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): February 28, 2005 (February 24, 2005)

Arch Coal, Inc.

(Exact name of registrant as specified in its charter)

Delaware	1-13105	43-0921172
(State or other jurisdiction of incorporation)	(Commission File Number)	(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

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:

- o Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- o Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- o Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- o Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

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

TABLE OF CONTENTS

Item 1.01. Entry into a Material Definitive Agreement.
Item 9.01. Financial Statements and Exhibits.
SIGNATURES
EXHIBIT INDEX
Incentive Compensation Plan

Item 1.01. Entry into a Material Definitive Agreement.

On February 24, 2005, the Board of Directors of Arch Coal, Inc. (the "Company") established the performance measures and maximum annual bonus payouts for 2005 under the Company's Incentive Compensation Plan for Executive Officers (the "Plan"). The Plan is subject to shareholder approval for purposes of Internal Revenue Code Section 162(m) at the Company's next annual meeting to be held on April 28, 2005.

The performance measures established by the Board for payment of 2005 bonuses under the Plan are: (1) earnings before interest, taxes, depreciation and amortization (EBITDA); (2) earnings per share (EPS); (3) safety performance; and (4) environmental performance.

The maximum annual bonus payout under the Plan for 2005 is 120% of base salary for the Chief Executive Officer of the Company and 100% of base salary for all other executive officers.

The Plan provides that the Personnel & Compensation Committee of the Board will establish performance measures, targets and maximum payouts for executive officers within 90 days of the beginning of each calendar year. The bonus payouts are calculated at the beginning of the next calendar year based on actual Company performance against the pre-established targets for such year. Bonus payouts may be decreased, but not increased, at the Committee's discretion. All payouts must be made within 90 days of the end of the calendar year for which such bonus is being paid.

Item 9.01. Financial Statements and Exhibits.

(c) Exhibits.

Exhibit Number	Description of Exhibit	
99.1	Arch Coal, Inc. Incentive Compensation Plan for Executive Officers	
	Page 2 of 4 pages. Exhibit Index begins on page 4.	

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, t	he registrant has duly caused this report to be signed on its behalf by the
undersigned hereunto duly authorized.	
Dated: February 28, 2005	ARCH COAL, INC.

By: Janet L. Horgan Assistant General Counsel and Assistant Secretary

Page 3 of 4 pages. Exhibit Index begins on page 4.

EXHIBIT INDEX

Exhibit No.	Description
99.1	Arch Coal, Inc. Incentive Compensation Plan for Ex

Arch Coal, Inc. Incentive Compensation Plan for Executive Officers

Page 4 of 4 pages.

ARCH COAL, INC.

INCENTIVE COMPENSATION PLAN FOR EXECUTIVE OFFICERS

1. Purpose of the Plan

The purpose of the Arch Coal, Inc. Incentive Compensation Plan for Executive Officers (as amended from time to time, the "Plan") is to provide an opportunity for Executive Officers of Arch Coal, Inc. to earn competitive annual cash incentive awards through the achievement of pre-established performance goals.

2. Definitions

- A. "Award" means the amount earned by an Executive Officer for a Plan Year in accordance with Section 4.
- B. "Base Salary" means the actual base pay earned by an Executive Officer during the Plan Year.
- C. "CEO" means the Chief Executive Officer of the Company.
- D. "Code" means the Internal Revenue Code of 1986, as amended from time to time.
- E. "Committee" means the Personnel & Compensation Committee of the Board of Directors of Arch Coal, Inc.
- F. "Company" means Arch Coal, Inc. and its subsidiaries.
- G. "Executive Officer" means the President and CEO, the Chief Operating Officer, the Chief Financial Officer and each Vice President and other officer of the Company who is subject to the reporting requirements of Section 16 of the Securities Exchange Act of 1934, as amended.
 - H. "Maximum Award Opportunity" shall be the maximum annual incentive Award that an Executive Officer is eligible for under this Plan.
- I. "Performance Measures" means the Company performance objectives determined by the Committee within 90 days of the beginning of each Plan year for Executive Officers. Performance Measures may include, but are not limited to, (i) net income; (ii) cash flow; (iii) earnings before interest, taxes, depreciation, depletion and amortization (EBITDA); (iv) operating income; (v) earnings per share (EPS); (vi) debt reduction; (vi) safety incident rate; (viii) cost reduction; (ix) production rates; (x) environmental compliance; and (xi) operating cost per ton. As determined by the Committee, the Performance Measures shall be applied (A) in absolute terms or relative to one or more other companies or indices and (B) to a business unit, geographic region, one or more separately incorporated entities, or the Company as a whole.
 - J. "Plan" means the Arch Coal, Inc. Incentive Compensation Plan for Executive Officers, as it may be amended from time to time.
 - K. "Plan Year" means the calendar year, commencing on January 1 and ending on December 31.

3. Eligibility

- A. The Committee shall establish, from time to time, Award opportunities for Executive Officers.
- B. Awards to Executive Officers who begin participating in the Plan after the beginning of a Plan Year will be prorated using the ratio of months the Executive Officer is in the Plan compared to the total months in the Plan Year.
 - C. Participants will cease to be participants in the Plan effective as of the date they no longer hold an Executive Officer position.

4. Awards

A. Within 90 days of the beginning of each Plan Year, the Committee shall determine in writing (i) the Executive Officers who shall be eligible to receive an Award opportunity for such Plan Year, (ii) the Performance Measures applicable to each such Executive Officer's Award opportunity and (iii) the formula for computing the amount of the Award payable to each Executive Officer if the Performance Measures are achieved (such formula shall, unless otherwise determined by the Committee, comply with the requirements applicable to performance-based compensation plans under Section 162(m) of the Code and the related Treasury regulations).

B. The Maximum Award Opportunity for an Executive Officer for any calendar year shall be \$2,500,000. Any Award under the Plan that is intended to comply with the exception for "performance-based compensation" under Section 162(m) of the Code and the related Treasury regulations shall be administered in accordance with Section 162(m) and such regulations, and if any Plan provision is found not to be in compliance with Section 162(m) of the Code, the provision shall be deemed modified as necessary to so comply.

C. Awards shall be calculated by the Committee at the end of each Plan Year based on the Award Opportunities of each Executive Officer and the achievement of the Performance Measures set by the Committee with respect to Executive Officers for the Plan Year. At the election of the Committee, an Award may be reduced for individual performance or any other reason; however, no Award under this Plan may exceed the Award calculated based on the Performance Measures established by the Committee for such Plan Year. The Committee may, in its discretion, make appropriate adjustments in the Performance Measures established for a particular Plan Year to take account of the effect of any unforeseen events that occur during such Plan Year.

5. Payment of Award

A. Except with respect to a reduction in force or pursuant to any written agreement between the Company and the Executive Officer, any rights an Executive Officer may have to receive an Award will be forfeited if the Executive Officer's employment is terminated prior to the date of approval of the Award; however, the Committee shall determine to what extent, if any, an Award shall be payable under the Plan and may elect to make a pro rata payment (based on full months of participation during the year or otherwise) in its sole discretion.

B. The Award, if any, earned in accordance with Section 4 shall be paid in cash by the Company to the Executive Officer within a reasonable period, which in most cases will be thirty (30) days after the Committee's certification that the Award was earned by the Executive Officer. The Company shall deduct from any Award paid under the Plan the amount of any taxes required to be withheld by the federal or any state or local government.

6. Death or Disability

In the event of an Executive Officer's death or permanent and total disability prior to receiving his or her Award, a pro rata payment of such Award (based on full months of participation) shall be paid to the Executive Officer or to the Executive Officer's designated beneficiary (or to his or her estate in the event the Participant dies without previously having designated a beneficiary in writing to the Company) pursuant to Section 6.

7. Amendment or Termination of the Plan

The Committee reserves the right to terminate or amend the Plan, in whole or in part, or waive any provision thereof at any time and from time to time, provided that no amendment, termination or waiver shall adversely affect any Award previously earned by an Executive Officer.