UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-8 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

ALCOA INC.

(Exact name of registrant as specified in its charter)

Pennsylvania (State of Incorporation) 25-0317820 (I.R.S. Employer Identification No.)

390 Park Avenue New York, New York 10022-4608 (Address of principal executive offices, including zip code)

2013 ALCOA STOCK INCENTIVE PLAN, AS AMENDED AND RESTATED (Full Title of the Plan)

Audrey Strauss
Executive Vice President, Chief Legal Officer and Secretary
Alcoa Inc.
390 Park Avenue
New York, New York 10022-4608
(212) 836-2731

(Name, Address and Telephone Number, Including Area Code, of Agent for Service)

ndicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. Se	ee the
efinitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):	

Large accelerated filer	\boxtimes	Accelerated filer	
Non-accelerated filer	☐ (Do not check if a smaller reporting company)	Smaller reporting company	

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Share (2)	Proposed Maximum Aggregate Offering Price (2)	Amount of Registration Fee
Common Stock, par value \$1.00 per share	85,000,000 shares	\$9.53	\$810,050,000	\$81,572.04

- (1) Pursuant to Rule 416(a) under the Securities Act of 1933, as amended (the "Securities Act"), this Registration Statement also covers any additional securities that may be offered or issued pursuant to the 2013 Alcoa Stock Incentive Plan, as Amended and Restated (the "Plan") to prevent dilution as a result of adjustments for stock splits, stock dividends or similar transactions.
- (2) Estimated solely for the purpose of calculating the registration fee pursuant to 457(c) and 457(h) of the Securities Act, and based on the average of the high and low prices of shares of the Registrant's common stock reported on the New York Stock Exchange on June 17, 2016.

PART I

INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS

Item 1. Plan Information.*

Item 2. Registrant Information and Employee Plan Annual Information.*

* Information required by Part I to be contained in the Section 10(a) prospectus is omitted from this Registration Statement in accordance with Rule 428 under the Securities Act and the Note to Part I of Form S-8.

PART II

INFORMATION REQUIRED IN THE REGISTRATION STATEMENT

Item 3. Incorporation of Documents by Reference.

The Securities and Exchange Commission ("SEC") allows Alcoa Inc. ("Alcoa") to "incorporate by reference" in this Registration Statement the information in the documents that it files with the SEC, which means that Alcoa can disclose important information to you by referring you to those documents. The information incorporated by reference in this Registration Statement is considered to be a part of this Registration Statement, and information in documents that Alcoa files later with the SEC will automatically update and supersede information contained in documents filed earlier with the SEC or contained in this Registration Statement. Alcoa incorporates by reference in this Registration Statement the documents listed below and any future filings that it may make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act") after the date of this Registration Statement and prior to the filing of a post-effective amendment to this Registration Statement which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, except that Alcoa is not incorporating by reference any information that is deemed to have been furnished and not filed in accordance with SEC rules.

- Alcoa's Annual Report on Form 10-K for the fiscal year ended December 31, 2015;
- Alcoa's Quarterly Report on Form 10-Q for the fiscal quarter ended March 31, 2016;
- Alcoa's Current Reports on Form 8-K filed February 1, 2016, February 4, 2016, February 23, 2016 and May 11, 2016; and
- The description of Alcoa's common stock, par value \$1.00 per share ("Common Stock") contained in Alcoa's Registration Statement on Form S-3 (File No. 333-197371), filed July 11, 2014, as amended by Amendment No. 1 on Form S-3/A on July 25, 2014.

Alcoa will furnish without charge to you, upon written or oral request, a copy of any or all of the documents described above, except for exhibits to those documents, unless the exhibits are specifically incorporated by reference into those documents. Requests for copies should be addressed to:

Alcoa Inc. Attention: Investor Relations 390 Park Avenue New York, New York 10022-4608 Telephone: (212) 836-2674

Item 4. Description of Securities.

Not Applicable.

Item 5. Interests of Named Experts and Counsel.

The validity of the Common Stock to be issued in connection with the Plan will be passed upon by Thomas F. Seligson, Esq., Counsel of Alcoa. Mr. Seligson is paid a salary by Alcoa, is a participant in various benefit plans offered by Alcoa to employees of Alcoa generally and beneficially owns, or has rights to acquire, an aggregate of less than 1% of Alcoa's outstanding Common Stock.

Item 6. Indemnification of Directors and Officers.

Alcoa has purchased a directors and officers liability insurance policy with an aggregate limit of \$500 million for liability of directors and officers. The insurance also includes within that limit \$250 million of coverage, subject to a deductible, for reimbursement to Alcoa for indemnification provided to directors and officers. The policy has an expiration date of October 1, 2016 and provides liability insurance and reimbursement coverage for Alcoa, and its directors and officers that is permitted by the laws of Pennsylvania.

Article V of the By-Laws of Alcoa provides that Alcoa shall indemnify, under specified circumstances, where not prohibited by law, persons who were or are directors, officers or employees of Alcoa or who served or serve other business entities at the request of Alcoa. Under these By-Law provisions, a person who is wholly successful in defending a claim will be indemnified for any reasonable expenses. To the extent a person is not successful in defending a claim, reasonable expenses of the defense and any liability incurred are to be indemnified under these provisions only where independent legal counsel or another disinterested person selected by the board of directors determines that such person acted in good faith and in a manner such person reasonably believed to be in, or not opposed to, the best interests of Alcoa, and in addition with respect to any criminal action or proceeding, had no reasonable cause to believe the conduct of such person was unlawful. Any expense incurred with respect to any claim may be advanced by Alcoa if the recipient agrees to repay such amount if it is ultimately determined that such recipient is not to be indemnified pursuant to Article V.

The foregoing By-Law provisions generally parallel Sections 1741 and 1745 of the Pennsylvania Business Corporation Law ("PBCL"). Section 1746 and the By-Laws both also provide that the indemnification provided for therein shall not be deemed exclusive of any other rights to which those seeking indemnification may otherwise be entitled.

Section 1746 of the PBCL and the By-Laws provide for increased indemnification protections for directors, officers and others. Indemnification may be provided by Pennsylvania corporations in any case except where the act or failure to act giving rise to the claim for indemnification is determined by a court to have constituted willful misconduct or recklessness.

Section 1713 of the PBCL also sets forth a framework whereby Pennsylvania corporations, with the approval of the shareholders, may limit the personal liability of directors for monetary damages except where the act or omission giving rise to a claim constitutes self-dealing, willful misconduct or recklessness. The section does not apply to a director's responsibility or liability under a criminal or tax statute and may not apply to liability under Federal statutes, such as the Federal securities laws.

Alcoa's Articles of Incorporation and By-Laws were amended by the shareholders to implement the increased protections made available to directors under the PBCL as described in the preceding paragraph. Article VIII of the By-Laws provides that, except as prohibited by law, every director of Alcoa shall be entitled as of right to be indemnified by Alcoa for expenses and any and all liability paid or incurred by such person by reason of such person being or having been a director of Alcoa. Expenses incurred with respect to any claim may be advanced by Alcoa, subject to certain exceptions. The shareholders have also approved a form of indemnity agreement. Alcoa has entered into such an indemnity agreement with each of its current directors and officers.

Item 7. Exemption From Registration Claimed.

Not Applicable.

Item 8. Exhibits.

The following exhibits are filed with or incorporated by reference into this Registration Statement (numbering corresponds to Exhibit Table in Item 6.01 of Regulation S-K).

Exhibit <u>Number</u>	<u>Description</u>
4(a)	Articles of Incorporation of Alcoa, as amended September 22, 2014 (incorporated by reference to Exhibit 3(a) to Alcoa's Quarterly Report on Form 10-Q for the quarter ended September 30, 2014).
4(b)	By-Laws of Alcoa, as amended effective February 5, 2016 (incorporated by reference to Exhibit 3 to Alcoa's Current Report on Form 8-K filed February 4, 2016).
4(c)	2013 Alcoa Stock Incentive Plan, as Amended and Restated, effective May 6, 2016 (incorporated by reference to Exhibit 10(a) to Alcoa's Current Report on Form 8-K filed May 11, 2016).
5	Opinion of Thomas F. Seligson, Counsel of Alcoa.
15	Letter regarding unaudited interim financial information.
23(a)	Consent of PricewaterhouseCoopers LLP.
23(b)	Consent of Counsel (included as part of Exhibit 5).
24	Power of Attorney of certain directors of Alcoa (incorporated by reference to Exhibit 24 to Alcoa's Annual Report on Form 10-K for the year ended December 31, 2015).

Item 9. Undertakings.

- (a) The undersigned Registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this Registration Statement:
 - (i) to include any prospectus required by Section 10(a)(3) of the Securities Act of 1933, as amended;
 - (ii) to reflect in the prospectus any facts or events arising after the effective date of the Registration Statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the Registration Statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective Registration Statement; and
 - (iii) to include any material information with respect to the plan of distribution not previously disclosed in the Registration Statement or any material change to such information in the Registration Statement;
 - *provided*, *however*, that paragraphs (i) and (ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the Registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934, as amended, that are incorporated by reference in the Registration Statement.
 - (2) That, for the purpose of determining any liability under the Securities Act of 1933, as amended, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
 - (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (b) The undersigned Registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, as amended, each filing of the Registrant's annual report pursuant to Section 13(a) or

Section 15(d) of the Securities Exchange Act of 1934, as amended (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934, as amended), that is incorporated by reference in the Registration Statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, may be permitted to directors, officers and controlling persons of the Registrant pursuant to the provisions described in Item 6 above, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933, as amended, and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933, as amended, and will be governed by the final adjudication of such issue.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Pittsburgh, Commonwealth of Pennsylvania, on June 24, 2016.

ALCOA INC. (Registrant)

 B_{V} : /s/ Robert S. Collins

Robert S. Collins Vice President and Controller (Principal Accounting Officer)

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/ KLAUS KLEINFELD Klaus Kleinfeld	Chairman and Chief Executive Officer; Director (Principal Executive Officer)	June 24, 2016
/s/ WILLIAM F. OPLINGER William F. Oplinger	Executive Vice President and Chief Financial Officer (Principal Financial Officer)	June 24, 2016
/s/ ROBERT S. COLLINS Robert S. Collins	Vice President and Controller (Principal Accounting Officer)	June 24, 2016

Arthur D. Collins, Jr., Kathryn S. Fuller, Sean O. Mahoney, Michael G. Morris, E. Stanley O'Neal, James W. Owens, John C. Plant, L. Rafael Reif, Carol L. Roberts, Patricia F. Russo, Ulrich R. Schmidt, Sir Martin Sorrell, Ratan N. Tata and Ernesto Zedillo, each as a Director, on June 24, 2016, by Robert S. Collins, their Attorney-in-Fact.*

*By: /s/ ROBERT S. COLLINS
Robert S. Collins
Attorney-in-Fact

INDEX TO EXHIBITS

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June 24, 2016

Alcoa Inc. 390 Park Avenue New York, New York 10022-4608

Ladies and Gentlemen:

This opinion is furnished in connection with the registration by Alcoa Inc. (the "Company") pursuant to a Registration Statement on Form S-8 (the "Registration Statement") under the Securities Act of 1933, as amended (the "1933 Act"), of an aggregate of 85,000,000 shares (the "Shares") of common stock of the Company, par value \$1.00 per share ("Common Stock"), that are to be offered and sold by the Company through the 2013 Alcoa Stock Incentive Plan, as amended and restated (the "2013 Plan").

As a Counsel of the Company, I am of the opinion, based upon my familiarity with the affairs of the Company and upon my examination of the law and pertinent documents, that the Shares, when issued and sold pursuant to the 2013 Plan, will be legally issued, fully paid and non-assessable shares of Common Stock of the Company.

I hereby consent to the filing of this opinion with the Securities and Exchange Commission (the "Commission") as an Exhibit to the Registration Statement with respect to the Shares under the 1933 Act. In giving this consent, I do not admit that I am in the category of persons whose consent is required under Section 7 of the 1933 Act or the Rules and Regulations of the Commission issued thereunder.

Very truly yours,

/s/ Thomas F. Seligson

Thomas F. Seligson Counsel June 24, 2016

Securities and Exchange Commission 100 F Street, NE Washington, D.C. 20549

RE: Alcoa Inc.

Commissioners:

We are aware that our report dated May 5, 2016 on our review of interim financial information of Alcoa Inc. and its subsidiaries (Alcoa) for the three-month period ended March 31, 2016 and 2015 and included in Alcoa's quarterly report on Form 10-Q for the quarter ended March 31, 2016 is incorporated by reference in its Registration Statement on Form S-8 dated June 24, 2016.

Very truly yours,

/s/ PricewaterhouseCoopers LLP PricewaterhouseCoopers LLP

Pittsburgh, Pennsylvania

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-8 of our report dated February 19, 2016 relating to the consolidated financial statements and the effectiveness of internal control over financial reporting, which appears in Alcoa Inc.'s Annual Report on Form 10-K for the year ended December 31, 2015.

/s/ PricewaterhouseCoopers LLP Pittsburgh, Pennsylvania June 24, 2016