

543 Vine Street
Johnstown, Pa.
Sept. 9, 1947 MCM:MM

Mr. J. J. Forbes
U. S. Dept. of the Interior
Bureau of Mines
Washington, D. C.

Through M. C. McCall

Dear Mr. Forbes:

Subject: Gasoline explosion, strip mine
operation, Sept. 5, 1947.
Punxsutawney, Pa.

On September 8, 1947, the writers investigated an explosion of a gasoline tank caused by a fire in a power-shovel. The explosion occurred at a strip mine employing 34 men and operated by George Yortheimer, located near Anita, Jefferson County, Pennsylvania. The explosion occurred about 2:30 p.m. on September 5, 1947, and caused second and third degree burns to twelve employees. Two of the victims have died, and four are in critical condition and are not expected to survive. The condition of the other victims was given as serious. The hospital authorities would not permit questioning of the victims.

The victims of the explosion are: Stanley Wagner, Shovel Operator, Anita, Pa.; David Mottorn, Tractor Operator, Brookville, Pa.; Gusta Miller, Walder, Punxsutawney, Pa.; Harold Murray, Supply Man, Anita, Pa.; Mervin Geer, Tractor Operator, Anita, Pa.; Norman Bair, Oiler, Rossiter, Pa.; Nicholas Guzzo, Oiler, Punxsutawney, Pa.; George E. Mervin, Tractor Operator, Big Run, Pa.; Sidney Merrill, Tractor Operator, Big Run, Pa.; Rudolph Laidig, Tractor Operator, Punxsutawney, Pa.; Lloyd Brocius, Mechanic, Punxsutawney, Pa.; Wade Depp, Mechanic, Punxsutawney, Pa.

Messrs. Gusta Miller and Wade Depp died shortly after the explosion.

Direct testimony could not be obtained because all persons involved were hospitalized. The information obtained was given by a Mr. Miller, strip foreman, and Mr. J. J. Moyer, superintendent. Mr. Miller was near the power-shovel when the oiler (Bair) jumped out of the shovel with his clothes aflame. Mr. Miller and another employee extinguished the oiler's burning clothes. Mr. Moyer arrived on the scene after the explosion occurred and assisted in caring for the victims.

The power-shovel was shut down and fueled with 75 gallons of regular motor gasoline, after which the oiler proceeded to oil and grease the shovel. About

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40 minutes after the shut-down, the oiler jumped out of the rear entrance of the shovel in flames. Several other employees in the immediate vicinity started to fight the fire in the rear portion of the shovel with carbon-tetrachloride fire extinguishers which were obtained from nearby equipment. About eight 1-quart size extinguishers were emptied, but small fires still burned beneath the gasoline engine and in the chain-drive case. Shortly after, a service truck with additional extinguishers arrived, and as attempts were being made to extinguish the fire, the gasoline tank exploded throwing flaming gasoline for about 140 feet, enveloping the men who were within about 40 feet of the shovel. The side of the shovel on which the gasoline tank was mounted was demolished. The gasoline tank was torn loose from its mounting except for one steel upright which was twisted by the force of the explosion, and was in such a position that the tank rested on the front of the shovel at the base of the boom. Other equipment was not damaged because it had been moved to a safe distance when the fire was discovered.

Evidence as to the probable cause of the ignition could not be obtained from an inspection of the damaged power-shovel because parts had been removed and repair work was started.

A theory advanced by Messrs. Miller and Moyer as to the probable cause of the ignition was that the oiler was using gasoline (a weekly procedure) to clean the machinery in the vicinity of a storage battery. The battery was used to operate the starter, and that the fumes were ignited by sparks produced by a short circuit in the wiring or by the metal battery cover contacting the terminals of the battery.

Messrs. Miller and Moyer discounted the possibility that the oiler (Bair) might have been smoking because he was not an habitual smoker. Although "No Smoking" signs were not posted, they stated that all employees were instructed not to smoke while handling gasoline and other flammable liquids.

Information regarding the cause of the ignition may be obtained only when Mr. Norman Bair, oiler, and others are recovered sufficiently to be questioned.

Respectfully submitted,

A. J. Barry

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Coal-Mine Inspector

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