## **COAL FATAL**

UNITED STATES
DEPARTMENT OF COMMERCE
BUREAU OF MINES
BY C. W. OWINGS

SUBJECT: Explosion in the MacAlpin Mine, October 22,1928.

A coal-dust explosion occurred in the MacAlpin Coal Co., MacAlpin, W.V., about 2:15 p.m., October 22, 1928, killing six men. There were twenty men in the mine at the time of the explosion. Sixteen men escaped from the affected area; two of this number started to erect a barricade but were rescued shortly after starting construction. The explosion was undoubtedly started by a firing an "adobe" shot of 10 sticks of 60 per cent dynamite on a piece of sandstone.

The MacAlpin mine is opened by nine drifts one drift leads from the fan and is the intake airway, the other eight drifts are return airways. The Beckly coal bed, a semibituminous coal, feet thick, is being worked. The mining method is averaging the panel system; coal is undercut with non-permissible mining machines, some of which are classed as "flame proof." A reversible eight-foot fan, operating blowing, circulated 167,000 cu. ft. of air a minute. Very little methane is liberated in the mine. The haulage is done with trolley and cable-reel locomotives; the majority of the cars are the tight end-gate type and consequently there is but little coal spilled along the haulage roads. Carbide and oil lights are used in the MacAlpin mine. Hercules Red H permissible explosive, tamped with coal or road dust, is fired electrically by the miners whenever they are ready. The mine is slightly dusty in most places and the dust sampled was high in combustible content, ranging from 80 to 93 per cent.

Mr. Currie, his report on the explosion states that the disaster was the result of three bad practices, namely; mudcapping, the use of mixed explosives (dynamite and permissible explosives) and firing with fuse and cap in violation of the company rule. This explosion serves to emphasize the hazards if using mixed explosives in coal mines, even if they are classed as non-gassy. It again brings to the fore, the criminally reprehensible practice of using mud capping or "adobe" shots in coal mines.

W. W. adamo

## United States DEPARTMENT OF COMMERCE BUREAU OF MINES WASHINGTON

CONFIDENTIAL MEMORANDUM
NOT FOR PUBLICATION

To the members of the Safety Division:

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Cw. Qwings

A coal-dust explosion occurred in the MacAlpin mine of the MacAlpin Coal Co., MacAlpin, W. Va. about 2:15 p.m. October 22, 1928 killing 6 men. There were 20 men in the mine at the time of the explosion. Sixteen men escaped from the affected area; two of this number started to erect a barricade but were rescued shortly after starting construction. The explosion was undoubtedly started by firing an "adobe" shot of 10 sticks of 60 per cent dynamite on a piece of sandstone.

The MacAlpin mine is opened by nine drifts one drift leads from the fan and is the intake airway, the other 8 drifts are return airways. The Beckley coal bed, a semibituminous coal, averaging 4 feet thick, is being worked. The mining method is the panel system; coal is undercut with non-permissible mining machines, some of which are classed as "flame proof." A reversible 8-foot fan, operating blowing, circulated 167,000 cu. ft. of air a minute. Very little methane is liberated in the mine. The haulage is done with trolley and cable-reel locomotives; the majority of the cars are the tight end-gate type and consequently there is but little coal spilled along the haulage roads. Carbide and oil lights are used in the MacAlpin mine. Hercules Red H permissible explosive, tamped with coal or road dust, is fired electrically by the miners whenever they are ready. The mine is slightly dusty in most places and the dust sampled was high in combustible content, ranging from 80 to 93 per cent.

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This information, abstracted from the report by Mr. Currie, should be held strictly confidential and not published.

Approved: December 18, 1928.

HARRINGTON

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