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): August 17, 2004 (August 16, 2004)

> Arch Coal, Inc. (Exact name of registrant as specified in its charter)

Delaware1-1310543-0921172(State or other jurisdiction (Commission File Number)
of incorporation)(I.R.S. Employer
Identification No.)

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

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

Page 1 of 4 pages. Exhibit Index begins on page 4.

Item 5. Other Events.

On August 13, 2004, Arch Coal, Inc. (the "Company"), announced via press release that the U.S. District Court for the District of Columbia rejected the Federal Trade Commission's request for a preliminary injunction blocking the Company's acquisition of Triton Coal Company. A copy of the Company's press release is attached hereto and incorporated herein by reference in its entirety.

Item 7. Exhibits.

(c) The following Exhibit is filed with this Current Report on Form 8-K:

Exhibit No. Description 99 Press Release dated as of August 13, 2004 Page 2 of 4 pages. Exhibit Index begins on page 4.

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.

Dated: August 17, 2004

ARCH COAL, INC.

By: /s/ Janet L.Horgan

Janet L. Horgan Assistant General Counsel and Assistant Secretary

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Exhibit No.

99

Description ------Press Release dated as of August 13, 2004

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Exhibit 99

FOR FURTHER INFORMATION: Deck Slone Vice President Investor Relations and Public Affairs (314) 994-2717

> FOR IMMEDIATE RELEASE August 13, 2004

Arch Coal Comments on Favorable Decision in U.S. District Court Concerning Triton Acquisition

ST. LOUIS (August 13, 2004) - Late this afternoon, the U.S. District Court for the District of Columbia rejected the Federal Trade Commission's request for a preliminary injunction blocking Arch's acquisition of Triton Coal Company.

"We are pleased that the court has found no cause to prevent this transaction from moving forward," said Steven F. Leer, Arch's president and chief executive officer. "We are confident that completing this acquisition will create significant benefits for our customers, the end users of electricity, employees at both companies, and our shareholders."

James M. Hake, president and chief executive officer of Triton, stated: "We are very pleased that the court found no reason to enjoin our transaction, which we believe to be in the best interests of Triton and its shareholders, customers and other constituents."

The Federal Trade Commission has the right to seek an emergency stay of the District Court's decision. Arch has agreed not to close the transaction for a period of two full business days.

Arch Coal, Inc. (NYSE:ACI) is one of the nation's largest coal producers and mines clean-burning, low-sulfur coal exclusively. Through its subsidiary operations in West Virginia, Kentucky, Virginia, Wyoming, Colorado and Utah, Arch Coal provides the fuel for approximately 6% of the electricity generated in the United States.

Forward-Looking Statements: Statements in this press release which are not statements of historical fact are forward-looking statements within the "safe harbor" provision of the Private Securities Litigation Reform Act of 1995. These forward-looking statements are based on information currently available to, and expectations and assumptions deemed reasonable by, the company. Because these forward-looking statements are subject to various risks and uncertainties, actual results may differ materially from those projected in the statements. These expectations, assumptions and uncertainties include: the company's expectation of continued growth in the demand for electricity; expected synergies resulting from the acquisition; belief that legislation and regulations relating to the Clean Air Act and the relatively higher costs of competing fuels will increase demand for its compliance and low-sulfur coal; expectation of improved market conditions for the price of coal; expectation that the company will continue to have adequate liquidity from its cash flow from operations, together with available borrowings under its credit facilities, to finance the company's working capital needs; a variety of operational, geologic, permitting, labor and weather related factors; and the other risks and uncertainties which are described from time to time in the company's reports filed with the Securities and Exchange Commission.