UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF MINES WASHINGTON

C. M. 1912

February 5, 1944

TO MEMBERS OF THE HEALTH AND SAFETY SERVICE:

SUBJECT: Roof-fall accidents, Federal No. 1 mine, Koppers Coal

Division, Grant Town, West

Virginia.

Three men were killed and one was injured while pulling timbers to make a pillar fall in the Federal No. 1 mine, Koppers Coal Division, Eastern Gas and Fuel Associates, at Grant Town, West Virginia, about 9:40 p.m., December 2, 1943. While some workmen and officials were attempting to recover the bodies from the first fall, a second roof-fall accident occurred about 1:30 a.m., the same night, in another section of the mine, killing one man and injuring another.

The immediate roof in the mine is about 12 inches of coal left to support about 16 inches of draw slate; above the draw slate is a laminated coal band about 12 inches in thickness that is overlain with laminated shales. The main roof is sandstone. Slips, rolls, horsebacks, clay veins or faults are encountered occasionally throughout the mine. Working places are generally timbered with timber crossbars set on timber legs, on a maximum of 4-foot centers. Where pillar work is down "breaker" props are used to support roof edges near caved areas. All working places are supplied with prepared cap pieces and wedges. Systematic timbering is practiced and rules and diagrams in printed form are provided. Timbers are generally recovered between shifts, using a rope attached to a locomotive or shuttle car and all recovery work is under the supervision of a foreman.

The accident in which three were killed and one injured occurred while timbers were being recovered from a pillar pocket to induce caving. A loading crew of six members who had caught up with their work, the section foreman and the general assistant foreman, were engaged in recovering timbers in a recently completed pillar pocket. The section locomotive to which a long wire rope was attached was used in pulling the timbers, under the supervision of the general assistant foreman.

The pillar from which the timber was being recovered had been split to provide a haulage road and to avoid cleaning the adjacent entry. A thin fender of coal had been left standing between the pillar split and the entry for roof support. At the point of the accident and place had been driven through the fender and across the old entry and a pillar pocket driven into the pillar on the other side of the entry. This pillar pocket had been abandoned because of water and caving in the entry. Timber recovery in the

pillar pocket was completed except for the timber being pulled when the accident happened, and apparently caving had not immediately followed the pulling of the timbers. However, the last timber pulled, the one which led to the accident seemed to have been the key support and when removed caused the roof to fall, from the old pillar fall to the slip in the roof near the sides of the pillars.

A rope of about 50 feet in length attached to the locomotive was used and this length permitted the locomotive to operate at a safe distance. The company rules require "That during pulling operations, no persons shall be permitted inby or between the locomotive or shuttle car and timbers being pulled".

The motorman, section foreman, and two other workmen were at the locomotive but the general assistant foreman and three other men remained inby the locomotive within 30 feet of the timber to be pulled. When the timber was pulled and the cave occurred, it covered and killed three of them while one was extricated suffering only minor injuries.

The evidence at the accident shows that, had the company rules been followed, no one would have been injured.

In the second accident, two timbermen were setting center props to reinforce the crossbars a short distance from the face of a working place.

After the face of this place had been blasted the roof began to move and break the timbers and two timbermen were instructed to set center props under each crossbar and work toward the face. Five crossbars had been center-proped and the timberman was placing a prop under the sixth crossbar when it suddenly released (kicked out) causing a fall which killed him and injured the helper.

On December 30, 1943, another man was killed by a fall of "slate" in the same section in which the three men were killed on December 21.

Lessons to be Learned:

The pulling of timbers is hazardous work and extra precautions are needed to perform it safely.

Safety rules and standards are applicable to mine officials as well as to the workers and the mine officials should comply with rules as well as see that they are enforced. The best of safety rules are worthless if they are not enforced.

The accident costing 3 lives was the direct violation of the company safety rules by a mine official, who not only lost his life but through his lack of respect for the rules caused two other men to lose their lives.

This memorandum was based on the report of the accident by W. Dan Walker, Jr. It must not be published.

R. G. WARNCKE.

APPROVED:

D. HARRINGTON.