'I'll never go back in a gassy mine again'

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shorter route through 2 Left, robbing 2 Southeast Mains of fresh air inby the intersection.

On the morning of March 9, the men in the battery-powered motor—its controls probably sparking, as most motors do, when it was placed in or out of gear—entered 2 Southeast Mains inby the intersection with 2 Left, pulling or pushing a flatcar loaded with rails. If the air in 2 Southeast Mains was fresh and circulating in accordance with federal standards, there was little if any danger from the sparking motor. If the air wasn't moving—or wasn't moving much—and if methane was present, 2 Southeast Mains was a dark, silent, terrible bomb, fused and armed and waiting for a spark.

Methane is natural gas. In the right combination with oxygen, it is highly explosive. You can smell it from a leak in your stove at home because the gas company puts a foul smell into the pipeline as a safety precaution. You can't smell it in the mines. Or see it, or taste it.

Methane is no danger in a well-ventilated mine. It is carried away in the exhaust air and harmlessly dispersed into the atmosphere outside.

Methane is no danger at all in most Eastern Kentucky mines. It is not found in coal seams above the water table, and most mines in this area are developed in such seams. The Imboden Seam, is below the water table, and contains methane. The Scotia Mine, which is in the Imboden seam, "liberated" about 300,000 to 500,000 cubic feet of methane every 24 hours.

Methane is liberated from the coal seam by mining, and it is liberated more rapidly than normal during an abrupt change in barometric pressure. When the pressure drops, methane finds its way into the mine atmosphere more readily, meeting less resistance.

Barometric pressure drops rapidly when a cold front moves swiftly across an area. A cold front moved across Eastern Kentucky and southwestern Virginia on the morning of March 9. The MESA office at Norton, Virginia, reportedly warned a number of mines of this fact by telephone—mostly big mines liberating upwards of a million cubic feet of methane daily. But not Scotia, where the methane danger was thought to be relatively minor, according to MESA officials.

At approximately 11:30 in 2 Southeast Mains the methane bomb went off.

"We knew about the gas. But nobody took it seriously. They'd go to welding without making any kind of methane check. We didn't know. I'll never go back in a gassy mine again."

The massive bomb detonating in 2 Southeast Mains could not go up into the slate and sandstone above the mine or down into the rock strata below. It could only follow the path available to it, horizontally, tearing through the entries, crashing through the intersection of 2 Left at a speed of hundreds if not thousands of miles per hour, covering nearly three-quarters of a mile in the space of a few seconds, and dissipating itself finally as it ran out of methane.

Most MESA investigators and members of mine rescue teams that were in the mine later that day agree that the explosion was triggered in the vicinity of the motor inby the intersection of 2 Left in 2 Southeast Mains (see map)—and the logical assumption is that the motor itself sparked and triggered the explosion. Later, investigators would wonder if that assumption went far enough—later, after another explosion and more deaths.

For the men caught directly in the path of this first blast, death was instantaneous and almost certainly painless. The two men working on the overcasts probably were never even aware of what had happened.

Inby the intersection, the men on the motor could not have lived long either.

There were nine men in 2 Left section when the explosion took place. Sweeping through the intersection, the explosion would have expanded into any available space—including the mouth of 2 Left. The foreman, inby the intersection only 50 feet or so (and possibly trying to check out his ventilation problem), died instantly. Approximately 300 feet inby, two miners were felled, probably by the concussion.

Six men survived the blast. They may have been stunned, but they were able to put on their self-rescuers—chemical filters capable of converting carbon monoxide into breathable air. The self-rescuers would function for one hour.

In that hour, the men made a critical decision. Rather than proceed to the intersection and then outby to the mine portal three and a half miles away, they chose to barricade themselves at the face of 2 Left and wait for rescue.

It is easy to say that they did the wrong thing, and press reports since the disaster have sometimes suggested as much. But reporters do not know much about mine explosions. Very few people do. Those who have survived a mine explosion are sympathetic. The fireball in 2 Southeast Mains must have been terrifying, the noise overwhelming, the smoke and destruction baffling. One or more of the men may have tried to reach the intersection only to encounter carbon monoxide—or the sight of one or more of the victims, which might have led them to think the entire mine had been destroyed.

Nobody will ever know what they were thinking about. Behind their brattice barricade they sat, wearing their self-rescuers, and waited. After an hour the self-rescuers no longer screened out carbon monoxide, and quietly, one by one, the men in 2 Left must have become progressively drowsier until finally they passed into a peaceful and permanent sleep.

"When I was first hired they gave me a self-rescuer, told me not to smoke, and sent me in. I was not instructed in the use of the self-rescuer for several months and I never did know much about escapeways. They just told me not to smoke."

If there was a hero in those first moments after tragedy struck 2 Southeast Mains, it must have been John Hackworth, a beltman working in the mains several hundred feet outby the point where the blast dissipated. Through bad air and an evil haze that hung in the air and restricted his vision, he worked his way through debris and destruction most of the way to the intersection of 2 Southeast and 2 Left. Driven back to fresh air, he tried again, looking desperately for any survivors, installing temporary stoppings as best he could to re-direct the air flow. It turned out later that he was only four cross-cuts away from the victims — less than 400 feet — when he was forced back.

Hours later, when mine rescue teams and MESA investigators arrived and began probing the wreckage, Hackworth stayed with them, guided them, showed them what he had found and where he had tried to go. "By rights he should have collapsed, but he worked with us in that mine all night," remembers Monroe West, subdistrict manager in MESA's Norton, Va., office. "A big, stout fellow — he worked until he ran out of gas."

Two days later John Hackworth went into the mine again, as part of the work crew beginning recovery operations. He is still in the mine, a victim of the second explosion. He had a wife and a child and was 29 years old.

The mine rescue team from International-Harvester's Benham Mine was at Scotia by 3:00, looking at the mine map and discussing the situation with MESA inspectors. Teams from U.S. Steel's Lynch Mine and Westmoreland Coal Company's Bullitt Mine arrived soon thereafter.

Benham's team was the first underground, accompanying MESA inspector Charles Sample, with Monroe West and the Lynch team following. The teams were able to ride in battery-powered personnel carriers up the track entry for about one and three quarter miles, to the junction of Southeast Mains and Northeast Mains (see map). There they met about 20 Scotia employees who had refused to leave the mine — they wanted to help find their buddies. The teams persuaded them to leave the mine, all but John Hackworth and one or two others who could help guide the teams.

Taking turns backing each other up, the rescue teams explored forward, moving steadily until about 8:00 p.m., when they encountered disrupted ventilation and carbon monoxide. They were stalled there at the tenth crosscut in 2 Southeast Mains — about 800 feet from the intersection with 2 Left — for nearly two hours, until blown-out regulators could be repaired. Then, moving on, a Westmoreland team in the lead found the first of the bodies at about 11:00 p.m.

In the space of the next three hours, teams from Bethlehem, National Mines, Clinchfield Coal and MESA found the remaining victims and began the sorrowful job of bringing them out of the mine. By 5:00 a.m. the recovery operation was over.

The mine was silent, dark, devoid of life. But somewhere in the jumbled wreckage of 2 Southeast Mains, there was another bomb.

"The men weren't afraid of the gas, they'd never had any trouble with gas ...Scotia has been awful good to me. Scotia didn't push the men. I never had my boss raise his voice. They paid well."

Thursday

The second bomb went off at about 11:30 on the evening of March 11. It was a methane explosion far more powerful than the first. Actually, it may not have been the second explosion; there may have been others in the meantime. No one knows for sure—and there were no instruments in place sensitive enough to give MESA an accurate reading.

The other explosions—if there were any—were harmless, because the mine was empty. But at 11:30 on the evening of March 11 there were 13 men at the intersection of Northeast Mains and 2 Southeast, about three-fifths of a mile outby the site of the first explosion. According to MESA, they were in the mine to bolt a section of unstable roof in the track entry—slate jarred loose in the first explosion—so that other crews scheduled to come into the mine later could use vehicles to carry repair materials to 2 Left.

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Scotia ignored closure order

Scotia Coal Company failed last October to observe a closure order issued by an inspector for the local office of the Mining Enforcement and Safety Administration, according to records at the office.

MESA inspector Ronald D. Suttles reported in an Oct. 23, 1975, memorandum to the Pikeville office of MESA that he had issued a closure order on October 22, 1975, which would have required improvements on the cabs and canopies of shuttle cars in each coal producing section at the mine.

When Suttles returned to the mine at 8:15 a. m. on the morning of Oct. 23 he found the mine in operation.

His memorandum regarding the incident is reproduced below.

(A 104 B Closure order is given under the federal Coal Mine Health and Safety Act of 1969 when a violation which does not create an imminent danger to the health and safety of miners has not been corrected within a prescribed period of time. The order requires the withdrawal of all workmen except those needed to correct the condition from the mine and prohibits them from re-entering the mine until a satisfactory inspection has been made.)

United States Department of the Interior

MINING ENFORCEMENT AND SAFETY ADMINISTRATION

COAL MINE HEALTH AND SAFETY DISTRICT 6
P. O. BOX 262
MAIN STREET STATION
PIKEVILLE, KENTUCKY 41501

Phone 606-437-9616

October 23, 1975

Memorandum

To: Lawrence D. Phillips, District Manager, Coal Mine Health and Safety District 6

From: Ronald D. Suttles, Federal Coal Mine Inspector

Subject: 104 B Closure Order at the Scotia Mine, Scotia Coal Company, Ovenfork, Letcher Co., Kentucky

October 22, 1975 I issued 104 B Order, No. 1 RDS, 75-1710, on the cabs and canopies, at 9:45 A.M. on the National Mine Service Torkars (shuttle cars) that includes each coal producing section at the mine.

October 23, 1975, I arrived at the Scotia Mine, new return airway section (025-0) at 8:15 A.M.. Coal was being transported by belt from the faces to the surface. At 8:30 A.M. I observed coal coming out on the main belt, which transports coal from the five sections underground at the main mine. At 9:00 A.M. I talked with Charles Kirk, Safety Inspector. I informed Mr. Kirk that Scotia was working under an order. Mr. Kirk made no comment. I left Scotia Coal Company at 9:15 A.M.. Coal was still being dumped from the belt conveyor, new return airway section (025-0).

Arrived back at the office 10:00 A.M..

Ronald D. Suttles

Federal Coal Mine Inspector