

No. 11 room, No. 4 Left heading, and that the initial point was at or near the coal-cutting machine, and that accumulation of gas which caused the explosion was ignited by an arc from the coal-cutting machine.

A map is herewith attached for the purpose of clarifying this report.

Recommendations:

Your commission offers the following recommendations:

First—All electric mining machines used in working places and return air should be of an explosion-proof type and should be inspected and maintained in such condition at all times and a record made of said inspections in a book kept at the mine for that purpose.

Second—Rock dust dry and dusty places or use water to keep such in a wet or damp condition.

Respectfully submitted,

THOS. D. WILLIAMS,

Inspector Sixth Bituminous District.

ALEXANDER JACK,

Inspector Tenth Bituminous District.

F. W. CUNNINGHAM,

Inspector Twentieth Bituminous District.

NICHOLAS EVANS,

Inspector Twenty-fourth Bituminous District.

VERDICT RETURNED AUGUST 17, 1928, BY CORONER'S JURY
IN MINE EXPLOSION AT HILLSIDE MINE, ANNIE F.
SWABB, CORONER.

"We find that the mining machine cut through a feeder of gas and that the latter was probably ignited from a spark originating from the machine which was in a defective condition. This explosion resulted in the death of five employees. We recommend that the Legislature be requested to amend the bituminous mining laws so as to require a record of the inspection of all machines which might possibly cause an explosion in such mines so that more care may be exercised in order to prevent such explosions in the future."

IRVONA NO. 3 MINE EXPLOSION

On August 15, 1928, at 3:15 P. M., a gas explosion resulting in the loss of thirteen lives occurred in the Irvona No. 3 Mine operated by the Irvona Coal and Coke Company, situated near Coalport, Clearfield County, and located in the Thirteenth District, Thomas A. Mather, Acting Inspector.

The report of the Commission and also a supplemental report of the Commission, with the verdict of the Coroner's Jury of Clearfield County, follow:

REPORT OF COMMISSION OF INSPECTORS

Cresson, Pa., August 20, 1928.

Honorable Walter H. Glasgow,
Secretary of Mines,
Harrisburg, Pennsylvania.

Honorable Sir: We, the undersigned Bituminous Mine Inspectors, commissioned to investigate and ascertain, if possible, the cause of the explosion that occurred in the Irvona No. 3 mine operated by the Irvona Coal and Coke Company, situated in Beccaria Township, near the Borough of Coalport, County of Clearfield, State of Pennsylvania, on Wednesday afternoon, August 15, 1928, about 3:15 P. M., report as follows:

The mine is a drift opening extending some seventeen thousand five hundred feet (17,500 ft.) to face of main entries, from which the "B" or "Lower Kittanning" seam of coal is being mined.

The mine is classified as a gaseous one and is operated exclusively by the use of approved flame and electric cap lamps. The Commission was informed that the official force at this mine consisted of an Inside Superintendent, Mine Foreman, and Fire Boss, only a portion of the mine being examined by the Fire Boss. Electricity at a potential of two hundred fifty (250) volts is used for lighting, hauling, cutting and pumping. All the electrical machinery in use is of an open type. A 6x6 foot Jeffrey fan operating exhausting delivers about thirty-eight thousand (38,000) cubic feet of air per minute at 325 R. P. M. against a 2.5 inch water gauge.

The explosion resulted in the death of thirteen men, five of whom died from inhaling the gases produced by the explosion. One hundred fifteen (115) men, who were in the mine when the explosion occurred, escaped; the fan was not injured and continued to function.

Inspectors arrived at the mine at 7 P. M., and took charge of the rescue work. Supplies and help speedily arrived and the work progressed rapidly with the result that all of the bodies were removed from the mine by 12 P. M., on August 15th, 1928.

The Commission began its investigation August 17th, 1928, and found that the explosion area was confined to the three (3) South Section which is turned to the right off the Main entries about sixteen thousand (16,000) feet from the mine entrance. A pair of butt entries known as three (3) and four (4) butts are turned off three (3) South. Eight (8) rooms are turned off three (3) butt. We found evidence of considerable heat in Nos. Six (6) and Seven (7) rooms and on the entry from No. Six (6) room to the face. The force of the explosion came out of No. Seven (7) room in two directions. One part traveled out the room to Butt Three (3), in the Butt to the last break-through, through the break-through to Four (4) Butt, then out Four (4) Butt to about Fifteen (15) feet outbye of the second break-through from the face. At this point the entry was not more than five square feet. This restriction in the entry split the force, part continuing down Four (4) Butt to Three (3) South while the other turned back into Three (3) Butt through the break-through. The force also left No. Seven (7) room, traveled back through the break-through in the rooms as far as No. One (1) room where the force expended itself.

This portion of the mine was quite wet and in all probability prevented propagation throughout the mine.

Explosive gases were found in Three (3) Butt and in Seven (7) Room off Three (3) Butt; that found in the entry extended from Five (5) Room to the face of the entry. A coal-cutting machine was at the face of Seven (7) Room and was being unloaded from the truck when the explosion occurred.

We are of the opinion that the explosion was caused by an open type Mining Machine igniting an accumulation of gas at the face of No. seven (7) room. This gas was being generated from a feeder about sixty feet back from the face and from which point the room had a rise of about three per cent.

Your Commission was informed that the machine men were ordered not to cut No. Seven (7) room and we regret to say that we found no fire boss mark in the room later than August 9th, 1928, and no evidence of a danger signal being used at the entrances to said room. In fact, the conditions of the mine showed a carelessness on part of the management in carrying out the provisions of the Mining Laws.

RECOMMENDATIONS

For the future safety of the employes and the protection of the property connected therewith, we recommend that the mine be operated as a gaseous one and all the provisions prescribed by law be complied with and strictly adhered to.

That the operations of all places beyond the entry known as Second Right be discontinued until the above recommendations have been complied with and approved by the Inspector of the District.

Respectfully submitted,

ALEXANDER JACK,

Inspector Tenth Bituminous District.

W. B. WARDROP,

Inspector Fifteenth Bituminous District.

THOMAS A. MATHER,

Inspector Eighteenth Bituminous District.

CHARLES H. CROCKER,

Inspector Thirtieth Bituminous District.

SUPPLEMENTAL REPORT OF COMMISSION

Johnstown, Pa., August 23, 1928.

Honorable Walter H. Glasgow,
Secretary of Mines,
Harrisburg, Pennsylvania.

Dear Sir: The following is a supplemental report of the Commission relative to the explosion at Irvona No. 3 Mine, operated by the Irvona Coal and Coke Company, and will give our reasons for the statement that the conditions of the mine showed carelessness on the part of the management.

The primary cause of the explosion was insufficient ventilation and the air current not properly conducted to face of all working places. This condition was brought about by obstructed airways, due to rock falls, and failure to make sufficient area when extracting the coal. The stoppings were not substantially built as required by law; in

many instances brattice cloth was used instead of incombustible material. No canvas checks nor line brattice were provided to direct the current to the faces and keep the same free from explosive gas.

Explosive gas was found during the investigation in the following places: Nos. One (1), Six (6), Seven (7) and Eight (8) rooms off Third butt entry and Third butt entry from No. Five (5) room to face of the entry, and in the return coming from the Fourth (4) butt, also in Fifth (5) butt entry.

In the lower main section of the mine gas was found in C Main entry and the parallels; that which was in the entry extended One Hundred (100) feet back from the face of the entry and in three rooms off No. Two (2) butt Twenty-seven (27) left.

The ventilation in this section of the mine had not been fully restored since the explosion.

The electrical equipment, such as coal-cutting machines, pumps, hoists, and their connections, are of an open type.

The trolley wires on all right and left entries off the main beyond air shaft are on the return airways.

Recommendations had been made to replace the open type coal-cutting machine by enclosed machines in all sections of the mine beyond the air shaft.

The Commission was informed that sufficient supplies, labor and legal danger signals were not provided for the safe operation of the mine.

Respectfully submitted,

ALEXANDER JACK,

Inspector Tenth Bituminous District.

W. B. WARDROP,

Inspector Fifteenth Bituminous District.

THOMAS A. MATHER,

Inspector Eighteenth Bituminous District.

CHARLES H. CROCKER,

Inspector Thirtieth Bituminous District.

VERDICT RETURNED AUGUST 22, 1928, BY CORONER'S JURY
IN MINE EXPLOSION AT IRVONA NO. 3 MINE, H. H. LEWIS,
CORONER.

"From the evidence produced before them, that the said John Collins, Charles Richards, Charles Kubieini, Steve Vorabele, Emery Skainner, Joe Fulare, W. H. Mays, James Hunt, Ray Hunt, Herman Britton, William Smail, Tony Abramovich and Andy Abramovich, came to their death on August 15, 1928, between the hours of 3 and 4 P. M., from asphyxiation as a result of a mine explosion at Mine No. 3 of the Irvona Coal and Coke Company, located in Beccaria Township, Clearfield County, Pennsylvania, and from the evidence offered us we find that the accident was due to an accumulation of gas caused by insufficient ventilation and ignited by an open type mining machine. We further find that those in charge of furnishing materials and labor and looking after the safety of the employes of the Irvona Coal & Coke Company mine were grossly careless and negligent in not complying with the recommendations of the State Mine Inspector and the requirements of the mining laws of the State of Pennsylvania."