

COAL FATAL

1937 0006

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
BY C. W. OWINGS

SUBJECT: Explosion in Baker mine, Glendora Coal Company, Sullivan, Indiana, July 15, 1937.

An explosion occurred at somewhat after 7:00 a.m., July 15, 1937, in the Baker mine of the Glendora Coal Company, near Sullivan, Indiana. Twenty lives were lost and four men were seriously burned. Although about 175 men were in the mine, only the twenty-five men in one section were affected.

The mine is opened by two shafts. Approximately 100,00 cubic feet of air per minute is forced into the mine. Officials, pumpmen, and brattice men use electric cap lamps; all others use carbide lamps, as the local union of the United Mine Workers of America fines other union employees \$25 for wearing electric cap lamps. Electrical equipment is of nonpermissible types; however, permissible explosives are used, but in a nonpermissible manner, as fuse is used to fire the charge.

The mine is gassy, and fire bosses make pre-shift examinations of the mine. Rock-dusting is practiced and additional dust had been applied about three weeks before the explosion.

The 1 and 2 south entries off 16 east had been sealed the day before the explosion with wooden brattices covered with plaster. These entries had always liberated considerable gas, and it is believed that an explosive mixture had formed behind the scale during the 17 hours between the sealing and the explosion.

On the morning of the explosion, the brattice man, wearing an electric cap lamp, went to the seals to examine them and to give them another coat of plaster. Two other men, presumably wearing carbide lamps, had been sent into 15 east in by the last room. Suddenly there was a concussion or blast, followed in about 3 minutes by an explosion. Following the first blast, all of the men in the section, except the brattice man and the two others sent to 15 east face, came out to the main south, where the bodies of these seventeen men were found. The bodies of the brattice man and the two men sent to 15 east were found opposite 2 south, one of the sealed entries, from which the first blast probably came and either killed or injured them severely.

It is believed that a heavy fall occurred in the sealed area, causing the first concussion or blast, forcing gas out onto 15 and 16 east entries. The men from the rooms in 15 east entry probably ignited the gas with carbide lamps. The thick coating of

rock dust unquestionably played an important part in limiting the explosion and probably saved most of the lives of many if not all of the other 155 men in the mine. Samples of dust on main south, 600 feet outby 15 east, contained an average incombustible content of 68 percent in rib dust and 73 percent in road dust, even though the dust, where sampled, was blackened by the explosion, hence somewhat contaminated with combustible dust as compared with its content before the explosion.

This explosion is the direct result of short-sighted stubbornness of the miner as well as of some operators of Indiana in preventing the use of closed lights in the coal mines of this site. The seals were of a relatively flimsy construction and were also directly involved in this explosion. The Illinois-Indiana system of having the return air on the haulage road seriously handicapped the recovery work, this being but one of numerous instances where this handicap had been encountered in mine disasters in these States. The effectiveness of rock dust in limiting explosions was demonstrated, as it is thoroughly believed that rock dust prevented the explosion from becoming widespread with possible loss of the approximately 175 men in the mine at the time.

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF MINES
WASHINGTON

C.M. 1399

CONFIDENTIAL MEMORANDUM
(Not for Publication)

August 8, 1937

TO MEMBERS OF THE SAFETY DIVISION:

SUBJECT: Explosion in Baker mine, Glendora
Coal Company, Sullivan, Indiana,
July 15, 1937.

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An explosion occurred at somewhat after 7:00 a.m., July 15, 1937, in the Baker mine of the Glendora Coal Company, near Sullivan, Indiana. Twenty lives were lost and 4 men were seriously burned. Although about 175 men were in the mine, only the 25 men in one section were affected.

The mine is opened by two shafts. Approximately 100,000 cubic feet of air per minute is forced into the mine. Officials, pumpmen, and brattice men use electric cap lamps; all others use carbide lamps, as the local union of the United Mine Workers of America fines other union employees \$25 for wearing electric cap lamps. Electrical equipment is of nonpermissible types; however, permissible explosives are used, but in a nonpermissible manner, as fuse is used to fire the charge.

The mine is gassy, and fire bosses make pre-shift examinations of the mine. Rock-dusting is practiced and additional dust had been applied about 3 weeks before the explosion.

The 1 and 2 south entries off 16 east had been sealed the day before the explosion with wooden brattices covered with plaster. These entries had always liberated considerable gas, and it is believed that an explosive mixture had formed behind the seals during the 17 hours between the sealing and the explosion.

On the morning of the explosion, the brattice man, wearing an electric cap lamp, went to the seals to examine them and to give them another coat of plaster. Two other men, presumably wearing carbide lamps, had been sent into 15 east in by the last room. Suddenly there was a concussion or blast, followed in about 3 minutes by an explosion. Following the first blast, all of the men in the section, except the brattice man and the 2 others sent to 15 east face, came out to the main south, where the bodies of these 17 men were found. The bodies of the brattice man and the 2 men sent to 15 east were found opposite 2 south, one of the sealed entries, from which the first blast probably came and either killed or injured them severely.

It is believed that a heavy fall occurred in the sealed area, causing the first concussion or blast, forcing gas out onto 15 and 16 east entries. The men from the rooms in 15 east entry probably ignited the gas with carbide lamps. The thick coating of rock dust unquestionably played an important part in limiting the explosion and probably saved most of the lives of many if not all of the other 155 men in the mine. Samples of dust on main south, 600 feet outby 15 east, contained an average incombustible content of 68 percent in rib dust and 73 percent in road dust, even though the dust, where sampled, was blackened by the explosion, hence somewhat contaminated with combustible dust as compared with its content before the explosion.

This explosion is the direct result of short-sighted stubbornness of the miners as well as of some operators of Indiana in preventing the use of closed lights in the coal mines of this State. The seals were of a relatively flimsy construction and were also directly involved in this explosion. The Illinois-Indiana system of having the return air on the haulage road seriously handicapped the recovery work, this being but one of numerous instances where this handicap has been encountered in mine disasters in those States. The effectiveness of rock dust in limiting explosions was demonstrated, as it is thoroughly believed that rock dust prevented the explosion from becoming widespread with possible loss of the approximately 175 men in the mine at the time.

This memorandum, based on a letter report by C. A. Herbert, is confidential and must not be published.

C. W. OWINGS

Approved:

D. HARRINGTON