

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

POST-EFFECTIVE AMENDMENT NO. 1

TO

FORM S-3

REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

ALCOA INC.

(Exact name of registrant as specified in its charter)

Pennsylvania

(State or other jurisdiction of incorporation or organization)

25-0317820

(I.R.S. Employer Identification Number)

201 Isabella Street

Pittsburgh, Pennsylvania 15212-5858

(412) 553-4545

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Lawrence R. Purtell

Executive Vice President and General Counsel

390 Park Avenue

New York, New York 10022-4608

(212) 836-2650

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Approximate date of commencement of proposed sale to the public: Not applicable.

If the only securities being registered on this Form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box:

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box.

This Post-Effective Amendment shall become effective in accordance with Section 8(c) of the Securities Act of 1933, as amended, on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(c), may determine.

DEREGISTRATION OF SECURITIES

On August 13, 2003, Alcoa Inc., a Pennsylvania corporation (“Alcoa”), filed with the Securities and Exchange Commission a registration statement on Form S-3 (File No. 333-107926) (the “Registration Statement”) registering the offering for resale from time to time of up to 17,773,540 shares (the “Shares”) of Alcoa common stock, par value \$1.00 per share, by certain selling shareholders named in the prospectus constituting part of the Registration Statement.

In accordance with the undertaking contained in the Registration Statement pursuant to Item 512(a)(3) of Regulation S-K, Alcoa is filing this Post-Effective Amendment No. 1 to the Registration Statement to remove from registration all Shares remaining unsold under the Registration Statement as of the date hereof (the “Unsold Shares”). Alcoa is deregistering the Unsold Shares because Alcoa’s obligation to maintain the effectiveness of the Registration Statement with respect to the Shares pursuant to a registration rights agreement, dated as of July 25, 2003, among Alcoa, Camargo Corrêa S.A. and others has expired.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, and in accordance with Rule 478 thereunder, Alcoa Inc. certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Post-Effective Amendment No. 1 to the Registration Statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York, on September 26, 2005.

ALCOA INC.

By: /s/ Lawrence R. Purtell

Name: Lawrence R. Purtell

Title: Executive Vice President and
General Counsel
(Agent for Service)