of determination of 0.04, reflecting very limited direct relationship. However, during the period from 2008 (the onset of the financial crisis) through 2013, our common share price and LME aluminum prices had a coefficient of determination of 0.64, reflecting significant correlation. This trend has become even more pronounced during the period from 2011 through 2013, when the coefficient of determination has increased to 0.88, which suggests the common stock price is being driven almost exclusively by LME aluminum prices, as opposed to the projected cash flows of the Company's consolidated portfolio of both upstream and value-added businesses.

Following on this last point, since our common stock price is largely determined by LME prices, our market capitalization does not reflect the strong performance of our midstream businesses and downstream businesses, each of which continues to deliver improved operating results that are largely unaffected by aluminum price fluctuations.

In response to the Staff's comment regarding the Company's common stock performance as compared to the Standard & Poor's (S&P) 500 Index and the S&P Materials Index, we would respectfully point out that most companies included in those S&P indices do not operate in a commodity business similar to Alcoa. We believe it is more representative to compare the performance of our common stock to the stock of our peers in the industry (as we have presented on page 36 in the Company's 2013 Definitive Proxy Statement Schedule 14A filed on March 14,

2013), who have experienced similar price volatility that aligns closely with commodity prices. When viewed in this context, the performance of our common stock has been consistent with aluminum peers over the past five years, with Alcoa slightly outperforming such peers over the past three years.

We also note the Staff comment regarding the Company's debt ratings provided by the three primary rating agencies and wish to inform the Staff that both S&P and Fitch, while modifying their outlook from stable to negative, have affirmed their investment-grade ratings of the Company's long-term debt within the last month. It is our understanding that Moody's will issue its decision during the second quarter of 2013.

In summary, we believe the ongoing global economic crisis that began in 2008 has had a significant adverse impact on commodity prices in general and aluminum prices in particular, creating significant volatility and continued downward pressure. The sustained low aluminum prices have a direct negative impact on our share price, which depresses our overall market capitalization such that it does not reflect the future cash flows for both our upstream businesses, as well as the balance of our diversified businesses.

Therefore, while we do consider market capitalization in connection with our annual goodwill impairment testing, we believe using it as a reference point over a relatively short-term period is not appropriate. Rather, we estimate the fair value of our reporting units using assumptions we believe are reasonable and consistent with anticipated and past performance. Accordingly, our discounted cash flow models reflect more of a long-term view (15 years), which we believe is more indicative of the fair value of the Company and its underlying diversified businesses.

**8. We note the amount of goodwill you present in Corporate, please tell us how you allocate this goodwill to your reportable segments, including if there have been any changes in your allocation during the periods presented.**

**Response:** We wish to inform the Staff that no amounts of Corporate goodwill are allocated for segment reporting purposes, as the goodwill in Corporate is not used for management's evaluation of segment operating performance metrics. However, the balance of goodwill recorded in Corporate is specifically associated with several of our reporting units, and is therefore included within the respective reporting unit goodwill balances for purposes of impairment testing. In this sense, the Corporate goodwill is perhaps more accurately characterized as being attributable to certain reporting units as opposed to being "allocated" in a more traditional sense. The amount of goodwill attributable to each of the Company's reporting units (including the amount reflected in Corporate for segment reporting purposes) was determined in 2002, when the Company adopted the current method of accounting for goodwill; in response to the Staff's question, we hereby confirm such amounts have remained unchanged since that time other than changes resulting from acquisition/divestiture transactions and currency fluctuations.

\* \* \* \* \*



The Company acknowledges the following:

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

If you have any questions with respect to the foregoing, please contact me at (212) 836-2685 or Graeme Bottger, Vice President and Controller, at (412) 553-2169.

Sincerely,

/s/ William F. Oplinger

William F. Oplinger

Executive Vice President and Chief Financial Officer