UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 8-K

CURRENT REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of Report (Date of earliest event reported): May 31, 2016 (May 27, 2016)

ALCOA INC.

(Exact name of Registrant as specified in its charter)

Pennsylvania (State or Other Jurisdiction of Incorporation) 1-3610 (Commission File Number)

390 Park Avenue, New York, New York (Address of Principal Executive Offices)

> Office of Investor Relations 212-836-2674 Office of the Secretary 212-836-2732 (Registrant's telephone number, including area code)

(Former Name or Former Address, if Changed Since Last Report)

25-0317820 (I.R.S. Employer Identification Number)

> 10022-4608 (Zip Code)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the Registrant under any of the following provisions:

□ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

Dere-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

Dere-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 7.01. Regulation FD Disclosure.

On May 27, 2016, Alcoa Inc. (the "Company") filed a complaint in the Delaware Court of Chancery seeking a declaratory judgment on an expedited basis to forestall what the complaint alleges are continuing threats by Alumina Limited, the Company's joint venture partner, to attempt to interfere with the Company's plan to separate its two businesses into two companies unless the Company accedes to baseless and improper demands. As explained in the complaint, Alumina Limited has claimed that it has consent and other rights under certain agreements. The Company believes such claims are without merit and is moving forward with its separation plans.

As previously announced, the Company will separate into two independent, publicly-traded companies: an Upstream Company, the new Alcoa, that will comprise the business units that today make up Global Primary Products: Bauxite, Alumina, Aluminum, Cast Products and Energy, as well as the Company's rolling mill at the Warrick Operations and its stake in the Ma'aden Rolling Company; and a Value-Add Company, Arconic, that will include Global Rolled Products, Engineered Products and Solutions, and Transportation and Construction Solutions. The Company owns 60%, and Alumina Limited owns 40%, of a series of affiliated operating entities referred to as Alcoa World Alumina and Chemicals (AWAC). Following the separation, the Company's interests in the AWAC entities will be held by the Upstream Company.

The information in Item 7.01 of this Current Report on Form 8-K is being furnished, not filed, in accordance with the provisions of General Instruction B.2 of Form 8-K. Accordingly, the information in Item 7.01 of Form 8-K will not be incorporated by reference into any registration statement filed by the Company under the Securities Act of 1933 unless specifically identified therein as being incorporated therein by reference. The furnishing of this information in Item 7.01 of Form 8-K will not be deemed an admission that such information is material information that is not otherwise publicly available.

Forward-Looking Statements

This communication contains statements that relate to future events and expectations and as such constitute forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include those containing such words as "anticipates," "believes," "could," "estimates," "expects," "forecasts," "intends," "may," "outlook," "plans," "projects," "seeks," "sees," "should," "targets," "will," "would," or other words of similar meaning. All statements that reflect the Company's expectations, assumptions or projections about the future, other than statements of historical fact, are forward-looking statements, including, without limitation, statements regarding the separation transaction, the complaint filed by the Company, the claims made by the Company therein and the claims of Alumina Limited described therein, and the merits and likelihood of success of such claims. Forward-looking statements are not guarantees of future performance and are subject to risks, uncertainties, and changes in circumstances that are difficult to predict. Although the Company believes that the expectations reflected in any forward-looking statements are based on reasonable assumptions, it can give no assurance that these expectations will be attained and it is possible that actual results may differ materially from those indicated by these forward-looking statements due to a variety of risks and uncertainties. Such risks and uncertainties include, but are not limited to: (a) uncertainties as to the timing of the separation and whether it will be completed; (b) the possibility that various closing conditions for the separation may not be satisfied; (c) the outcome of contingencies, including legal proceedings; and (d) the other risk factors discussed in the Company's Form 10-K for the year ended December 31, 2015, and other reports filed with the U.S. Securities and Exchange Commission (SEC). The Company disclaims any obligation to update publicly any forward-looking statements, whethe

2

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

ALCOA INC.

By: /s/ Peter Hong

Name:Peter HongTitle:Vice President and Treasurer

Date: May 31, 2016

3