

Norton, Virginia 24273
July 20, 1967

Memorandum

To: J. S. Malesky, District Manager, Health and Safety District C

From: Harold Wiley, Coal Mine Inspection Supervisor

Subject: Investigation of multiple fatal surface (coke plant) haulage accident on July 11, 1967, Jewell Smokeless Coal Corporation, Vansant, Buchanan County, Virginia

This report pertains to an investigation conducted July 12, 1967, of a multiple fatal haulage accident that occurred about 4:15 p.m., Tuesday, July 11, 1967, wherein Roy McGlothlin, age 51, employed as a motorman, and Claude Ratliff, Jr., age 43, employed as the second shift foreman of the coke plant crew, lost their lives. The accident occurred as the result of the collapse of a 266-foot span of elevated track used to transport cars of coke from the ovens to a railroad car-loading point approximately 1/4-mile from the coke ovens. Roy McGlothlin had about 4 years experience as a motorman at the coke plant and is survived by his widow. Claude Ratliff, Jr. had been an employee at the coke plant for about 3-1/2 years. He is survived by his widow and one child.

The writer was notified of the occurrence at about 5:00 p.m. on July 11, 1967, by Mr. Gomer Evans, safety director, Jewell Smokeless Coal Corporation, and the investigation was conducted the following day.

Information for this report was obtained from an investigation at the scene of the accident and from statements of the coke plant superintendent, Mr. Charles Hale, who was in the area when the accident occurred, and Mr. C. M. Silva, a coke plant workman, who was an eyewitness.

The coke plant is situated at the confluence of Dismal River with Levisa River near the intersection of State Road 638 with U. S. Highway 460 and is about 3 miles east of Vansant, Virginia. All coke was made from coal purchased from numerous truck mine operations located on various coal properties controlled by the Jewell Smokeless Coal Corporation. The coke plant consisted of 208 Mitchell-type and 46 Sole Flue-type ovens arranged in 4 batteries. The 56 men employed worked on 2 shifts daily, 6 days a week. The average daily production of coke was 1,000 tons.

cc: Frank C. Memmott (3)
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Files

The track involved in this accident was 90 pounds per yard steel rails laid to a gage of 56-1/2 inches. The track straddled a single row of reinforced concrete pylons, each of which was anchored to bed rock and was 36 inches in diameter at the top. The pylons varied in height from about 14 feet at the coke plant end to about 22 feet at the other end, which put the track on a rising grade of approximately 3 percent against the loaded cars of coke. The steel rails were welded to two 5-foot sections of steel "H" beams, which were welded together one atop the other. The bottom "H" beam was, in turn, welded to a 1/4-inch thick steel plate which was about 30 inches long and about a foot wide. This steel plate was spot-welded to the tops of six 3/4-inch diameter steel bolts which were embedded in the tops of the concrete pylons to a depth of 18 inches. The tops or ends of these bolts protruded flush with the tops of the pylons. Well-installed trolley wire paralleled the haulage track about 7 feet above the tops of the rails. Equipment involved in this accident consisted of 4 cars, each of 8-ton capacity, loaded with coke, which were being pulled by an 8-ton General Electric trolley locomotive. The locomotive was of the type commonly used in coal mines and had been altered only to the extent that a steel cab had been installed over the deck.

At about 4:15 p.m. on July 11, 1967, Roy McGlothlin, the motorman at the coke plant, coupled the trolley locomotive to a trip of four loaded cars of coke at the ovens and prepared to pull them along the elevated track haulage road to the car-dumping point, which was located across the river from the coke ovens. On a previous trip, something had gone wrong with the dumping mechanism on one of the cars and Claude Ratliff, Jr., the second shift foreman, who had just arrived at the coke plant, told McGlothlin that he would ride over to the dumping point with him to check the faulty dump mechanism. He thereupon got into the cab with McGlothlin who then started the trip toward the car dumping point. According to C. M. Silva, eyewitness, the trip had proceeded a hundred feet or so along the elevated track haulage road when the track began suddenly to tilt. Silva said that as the tilting track reached the critical angle, it began also to slide off the concrete pylons and that at this point the locomotive flipped over and, with the loaded cars, crashed upside down to the ground trapping McGlothlin and Ratliff in the cab. Fellow workmen, including Charles Hale, the coke plant superintendent, rushed to the scene and recovered the bodies of the victims about 20 minutes after the accident occurred.

The investigation disclosed that all but two of the bolts embedded in the tops of the Nos. 3 and 4 pylons had broken away from the bottom of the steel plates prior to the occurrence. Rust on the bolt heads and on the areas of the plates to which they had been spot-welded indicated that the bolts had broken away from the plates long, perhaps many months, before the accident occurred. Also, it was noted that many of the bolts had been weakened by careless spot-welding techniques which, in many cases, had destroyed as much as 50 percent of the bolt diameters.

At the close of the investigation, it was recommended that the track be mounted on a double row of pylons to assure the stability of the track installation. Also, it was recommended that the anchor bolts atop the pylons be long enough to penetrate not only the 1/4-inch steel plate but the web of the bottom "H" beam as well and that, preferably, lock washers and nuts be used in place of spot-welding to guard against weakening of these critical areas by crystallization and/or faulty or careless spot-welding techniques. It was further recommended that inspections of the entire haulage complex be made at frequent intervals.

Harold Wiley
/s/ Harold Wiley