1926 0003

# COAL FATAL

UNITED STATES
DEPARTMENT OF COMMERCE
BUREAU OF MINES
BY D. HARRINGTON

SUBJECT: Explosion, Mound Mine of the Glendale Gas Coal Company at Moundsville, West Virginia, November 15, 1926.

An explosion occurred at about 2:15 a.m., November 15, 1926, in the Mound Mine of the Glendale Gas Coal Company at Moundsville, West Virginia, resulting in the death of five men and the serious injury of two others. The explosion resulted from an electric arc from the trolley wire and trolley wheel of an electric locomotive.

Coal dust was probably an important factor in propagating the explosion, and it is thought that the explosion might have spread throughout the mine had not the main entries been rock-dusted, even though the rock-dusting had been done three months previously.

The recovery of the bodies was accomplished by 7:00 p.m. of the 15th by the State mine officials and rescue teams from nearby mines. Two of the bodies were recovered by a crew wearing oxygen breathing apparatus.

The coal in the Mound Mountain is the Pittsburgh seam and average 5 ft. 10 in. in thickness. The 10-inch draw slate above the coal falls when the coal is blasted. All haulage entries were rock-dusted during August but no rock dusting had been done since that time. The mine is classed as gaseous, and two fire bosses make pre-shift examinations with flame safety lamps every morning.

The mine is worked by the room and pillar panel system, with the following practices; permissible electric lights; non-approved mining machines; trolley pole and crab type electric locomotives, permissible explosives shot by the miner at any time during the day. It is not safe to use non-permissible equipment in gassy mines if permissible equipment is available; use of trolley-crab locomotives near gassy faces is dangerous; shooting with the shift in the mine is not safe even though permissible explosives are used.

The final report made by W. H. Forbes was received at the Washington Office on November 26 and was submitted to the operator on December 7.

1926-0003

UNITED STATES
DEPARTMENT OF COMMERCE
BUREAU OF MINES
BY W. H. FORBES

SUBJECT: Explosion at the Mound Mine, Glendale Gas Coal Company, Moundsville, West Virginia, November 19, 1926.

The explosion occurred about 2:15 a.m., November 19, 1926, resulting in the death of five men, and apparently it was another case of methane ignition by electrically (trolley wire) in a closed light mine. In addition to five dead, two were seriously injured and eleven escaped uninjured.

The coal in this mine averages five feet ten inches in thickness. The roof immediately above the coal has about ten inches of soft clay shale or draw slate which falls when coal is blasted. Above this draw slate is a comparatively good or solid limestone roof. The floor is a hard dark slate. The mine, while fairly dry in general, has a number of water accumulations in dips and in many places the ribs and roof appear to be in a damp to wet condition. The mine had been rock dusted as to haulage entries the latter part of August but no dusting had been done since that time. Methane is liberated in considerable quantities, the mine is classified as "Gassy" by the West Virginia Department of Mines and two fire bosses make pre-shift examination with fire safety lamps every morning.

Haulage is by means of a main slope to the surface and the main line locomotives of the entry of the mine are of trolley type and coal is gathered by mule-haulage or by electrical locomotives of the trolley and crab type. The use of trolley or crab type locomotives for gathering is decidedly dangerous in a gassy mine.

The mine is worked on the panel system. Coal is undercut by electric machines, shot by permissible explosives with electric detonators and permissible batteries. The miner drills, charges and fires his own shots at any time during the shift, the latter in my opinion being dangerous. The mine produces approximately 500 tons per day.

The explosion took place about the time that eighteen men on the night shift were preparing to leave the mine. It seems that a car had run away and wrecked a trap door. Later the door was repaired but it is estimated that ventilation was cut off from the affected section for approximately two hours. After restoring ventilation, the haulage crew went towards the face with a trolley locomotive and a car containing a barrel of oil, and apparently the sparks from the trolley wheel ignited the gas with the resultant explosion. The region affected was in a damp to wet condition, the flame was transmitted only for a comparatively short distance and

it is stated that the explosion was checked by rock dust and by the damp to wet condition of the region.

One of the men who was killed was breathing when found but died later in the hospital.

The fan ventilating the mine delivered but 44,000 cubic feet of air per minute, and I agreed with Mr. Forbes that this is insufficient for a mine as large as this one.

The recommendations appear good, except that the first one as to barriers is not particularly plain as worded. The ninth recommendation also should be somewhat re-worked, as it does not seem to be within our province to dictate what sort of work mine bosses may do, except that we may suggest that they have plenty to do if they utilize all of their time for purposes of inspection of supervision.

With a comparatively few alterations, it seems to me that the report could be forwarded to the operator, and it is my recommendation that this be done.

UNITED STATES
DEPARTMENT OF COMMERCE
BUREAU OF MINES
WASHINGTON

February 10, 1927.

CONFIDENTIAL MEMORANDUM
NOT FOR PUBLICATION

To the members of the Safety Service and Mining Research Divisions:

An explosion occurred at about 2:15 a.m., November 15, 1926 in the Mound mine of the Glendale Gas Coal Company at Moundsville, West Virginia, resulting in the death of five men and the serious injury to two others. The explosion resulted from an accumulation of methane due to interrupted ventilation as a result of a door being wrecked; the ignition being caused by an electric arc from the trolley wire and trolley wheel of an electric locomotive.

Coal dust was probably an important factor in propagating the explosion, and it is thought that the explosion might have spread throughout the mine had not the main entries been rock-dusted, even though the rock-dusting had been done three months previously.

The recovery of the bodies was accomplished by 7:00 p.m. of the 15th by State mine officials and rescue teams from nearby mines. Two of the bodies were recovered by a crew wearing oxygen breathing apparatus.

The coal in the Mound Mine is the Pittsburgh seam and averages 5 ft. 10 in. in thickness. The 10-inch draw slate above the coal falls when the coal is blasted. All haulage entries were rock-dusted during August but no rock-dusting had been done since that time. The mine is classed as gaseous, and two fire bosses make pre-shift examinations with flame safety lamps every morning.

The mine is worked by the room and pillar panel system, with the following practices:- permissible electric lights; non-approved mining machines; trolley pole and crab type electric locomotives, permissible explosives shot by the miner at any time during the day. It is not safe to use non-permissible equipment in gassy mines if permissible equipment is available; use of trolley or trolley-crab locomotives near gassy faces is dangerous; shooting with the shift in the mine is not safe even though permissible explosives are used.

The final report made by W. H. Forbes was received at the Washington Office on November 26 and was submitted to the operator on December 7.

While this memorandum is of a confidential nature for the information of Bureau field men, it may be used in connection with Bureau work but should not be published.

D. Harrington

D. HARRINGTON.

3/11/27

2375-h-2.

M. Adams

November 29, 1926 DH/RP

Memorandum Concerning the Preliminary Report, by W. H. Forbes, of Explosion at the Mound Mine, Glendale Gas Coal Company, Moundsville, West Virginia, November 15, 1926.

The explosion occurred about 2:15 A.M., November 19, 1926, resulting in the death of five men, and apparently it was another case of methane ignition by electricity (trolley wire) in a closed light mine. In addition to 5 dead, 2 were seriously injured and 11 escaped uninjured.

The coal in this mine averages about 5 feet 10 inches in thickness. The roof immediately above the coal has about 10 inches of soft clay shale or draw slate which falls when coal is blasted. Above this draw slate is a comparatively good or solid limestone roof. The floor is a hard dark slate. The mine, while fairly dry in general, has a number of water accumulations in dips and in many places the ribs and roof appear to be in a damp to wet condition. The mine had been rock dusted as to haulage entries the latter part of August but no rock dusting had been done since that time. Methane is liberated in considerable quantities, the mine is classified as "Gassy" by the West Virginia Department of Mines and two fire bosses make pre-shift examination with flame safety lamps every morning.

Haulage is by means of a main slope to the surface and the main line locomotives of the entry of the mine are of the trolley type and coal is gathered by mule-haulage or by electric locomotives of the trolley and crab type. The use of trolley or crab type locomotives for gathering is decidedly dangerous in a gassy mine.

The mine is worked on the panel system. Coal is undercut by electric machines, shot by permissible explosive with electric detonators and permissible batteries. The miner drills, charges and fires his own shots at any time during the shift, the latter in my opinion being dangerous. The mine produces approximately 500 tons per day.

The explosion took place about the time that 18 men on the night shift were preparing to leave the mine. It seems that a car had run away and wrecked a trap door. Later the door was repaired but it is estimated that ventilation was cut off the affected section

for approximately two hours. After restoring ventilation, the haulage crew went towards the face with a trolley locomotive and a car containing a barrel of oil, and apparently the sparks from the trolley wheel ignited the gas with the resultant explosion. The region affected was in a damp to wet condition, the flame was transmitted only for a comparatively short distance and it is stated that the explosion was checked by rock dust and by the damp to wet condition of the region.

One of the men who was killed was breathing when found but died later in the hospital.

The fan ventilating the mine delivered but 44,000 cubic feet of air perminute, and I agree with Mr. Forbes that this is insufficient for a mine as large as this one.

The recommendations appear good, except that the first one as to barriers is not particularly plain as worded. The ninth recommendation also should be somewhat re-worded, as it does not seem to be within our province to dictate what short of work mine bosses may do, except that we may suggest that they have plenty to do if they utilize all of their time for purposes of inspection or supervision.

With a comparatively few alterations, it seems to me that the report could be forwarded to the operator, and it is my recommendation that this be done.

The letter of transmittal, prepared at Pittsburgh, also appears to be O.K.

D. Harrington

cc - Mr. Adams
cc - Safety Service
cc - Mining Research
cc - D. Harrington
cc - W. O. Files