

May 4, 2012

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, 2011  
Filed February 16, 2012  
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 March 16, 2012 (the "Comment Letter"), relating to the Form 10-K for the fiscal year ended December 31, 2011 (file no. 1-03610) (the "2011 10-K"), filed by the Company on February 16, 2012. 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, 2011**

**Business**

**Sources and Availability of Raw Materials, page 15**

- 1. In future filings, please disclose the approximate amount of each of your key raw materials needed to produce a ton of alumina and, similarly, a ton of aluminum. While the amount of raw materials needed on a per ton basis will fluctuate based on the type and specifications of the final products and other factors, estimates or ranges of these amounts would provide useful information to an investor regarding your use of key raw materials. Please also revise future filings to disclose the approximate amount of natural gas consumed per ton at your facilities' normal operating levels and consumption rates of key sources of electricity, where not already provided.**

**Response:** In response to the Staff's comment, in future annual filings, the Company will disclose general ranges of amounts for the key raw materials needed to produce a ton of both alumina and aluminum.

In response to the Staff's request concerning natural gas and electricity, the Company believes it provided sufficient disclosures that addressed the sources and availability of such inputs in the 2011 10-K (see pages 15 through 20). Additionally, as noted above, in future annual filings, the Company will provide a range for both the amount of natural gas needed to produce a ton of alumina and the amount of electricity needed to produce a ton of aluminum. As such, we do not believe providing natural gas and electricity consumption rates per ton for each of the Company's facilities provides any further meaningful information to investors.

**Legal Proceedings, page 31**

**Litigation**

**General**

- We note that in many instances you disclose that you believe the outcome of your contingencies is uncertain and you are unable to reasonably estimate your range of possible loss. It appears in many cases these matters have been on-going for extended periods. We would expect that as contingencies progress, the range of possible loss would become clearer with the passage of time and developments arising from the proceedings. For each matter you discuss in your filing where you present the above conclusion, please provide us with an analysis of why you believe a range of possible loss is not reasonably estimable.**

**Response:** In response to the Staff's comment, the Company respectfully submits that it makes disclosure of its material pending legal proceedings (and material proceedings known to be contemplated by governmental authorities) and material developments in such proceedings, as required by Item 103 of Regulation S-K. The Company provided sufficient disclosure about the posture and development of various litigation matters in our 2011 10-K, including in Item 3. Legal Proceedings and in Footnote N. Contingencies and Commitments to our financial statements. Consistent with ASC 450-20, the Company records a provision with respect to a claim, suit, investigation or proceeding when it is probable that a liability has been incurred and the amount of the loss can reasonably be estimated. We have noted throughout our disclosure where we have recorded such charges.

The Company is also engaged in several litigation matters, however, for which we are unable to estimate a range of reasonably possible losses. Where that is the case with regard to a litigation matter discussed in the Company's filings, we have

provided an express statement to that effect in keeping with the requirements of ASC 450-20 in Item 3 of our 2011 10-K and in subsequent reports on Form 10-Q as appropriate. While the Company's litigation matters have been "on-going for extended periods," we are not able currently to provide an estimate of the reasonably possible losses with respect to certain matters in our filings where we present this conclusion. Claims, suits, investigations and proceedings are inherently uncertain, and it is not possible to predict the ultimate outcome of these matters. Further, the Company is unable to provide such an estimate due to a number of other variables with respect to these claims, suits, investigations and proceedings, including considerations of the procedural status of the matter, the legal defenses available to the Company, the parties' respective litigation strategies, and the ongoing discovery and development of information important to the matters. We discuss each of the matters for which we are unable to estimate a range of reasonably possible losses in turn below.

*Alba claim, related governmental investigations and two derivative suits*

With regard to the Alba matters, although Alba's suit was first filed by Alba against the Company in late February 2008, it was almost immediately administratively closed in March 2008 in response to a motion by the U.S. Department of Justice ("DOJ") to allow the DOJ to conduct its own investigation. All discovery in the private suit was paused as part of that administrative stay. In November 2011, the administrative stay was partially lifted for the limited purpose of allowing the Company to move to dismiss Alba's lawsuit. As we disclosed in our Form 10-Q for the quarter ended March 31, 2012 (the "2012 First Quarter 10-Q"), Alcoa filed its motion to dismiss the Amended Complaint on January 27, 2012. Briefing on the motion was completed on March 12, 2012, and the Court heard oral argument on March 29, 2012. The motion to dismiss is pending before the Court, and no fact-finding or other progress has been made in the case that would provide us with any information about the strength of the plaintiff's position or otherwise to inform a reasonable estimate of possible losses. With regard to the two derivative actions stemming from the Alba complaint, those have also been stayed since 2009 pending the DOJ investigation, remain at preliminary stages and the Company is similarly unable to predict the outcomes or to estimate any reasonably possible losses. Finally, with regard to the related government investigations, as disclosed in our 2012 First Quarter 10-Q, we have been in dialogue with both the DOJ and the Commission, but the Company is unable to conclude that the likelihood of a loss is currently probable. And because the terms of any potential resolution are unclear at this time, the Company is unable to provide an estimate of any reasonably possible loss or range of loss.

*Environmental matters*

Dany Lavoie v. Alcoa Canada, et al.: While this litigation began in 2005, in 2007 the court authorized, and plaintiff filed, a class action on behalf of people who

allegedly suffered property damage or personal injury damages caused by the emission of Polycyclic Aromatic Hydrocarbons or "PAHs" from the smelter and deposited on the lands and houses of the St. Georges neighborhood and its environs (the "Class"). Despite the passage of more than four years, we are continuing in the discovery phase of the case and the plaintiff has not quantified the damages he seeks to recover. Without the amount sought by plaintiff and given the various possible damages that could be alleged on behalf of the Class and the fact that discovery is not complete, the Company is unable to reasonably estimate the extent of its potential liability or a range of reasonably possible loss.

Musgrave v. Alcoa, et al.: The Company advises the Staff that the Company has included updated disclosure of this proceeding in its 2012 First Quarter 10-Q to reflect developments during the 2012 first quarter. In that update, the Company disclosed that plaintiffs have indicated they intend to claim up to \$13 million in damages at trial, which began on April 10, 2012. Due to the inherent uncertainties of jury trials, the Company was unable to reasonably predict the outcome of the trial. As a further update to the 2012 First Quarter 10-Q, the jury ruled in favor of the Company on May 1, 2012. This development will be disclosed in the Company's Form 10-Q for the quarter ended June 30, 2012.

Barnett, et al. v. Alcoa and Alcoa Fuels, Inc.: These cases involve claims by individuals who are similarly situated with the plaintiffs in the Musgrave matter and the court has granted the parties' joint motions for a general continuance of trial settings. Discovery in these cases is stayed pending the outcome of the Musgrave matter. Plaintiffs in the Barnett cases have not indicated the amount of damages they intend to claim. They have merely alleged that their medical condition is a result of exposure to wastes at the Squaw Creek Mine, but no further information is available due to the discovery stay. Without such information, we cannot now estimate a range of reasonably possible loss.

Italy - Fusina and Portovesme sites: With respect to the litigation concerning the Fusina and Portovesme, Italy sites, Alcoa is unable to compute an upper bound for the potential loss from these matters. The disclosure in the 2011 10-K describes the tentative settlement agreements relating to these matters. Furthermore, Note N on page 117 of the 2011 10-K discusses the reserves taken to address the expected losses to the Company upon finalization of these agreements. Alcoa is unable to estimate a range of reasonably possible loss beyond what is described in Footnote N because the Ministry of Environment (MOE) has not yet approved the remediation plans. The Company understands that the MOE has substantial discretion in defining what must be managed under the Italian soils law. The availability of appropriate landfills must also be considered. As a result, considerable uncertainty remains as to the scope and cost of the final remediation plans. Until such plans are approved, it is not reasonably possible to estimate an upper value for possible loss because it is not certain what actions the MOE will require. This is especially true at old industrial sites with complicated environmental impacts and where the complete restoration to pre-industrial conditions is not practicable.

Alcoa Alumínio S.A. – Juruti license: This action, brought by the public prosecutors of the State of Pará in Brazil, concerns the Company’s new bauxite mine in Juruti and the impact of the project on part of the region’s water system and alleges that certain conditions of the original installation license were not met by the Company. The plaintiffs requested an injunction to suspend the environmental license of the Juruti mine and direct the State of Pará to advise which license conditions have not been fulfilled by the Company. The action also seeks to impose several obligations aiming to redress, avoid and compensate alleged damages caused by activity of the mine to the “igarapés” (small creeks) of “Planalto de Juruti” (Juruti’s plateau).

The court granted a preliminary injunction but only for the State of Pará to identify those license conditions that had not been fulfilled. The State advised that all the conditions have been fulfilled (rendering the issue moot). The court, in its decision on the preliminary injunction request, indicated the insufficiency and bias of the plaintiffs’ evidence. The Company’s position is that while the roadwork associated with the project may have caused some minor damage of limited impact to the small creeks, this impact had been fully repaired when the suit was filed. The Company also believes that Jará Lake has not been affected by the roadwork or any other project activity and any evidence of pollution from the project would be unreliable. Following the preliminary injunction, the plaintiffs have taken no further action. The Company is not certain whether or when the action will proceed. Given the current uncertainty in this case, the Company is unable to reasonably predict an outcome or estimate a range of reasonably possible loss.

Orange County Water District v. Northrop Corporation, et al. and Orange County Water District v. Sabic, et al.: These actions allege contamination or threatened contamination of a drinking water aquifer by Alcoa, certain of the entities that preceded Alcoa at the same locations as property owners and/or operators, and other current and former industrial and manufacturing businesses that operated in Orange County in past decades. In the Northrop case, plaintiff has asserted a total remedy cost of \$150 million plus attorneys’ fees. Currently 13 original defendants remain in the case. The defendants do not believe such costs are consistent with appropriate remediation standards and the Company contends that its liability, if any could be established, is minimal. Trial reconvened on March 26, 2012 and is projected to last into August 2012. Notwithstanding the parties’ contentions regarding the appropriate remediation and liability, the Company is not able to predict an outcome or estimate a range of reasonably possible loss.

In the Sabic matter (and unlike the Northrop case), the plaintiff has not yet disclosed its estimate of remediation costs. While Alcoa believes that its liability in this matter should be insignificant, without knowledge of the remedy that plaintiff is seeking, the Company is unable to estimate a range of reasonably possible loss.

**European Commission Matters, page 34**

3. **We note your disclosure regarding the electricity tariff matter in Italy, which states you expect a payment in the range of \$300 to \$500 million will be required. You further state that you recorded a charge of \$250 million for this matter in 2009, which included the write-off of a \$20 million receivable. Please tell us the full amount of the liability you have recorded for this matter as of each balance sheet date presented. To the extent your accrual is less than the minimum range of your expected payment, please explain to us why you believe the amount of your accrual is appropriate.**

**Response:** In response to the Staff's comment, the Company respectfully advises the Staff that a total charge of \$250 million was recorded as a combination of liability (\$230 million) and contra-asset (\$20 million) in the fourth quarter of 2009, following the issuance of the European Commission's (EC) decision in this matter. There have been no adjustments to the amounts recorded in 2009 since that time. The contra-asset represents the write-off of a receivable that had been due to the Company from the Italian government under the tariff structure on which the EC had just rendered its decision. As discussed in Item 3 – Legal Proceedings and in the notes to the consolidated financial statements, pending formal notification from the Italian Government, management estimates a payment in the range of \$300 million to \$500 million will be required (which payment may be demanded before all steps in the appellate process being pursued by the Company are exhausted), although the timing of such payment is uncertain.

Management determined its charge of \$250 million for this matter based on legal analysis of the EC decision, including: 1) distinctions drawn by the EC regarding the facts and circumstances surrounding the two affected smelters at Fusina and Portovesme, Italy; and 2) the legal arguments available to the Company. The amounts recorded represent management's best estimate of the ultimate loss associated with this matter, upon conclusion of all available appellate alternatives. Notwithstanding management's judgment of the outcome, it is possible the Company will have to make a cash payment in excess of this amount while the legal process is exhausted.

The Company will continue to disclose all relevant developments in this matter related to any required cash payments, adjustments to the recorded liability, and updates on the appellate process.

**Environmental Matters, page 35**

4. **In future filings, please expand your disclosure to provide a clear status update regarding the matter of Dany Lavioe vs. Alcoa Canada, et al. Your**

**current disclosure indicates that certain motions of the company were denied in late 2010 with no indication of proceedings since that time period. Please provide a current status of this litigation or otherwise state that no further proceedings have occurred.**

**Response:** In response to the Staff's comment, the Company has included a status update on this matter in its 2012 First Quarter 10-Q. This disclosure clarifies that no further formal proceedings have occurred since late 2010. The Company will provide further status updates regarding this matter in future filings as appropriate.

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

**Segment Information**

**Alumina, page 54**

5. **In future filings, please significantly expand your discussion of this segment's operating results to provide a robust discussion of the results of operations related to bauxite mining activities and power generation. Your discussion should include items such as tons mined, average selling price and mining costs per ton, electricity generation costs per unit and quantities sold to other segments as well as total sales to third parties. Please provide us your proposed disclosure revisions as part of your response.**

**Response:** In response to the Staff's comment regarding bauxite mining activities, the Company respectfully advises the Staff that a robust discussion of the results of operations related to bauxite mining activities is not appropriate in the discussion of the operating results of the Alumina segment because such activities are an incidental means of obtaining an input (bauxite), which is used to produce alumina. Except on a very limited basis, the Company does not market or sell bauxite to third parties, nor realize revenue from bauxite mining, but, instead, mines sufficient bauxite to supply its alumina refineries. The Company respectfully directs the Staff's attention to the Response to Comment No. 16 for additional information.

In response to the Staff's comment regarding power generation, management respectfully advises the Staff that the Company's power generation activities are mostly included within the Primary Metals segment. Power is one of the principal inputs in the production of aluminum, and, as such, the Company either wholly owns or has equity interests in various power facilities as a cost-effective way of procuring some of its power needs. As noted on page 16 of the Company's 2011 10-K, self-generation accounts for 22% of the power used at its smelters. The Company generally purchases the remainder of its power needs under long-term power purchase agreements. In periods when we do not consume all power generated and/or purchased, the Company sells this excess power into external markets. Revenue generated in 2011 from the sale of excess power represented

less than three percent of the Primary Metals and Alumina segments' third-party sales combined. Additionally, the margin impact of such sales is insignificant to the segment profit measure (after-tax operating income) of both segments. Therefore, the Company respectfully advises the Staff that a robust discussion of the results of operations related to power generation is not relevant in the discussion of the operating results of the Primary Metals or Alumina segments.

**Liquidity and Capital Resources, page 61**

6. **We note you have substantial sales and operations outside the U.S., including jurisdictions that appear to have lower tax rates. In future filings, please quantify and disclose the total amount of cash held in foreign jurisdictions compared to U.S. cash holdings and also disclose the range of possible tax consequences associated with repatriating cash from foreign sources.**

**Response:** In response to the Staff's comment, in future annual filings, the Company will disclose the total amount of cash held in foreign jurisdictions (approximately \$600 million at December 31, 2011) compared to U.S. cash holdings (approximately \$1,300 million at December 31, 2011) and, if significant, also disclose a range of possible tax consequences associated with repatriating cash that exists in our foreign subsidiaries. The Company wishes to inform the Staff that management does not have a current expectation of repatriating cash held in foreign jurisdictions. This is based on the fact that the Company has a number of commitments and obligations related to its growth strategy in these foreign jurisdictions, resulting in the need for cash outside the U.S.

**Critical Accounting Policies and Estimates, Goodwill, page 69**

7. **We note you adopted the new accounting guidance for testing goodwill for impairment in September, 2011. We also note that for six of your reporting units you determined it was not more likely than not that their fair values were less than their carrying values based on a qualitative assessment. Please help us more fully understand the specific factors you considered in your qualitative assessments. Also, please help us more fully understand the significant assumptions you used in estimating the fair value of your Primary Metals segment.**

**Response:** In response to the Staff's comment related to the six reporting units for which we performed a qualitative assessment, management considered a variety of specific factors, consistent with the guidance in ASC 350-20-65-1, including the following:

- the consistency and quality of earnings and cash flows individually, as well as compared to projected or planned results;
- the current and forward prices of aluminum on the London Metal Exchange (LME) in 2011 as compared to the prior year;



- 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 response to the Staff's comment related to the significant assumptions used in estimating the fair value of the Company's Primary Metals segment, we used a discounted cash flow model, which took into consideration the following significant assumptions:

- the estimated future price of aluminum on the LME;
- the WACC;
- forecasted revenue growth and operating margin percentage;
- forecasted changes in working capital levels;
- planned capital expenditures; and
- the expected tax rate.

The Company respectfully advises the Staff that the estimated fair value of the Primary Metals segment was substantially in excess of its carrying value as noted on page 70 of the 2011 10-K. Additionally, at this time, we re-affirm our commitment to the Staff, as expressed in our letter of July 23, 2010 (in response to the Staff's letter dated July 13, 2010), to provide additional disclosures of quantitative information regarding assumptions used for any reporting unit where the estimated fair value was not substantially in excess of its carrying value.

#### **Financial Statements**

#### **Note A – Summary of Significant Accounting Policies**

#### **Property Plants and Equipment, page 81**

8. **We note your disclosure that indicates for “greenfield assets”, you use the units of production method to determine depreciation. In future filings, please clarify what this term means and the nature of the assets this method is being applied to. In addition, please tell us how you depreciate brownfield assets, if different.**

**Response:** In response to the Staff's comment, the term “greenfield assets” is meant to refer to the construction of new assets on undeveloped land. Recent examples of the Company's greenfield assets are its smelter in Iceland, bauxite

mine in Juruti, Brazil, and hydroelectric power project in Brazil. These assets require a significant period (generally greater than one-year) to ramp-up to full production capacity. As a result, management determined the units of production method is a more systematic and rational method for recognizing depreciation on these assets.

Brownfield assets refer to the expansion or modernization of existing facilities. A recent example of the Company's brownfield assets was the expansion of the Alumar consortium alumina refinery in São Luís, Brazil. This expansion required a short period for ramp-up (approximately six months); therefore, the straight-line method of depreciation was employed, as there was not a significant difference in the calculation of depreciation under the two methods during the short ramp-up period.

In future annual filings, the Company will clarify its intended meaning in its use of the term greenfield assets and the nature of the assets utilizing the units of production method.

- 9. Please expand your accounting policy disclosures in future filings to discuss your accounting for: mineral rights, mineral exploration costs, mine development costs, overburden removal in both the development and production stage and your methods of amortizing any such costs that are capitalized. Please also explain to us your policy disclosure that states "mineral reserves" are depleted using the unit of production method. It appears you may mean mineral rights and mine development costs. Otherwise, please advise. Please provide us your proposed disclosure revisions as part of your response.**

**Response:** In response to the Staff's comment, the policy disclosure that states "mineral reserves" are depleted using the units of production method does refer to "mineral rights." Management does not believe the Company's accounting policies for mineral rights, mineral exploration costs, mine development costs, overburden removal in both the development and production stage, and our methods of amortizing any such costs that are capitalized constitute significant accounting policies. As two points of reference for the Staff's consideration, the net carrying value of the Company's mineral rights and mine development costs are \$49 million and \$221 million, respectively, as of December 31, 2011. As a result, management believes providing such accounting policies in future annual filings would not be material to an investor or user of the Company's financial statements. Additionally, the Company plans to remove the sentence that refers to the use of the units of production method for "mineral reserves" since it is immaterial to the net carrying value of Alcoa's properties, plants, and equipment (\$19,416 million at December 31, 2011).

- 10. It appears in your tabular presentation of useful lives; you are grouping your bauxite mines and power generation facilities within the Alumina segment**

**and are referring to them as “structures.” In future filings, please separately disclose the average useful lives of your mines, power generation facilities, and alumina refineries.**

**Response:** In response to the Staff’s comment, management respectfully advises the Staff that the Company’s power generation facilities are grouped principally within the Primary Metals segment. In future annual filings, the Company will separately disclose the average useful lives of its mines, power generation facilities, alumina refineries, and any other subcategories of structures in alignment with Comment No. 11 below.

**Note H – Property Plants and Equipment, net, page 103**

**11. We note your line item that presents “land and land rights including mines.” It is unclear what costs are included in this category. Please tell us the amounts you have capitalized for the following items:**

- **Mineral rights**
- **Capitalized mine development costs including development stage overburden removal**

**To the extent material, given the disparate nature of your many fixed assets, it would facilitate investor understanding of your fixed assets if you presented a breakout of the asset class you refer to as “structures”. A suggested breakout might include capitalized mine development costs, power generation facilities, refineries, smelters, and rolling mills, at a minimum.**

**Response:** In response to the Staff’s comment, “land and land rights, including mines” includes the cost to acquire land and mineral rights; however, mine development costs are included in other noncurrent assets (see the Company’s response to Comment No. 12). The net carrying value of the Company’s mineral rights and mine development costs are \$49 million and \$221 million, respectively, as of December 31, 2011. In future annual filings, the Company will present a detailed breakout of the asset class described as “structures,” as suggested by the Staff.

**Note J – Other non-current assets page 106**

**12. Please explain to us the nature of the line item referred to as “deferred mining costs, net”. Please explain why this amount is not presented with your fixed assets and also tell us the method you are using to amortize this cost.**

**Response:** In response to the Staff’s comment, the nature of the line item referred to as “deferred mining costs, net” relates to development costs to prepare a mine for the next phase of its life cycle, construction and/or production. Specifically,

such costs typically represent the advance removal of overburden and other waste material related to bauxite mines. The Company utilizes the units of production method to amortize such costs. These costs are not presented within the Company's fixed assets because they relate to activities that are an incidental means of obtaining the primary input (bauxite) for the production of alumina (see the Company's response to Comment No. 16). Additionally, these costs do not reflect and are not incurred in connection with the acquisition of a physical asset. As a result, the Company's policy for deferred mining costs is to present them as a noncurrent asset, separate from fixed assets.

**Note Q – Segment and Geographic Area Information, page 120**

13. Please revise future filings to disclose revenues by product line for each reportable segment as required by ASC 280-10-50-40. Please provide us your proposed disclosure revisions with your response.

**Response:** As discussed more fully in response to the Staff's Comment No. 14 below, the Company has four operating segments: 1) Alumina; 2) Primary Metals; 3) Global Rolled Products; and 4) Engineered Products and Solutions. For each of Alumina, Primary Metals and Global Rolled Products, the products within the respective segments are substantially similar and share the same production processes. (Note as discussed in response to the Staff's Comment No. 5 above, the Primary Metals and Alumina segments include an immaterial amount of revenue related to energy sales.) We therefore believe the segment revenue disclosures for these three segments are consistent with the requirements of ASC 280-10-50-40.

With respect to Engineered Products and Solutions, the production processes and associated product offerings, while all focused on aluminum and other metals, are less homogenous. The Company respectfully advises the Staff that, in future annual filings, it will include additional revenue information by product group, which we believe will conform to the requirements of ASC 280-10-50-40. As the Staff requested, we have included a preliminary example of our proposed disclosure below:

Sales by major product grouping were as follows:

<u>(in millions)</u>	<u>2011</u>	<u>2010</u>	<u>2009</u>
Alumina	\$ 3,359	\$ 2,740	\$ 2,061
Primary aluminum	7,959	6,842	5,021
Flat-rolled aluminum	7,642	6,277	6,069
Investment castings	1,700	1,521	1,551
Fastening systems	1,313	1,070	1,204
Aluminum structural systems	973	884	928
Aluminum wheels	656	475	406
Other extruded aluminum and forged products	1,010	930	802
Other	339	274	397
	<u>\$24,951</u>	<u>\$21,013</u>	<u>\$18,439</u>

**14. Please provide us, on a supplemental basis, with a copy of the monthly financial information received by your CODM. Please also provide us with an understanding of your organizational structure, including how you currently define your CODM, operating segments, and reporting units.**

**Response:** In response to the Staff's comment, the Company is organized into four businesses, which represent the Company's four operating segments: 1) Alumina; 2) Primary Metals (note Alumina and Primary Metals together form the Company's Global Primary Products (GPP) businesses) ; 3) Global Rolled Products (GRP); and 4) Engineered Products and Solutions (EPS), each of which is described more fully below.

GPP refers to Alcoa's "upstream" operations, which include the mining and refining of bauxite into alumina, and the smelting of alumina into primary aluminum. GPP also includes limited power-generation assets as discussed more fully in response to Staff Comment No. 5 above. The Company conducts these operations through its worldwide refining and smelting systems. Sales of upstream products are split between internal and third-party customers. GRP constitutes Alcoa's global "midstream" operations, comprising the production of aluminum sheet and plate for use across various industries, including packaging, automotive, aerospace, commercial transportation and building and construction. EPS represents the Company's global "downstream" operations, which include investment castings, fasteners, aluminum wheels, aluminum structural systems, and forged and extruded aluminum products. Similar to GRP, EPS sells into a number of end-markets across various industries. Both GRP and EPS sell predominantly to third parties. We respectfully direct the Staff to Item 1 within Part I of the 2011 10-K for a more detailed description of the operating locations for the four segments.

Each of GPP, GRP and EPS has a Group President, who reports directly to the Chairman and Chief Executive Officer. The Group Presidents are responsible for the operations of their respective Groups. These Group Presidents represent segment managers as contemplated by ASC 280-10-50-7 as they are "directly accountable to and maintain(s) regular contact with the chief operating decision maker to discuss operating activities, financial results, forecasts, or plans for the segment."

The Company respectfully advises the Staff that Klaus Kleinfeld, Chairman of the Board of Directors and Chief Executive Officer, is considered to be the chief operating decision maker (CODM) of Alcoa in accordance with the criteria in ASC 280. As mentioned above, the Group Presidents report directly to Mr. Kleinfeld, and he is fully engaged in the details of assessing the performance of

and allocating resources to our four segments. Mr. Kleinfeld regularly reviews segment performance both in connection with the monthly closing and reporting process, as well as during monthly presentations of actual and forecast results by the Group Presidents. The conclusion that the CEO is the CODM is also evidenced by a number of policies/procedures and organizational aspects of how decisions are made in Alcoa. For example, CEO approval is required for annual operating and capital plans as well as significant capital or leasing transactions (\$10 million and higher). Additionally, with respect to general signing authority, CEO approval is necessary for purchase/sale contracts exceeding certain thresholds in terms of value and duration. Mr. Kleinfeld is also required to approve all movements of people into senior-level management positions both within the Groups as well as within the Corporate resource units. All of these factors support the position that Mr. Kleinfeld, as CEO of Alcoa, is the Chief Operating Decision Maker.

As stated above, Alcoa's four businesses constitute its operating (and reportable) segments under ASC 280: Alumina, Primary Metals, GRP and EPS. We note the Staff also inquired as to the Company's reporting units. As discussed in our 2011 10-K, the Company has nine reporting units for purposes of evaluating goodwill in accordance with ASC 350-20. In the case of Alumina, Primary Metals and Global Rolled Products, the operating segments are managed as global operations and therefore represent reporting units, as all the components within the respective segments are similar. Within the EPS segment, there are five components, each of which constitutes a reporting unit as defined under ASC 350-20-35, as the components represent "a business... for which discrete financial information is available and segment management regularly reviews the operating results of that component." Each of these reporting units has a manager responsible for operating performance who reports directly to the Group President of EPS.

We have supplementally provided the Staff with copies of financial presentations prepared for and used by the Company's CODM to assess the monthly operating performance of the Company's segments for the first quarter of 2012. We have also included an example monthly presentation of operating results delivered to Mr. Kleinfeld and members of executive management.

*Copies of each of these presentations have been provided separately to the Staff via Federal Express. The Company has requested Confidential Treatment for these documents and also requested they be returned to the Company when the Staff's review is completed.*

### **Engineering Comments**

#### **Bauxite Interests, page 6**

- 15. We note your table of bauxite mining rights/lease expiration dates for some of your operating mines in your filing. This information implies you have**

**sufficient raw materials for the assured economic and reliable supply for both your integrated bauxite mining and related alumina processing operations. At your present mining/consumption levels, please modify your filing and provide the estimated duration for your mining activities at these locations along with the actual annual production for each of your mines.**

**Response:** In response to the Staff's comment, the Company provides information to investors about its consumption of bauxite on an aggregate basis. The Company states on page 5 of its 2011 10-K that in 2011 it consumed 43.0 million metric tons (mt) of bauxite from Alcoa World Alumina and Chemicals and its own resources and 7.5 million mt from related and unrelated third parties. In addition, the 2011 10-K states that "Alcoa's present sources of bauxite are sufficient to meet the forecasted requirements of its alumina refining operations for the foreseeable future." This disclosure informs investors of the total amount of bauxite consumed annually from the Company's bauxite interests and indicates that adequate sources of this input are available going forward on a long-term basis. The Company respectfully directs the Staff's attention to the Response to Comment No. 16 for additional information. As a result, the Company does not believe that it is necessary to modify its filing to include this additional disclosure.

- 16. We also note your statement that your present resources are sufficient to supply your operations for the foreseeable future and in footnote 11, you added 1.6 Mt of reserves to your current concession in 2011. As an integrated aluminum producer, bauxite mining and the associated alumina operations have a significant role in your continued operations, overall profitability, and consequent stock price, and are material to investors. Please revise your filing and state your proven and probable reserves for your mining properties. In the event you do not have proven and/or probable reserves, please provide a clear statement, within your filing, that your properties do not have proven and probable reserves.**

**Response:** In response to the Staff's comment, the Company notes that in footnote 11 to the Active Bauxite Interests table on page 6 of the 2011 10-K, the use of the word "reserves" to refer to bauxite deposits was an inadvertent use of the term and will be corrected in future annual filings. The Company respectfully directs the Staff's attention to the Company's response to Staff Comment No. 62 contained in the Company's September 7, 2007, letter responding to the comments of the Staff contained in the Staff's letter dated May 21, 2007, relating to the Registration Statement on Form S-4 (file no. 333-142669) and the Schedule TO-T (file no. 005-43305), each filed by the Company on May 7, 2007, and the Form 10-K for the year ended December 31, 2006 (file no. 001-03610), filed by the Company on February 15, 2007. Relevant portions of that response are set out below (with omissions noted). The nature of the Company's mining activity has not changed in the last five years and we are not engaged in significant mining operations within the meaning of Industry Guide 7.

“However, the Company is not engaged in significant mining operations within the meaning of Industry Guide 7. Rather, the Company is engaged in the aluminum business as a vertically integrated aluminum company. The Company derives its revenues from the sale of alumina, aluminum and fabricated products. The Company mines bauxite to supply its alumina refineries. ... In each case, the Company’s mining activities are incidental to its business and merely serve as a method for obtaining an input necessary for the Company’s commercial operations, *i.e.* the sale of alumina, aluminum and fabricated products. In addition, the Company respectfully notes that, in further recognition of the status of bauxite ... as input[s] and not revenue generating sources, it does not account for bauxite ... deposits as an asset.

As stated above, the Company’s bauxite mining activities do not constitute significant mining operations within the meaning of Industry Guide 7. In this regard, the Company respectfully notes to the Staff, from a commercial perspective, that the Company generally does not market or sell bauxite to third parties, nor realize revenues from bauxite mining, but, instead, mines sufficient bauxite to supply its alumina refineries. As noted above, bauxite is an input used in the Company’s commercial operations, *i.e.* the sale of alumina, aluminum and fabricated products, and the Company’s bauxite mining activities are an incidental means of obtaining such input. Reflecting this understanding, the Company does not designate bauxite deposits as “reserves” and does not record bauxite deposits as an asset in its consolidated balance sheet.

In addition, the Company respectfully notes to the Staff that several characteristics of bauxite distinguish it, and the bauxite mining activities of the Company, from the minerals and ores which companies typically subject to Industry Guide 7 mine and the activities such companies conduct in connection therewith. More specifically, the Company notes for the Staff that bauxite essentially is dirt, with aluminum oxide contained in it. Aluminum oxide (also known as “alumina”) is one of the most plentiful elements in the earth’s crust. As such, bauxite is widely distributed throughout the globe. As noted above, bauxite is a feedstock for the Company’s alumina refineries, which in turn is a feedstock for the Company’s aluminum smelting operations. The smelting operations provide aluminum for the Company’s fabricating operations.

With respect to the Company’s bauxite “mining” activities, the Company respectfully submits that these differ from the activities conducted by companies typically understood to be conducting “mining” activities. In this regard, the Company notes to the Staff that bauxite is found close to the earth’s surface and, therefore, its “mining” does not require the deep subterranean excavations often conducted to obtain other minerals and ores, nor does bauxite require much processing. In bauxite mining, overburden is



removed by heavy earthmoving equipment from small areas at a time. Also, unlike other minerals and ores, given the large size of the Company's bauxite resources, the abundant supply of bauxite globally and the length of the Company's rights to bauxite, it is uneconomic to incur significant costs to establish bauxite reserves that reflect the size of the bauxite resources the Company has. Therefore, bauxite mining is planned on an incremental basis. Detailed assessments are progressively undertaken within a proposed mining area and mine activity is then planned to achieve a uniform quality in the supply of blended feedstock to the relevant refinery.

With respect to the considerations relevant to its determination to conduct mining activity with respect to a given deposit, the Company respectfully notes to the Staff that the suitability of any particular bauxite deposit for refining into alumina depends on a number of characteristics of the deposit. It is also a function of the development and application of technologies appropriate to the specific chemical and physical characteristics of the material. The most important characteristics in determining the cost of producing alumina from a particular bauxite deposit are: the chemical nature of the bauxite; the proportion of "available alumina" in the bauxite; the depth and nature of the overburden; and the proximity of the deposit to a refinery location. A bauxite deposit close to a refinery (or to a location at which a refinery can be constructed) may be cost effective notwithstanding a relatively low percentage of available alumina. Only bauxite with a high percentage of available alumina is suitable for shipping long distances.

In addition to the considerations outlined above, the Company notes to the Staff that there are other important factors to be considered in assessing the attractiveness of a given bauxite deposit. In this regard, the Company notes that the main cash cost in the refining process, after the cost of the bauxite itself, is the energy required to generate process steam. Bauxite which is gibbsitic in chemical composition requires substantially less energy to refine than does diasporic bauxite, which requires higher temperature and pressure in the digestions system, resulting in two to three times the energy consumption. Energy for the refining process can be sourced from natural gas, fuel oil or coal. Consequently, the local availability and price of such energy also influences the relative economic attractiveness of a particular bauxite deposit. In addition, bauxite contains various amounts of other minerals, including silica and iron, and organic compounds. The presence of high levels of organics requires additional processing of the caustic liquor, but does not prevent the bauxite being used as an alumina feedstock. High levels of silica generally result in greater consumption of caustic soda in the refining process, and so the price and availability of caustic soda at a particular location will also be taken into account in assessing the attractiveness of the bauxite deposit.

For the reasons outlined above, the mining metrics set forth in Industry Guide 7 are not material to an investor's understanding of the Company's business .... Furthermore, the Company respectfully notes that providing detailed information regarding bauxite deposits is not material to an investor's understanding of our business and the voluminous information requested would overwhelm disclosures about our refining, smelting and fabricating operations, which are material to an investor in Alcoa shares."

The Company also supplementally advises the Staff that, as reported in the 2011 10-K, the Company's then present sources of bauxite were sufficient to meet then forecasted requirements of the Company's alumina operations for the foreseeable future.

**17. We note your disclosure of reserve additions in Suriname. Please forward to our engineer as supplemental information and not as part of your filing, the geologic reports that established the legal, technical, and economic feasibility of your materials designated as reserves, as required by Section C of Industry Guide 7 pursuant to Rule 12b-4 of the Exchange Act. The information requested, generally is contained in an executive summary report that is commonly prepared in conjunction with other geologic documents that includes:**

- **Property and geologic maps**
- **Description of your sampling and assaying procedures**
- **Drill-hole maps showing drill intercepts**
- **Representative geologic cross-sections and drill logs**
- **Description and examples of your cut-off calculation procedures**
- **Cutoff grades used for each category of your reserves and resources**
- **Justifications for the drill hole spacing used to classify and segregate proven and probable reserves**
- **A detailed description of your procedures for estimating reserves**
- **Copies of any pertinent engineering or geological reports, and executive summaries of feasibility studies or mine plans which including the cash flow analyses**
- **A detailed permitting and government approval schedule for the project, particularly identifying the primary environmental or construction approval(s) and your current location on that schedule.**

**To minimize the transfer of paper, please provide the requested information on a CD, formatted as Adobe PDF files and provide the name and phone number for a technical person our engineer may call, if he has technical questions about your reserves.**

**In the event your company desires the return of this supplemental material, please make a written request with the letter of transmittal and include a**

**pre-paid, pre-addressed shipping label to facilitate the return of the supplemental information. Please note that you may request the return of this information pursuant to the provisions of Rule 12b-4 of the Exchange Act.**

**If there are any questions concerning the above request, please phone Mr. George K. Schuler, Mining Engineer at the number provided below.**

**Response:** In response to the Staff's comment, the Company notes, as stated in its Response to Comment No. 16, that its use of the term "reserves" to refer to bauxite deposits in Suriname was inadvertent and will be corrected in future annual filings. Based on our Response to Comment No. 16 and our position that we are not subject to Industry Guide 7, we do not believe the supplemental information requested is required.

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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) 836-2689 or Graeme Bottger, Vice President and Controller, at (412) 553-2169.

Sincerely,

/s/ Charles D. McLane, Jr.

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Charles D. McLane, Jr.  
Executive Vice President and  
Chief Financial Officer