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 13, 2018 (September 12, 2018)

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:

- 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))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (Section 230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (Section 240.12b-2 of this chapter).

Emerging growth company o

If an emerging growth company, indicated by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. o

Item 1.04 Mine Safety - Reporting of Shutdowns and Patterns of Violations.

On September 12, 2018, Mountain Coal Company, L.L.C., a subsidiary of Arch Coal, Inc., received an imminent danger order under section 107(a) of the Federal Mine Safety and Health Act of 1977 at the West Elk mine located in Gunnison County, Colorado. The order states that a mechanic was observed riding on top of a ram-car with the guarding in the open position while the ram-car was in operation.

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.

Dated: September 13, 2018 Arch Coal, Inc.

By: /s/ Robert G. Jones

Robert G. Jones