

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, DC 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): **September 4, 2012 (August 31, 2012)**

Arch Coal, Inc.

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation)

1-13105
(Commission File Number)

43-0921172
(I.R.S. Employer Identification No.)

CityPlace One
One CityPlace Drive, Suite 300
St. Louis, Missouri 63141
(Address, including zip code, of principal executive offices)

Registrant's telephone number, including area code: **(314) 994-2700**

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)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Item 5.02 Departure of Directors or Certain Officers; Election of Directors; Appointment of Certain Officers; Compensatory Arrangements of Certain Officers.

On August 31, 2012, Mr. David N. Warnecke, Senior Vice President of Marketing of Arch Coal, Inc. (the "Company") announced he will retire from the Company in May 2014. As part of his retirement plan, Mr. Warnecke will step down from his current position on December 31, 2012 and transition to a new role until his retirement date spearheading the Company's efforts to expand and strengthen its transportation, logistics and supply chain capabilities.

Item 7.01 Regulation FD Disclosure.

On August 31, 2012, the Company issued a press release announcing the retirement of Mr. Warnecke described above. A copy of the press release is furnished as Exhibit 99.1 hereto and is hereby incorporated by reference.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits

The following exhibit is attached hereto and furnished herewith.

Exhibit No.	Description
99.1	Press release dated August 31, 2012.

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.

Dated: September 4, 2012

Arch Coal, Inc.

By: /s/ Robert G. Jones

Robert G. Jones

Senior Vice President—Law, General Counsel and Secretary

2

Exhibit Index

**Exhibit
No.**

Description

99.1

Press release dated August 31, 2012.

3

**Arch Coal SVP Warnecke Announces Plan to Retire in 2014**

ST. LOUIS (August 31, 2012) — Arch Coal, Inc. (NYSE:ACI) today announced David N. Warnecke, Arch's senior vice president of marketing, has announced his plans to retire from the corporation in May 2014 after more than 30 years with the corporation. Warnecke will continue in his current capacity through the end of 2012, at which point he will transition to a new role spearheading Arch's efforts to expand and strengthen its transportation, logistics and supply chain capabilities — particularly in the export arena.

"Dave has made an invaluable contribution to Arch's growth and success over the years," said John W. Eaves, Arch's president and CEO. "I am particularly grateful that he has agreed to remain with Arch until mid-2014 to assist with transitional issues and to lead our ongoing supply chain initiative, which I view as an essential component in Arch's long-term growth plans. Dave is a great asset to the corporation and a valued member of the Arch team, and I look forward to working closely with him in this important new capacity."

Warnecke has led Arch's marketing and trading function and served as a member of the corporation's senior officer team since 2005. In his new role, he will continue to report to Paul A. Lang, Arch's executive vice president and chief operating officer.

"With his decades of experience and great depth of knowledge in transportation and logistics, Dave is uniquely equipped to lead our ongoing supply chain initiative," said Lang. "We greatly appreciate his dedication to Arch and to this important project, as well as his strong commitment to ensuring a smooth and orderly transition in the marketing function."

During his tenure with the company, Warnecke has also served as president of Arch Coal Sales; president of Arch Energy Resources; corporate vice president of marketing and trading; executive vice president of sales and trading for Arch Coal Sales; president of Arch Transportation; mine manager at Arch's former Pikeville, Kentucky, operation; and controller at Arch of Alabama. Early in his career, he served as manager of crude oil trading for Clark Oil.

Through the transition period, Jennifer Johnson, senior vice president of domestic thermal sales for Arch Coal Sales, and Matt Ferguson, senior vice president of metallurgical and international thermal sales for Arch Coal Sales, will report directly to Lang.

U.S.-based Arch Coal is a top five global coal producer and marketer. Arch is the most diversified American coal company, with mining complexes across every major U.S. coal supply basin. Its core business is supplying cleaner-burning, low-sulfur thermal and metallurgical coal to power generators and steel manufacturers on five continents. In 2011, Arch continued to lead the U.S. coal industry in safety performance and environmental compliance among large, diversified producers.

###

Forward-Looking Statements: This press release contains "forward-looking statements" — that is, statements related to future, not past, events. In this context, forward-looking statements often address our expected future business and financial performance, and often contain words such as "expects," "anticipates," "intends," "plans," "believes," "seeks," or "will." Forward-looking statements by their nature address matters that are, to different degrees, uncertain. For us, particular uncertainties arise from changes in the demand for our coal by the domestic electric generation industry; from legislation and regulations relating to the Clean Air Act and other environmental initiatives; from operational, geological, permit, labor and weather-related factors; from fluctuations in the amount of cash we generate from operations; from future integration of acquired businesses; and from numerous other matters of national, regional and global scale, including those of a political, economic, business, competitive or regulatory nature. These uncertainties may cause our actual future results to be materially different than those expressed in our forward-looking statements. We do not undertake to update our forward-looking statements, whether as a result of new information, future events or otherwise, except as may be required by law. For a description of some of the risks and uncertainties that may affect our future results, you should see the risk factors described from time to time in the reports we file with the Securities and Exchange Commission.