

**THE HOLMES SAFETY ASSOCIATION**

# **BULLETIN**

**MAY/JUNE 2000**



# **ABANDONED MINES**





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The Holmes Safety Association Bulletin contains safety articles on a variety of subjects: fatal accident abstracts, studies, posters, and other health- and safety-related topics. This information is provided free of charge and is designed to assist in presentations of groups of mine and plant workers during on-the-job safety meetings. For more information visit the MSHA Home Page at [www.msha.gov](http://www.msha.gov).

**Please Note:** The views and conclusions expressed in Bulletin articles are those of the **authors** and should not be interpreted as representing official policy or, in the case of a product, represent endorsement by the **Mine Safety and Health Administration**.

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*Keep Us in Circulation--Pass Us Along*

## MSHA Kicks Off National “Stay Out-Stay Alive” Safety Campaign

Article taken from MSHA News Release  
No. 2000-0417

How can something so intriguing be so deadly? It's a question for adventure seekers to seriously consider before wandering into one of the thousands of active and abandoned mines and quarries scattered throughout the country.

Each year, dozens of children and adults are injured or killed while playing on mine property. To prevent the next tragedy, the U.S. Department of Labor's Mine Safety and Health Administration (MSHA) launched a nationwide public awareness campaign aimed at keeping kids away from active and abandoned mine sites.

“With the arrival of warm weather, the temptation to explore an underground mine shaft or swim in a quarry can be irresistible,” said J. Davitt McAteer, Assistant Secretary of Labor for Mine Safety and Health. “Don't do it,” he warned. “And parents, don't let your children near these places. Mine sites make lousy—and deadly—playgrounds.”

“Stay Out-Stay Alive” is a cooperative venture of more than 30 federal, state, and

private sector organizations rallying together to increase awareness about the hazards of active and abandoned mine sites. From April 17-30, MSHA and its partners—armed with stickers, posters, coloring books, videos and bookmarks—visited schools, community groups, and scout troops nationwide to discuss the dangers children may encounter if they enter mine property without proper training, safety equipment, and supervision by mine personnel. The message will continue to be spread at camps and other outdoor venues that attract young people.

Active underground mines may harbor undetectable and deadly gases, such as methane and carbon monoxide. Abandoned underground sites often contain decaying timbers, loose rock, and tunnels that can collapse at any time.

Unsuspecting swimmers who frequent rock quarries may develop cramps from the icy temperatures, and divers can miscalculate the water's depth. When quarry operations shut down, they often leave behind



pieces of mining equipment undetectable from the water's surface, including old machinery and sharp-edged, barbed-wire fencing.

With suburban sprawl extending its reach beyond existing neighborhoods, the chances of new inhabitants encountering old mines are steadily increasing. “Such encounters—whether accidental or planned—can be deadly,” said McAteer. ❖



## *Dangers at Active and Abandoned Mine Sites*

The men and women who work at mine sites are trained to work in a safe manner. For the unauthorized visitor on an active mine site, or the hiker, off-roader, or rock-hound enjoying outdoor recreation, the hazards are not always apparent. Active and abandoned mine sites have proven to be an irresistible—and sometimes deadly—draw for children and adults.

\* Vertical shafts can be hundreds of feet deep. At the surface, shafts can be completely unprotected, hidden by vegetation, or covered by rotting boards.

\* Horizontal openings may seem sturdy, but rotting timbers and unstable rock formations make cave-ins a real danger. Darkness and debris add to the hazards.

\* Lethal concentrations of deadly gases (methane, carbon monoxide, carbon dioxide, and hydrogen sulfide) can accumulate in underground passages.

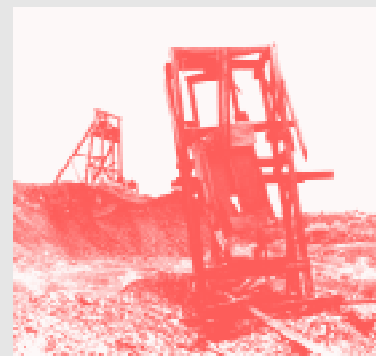
\* Unused or misfired explosives can become unstable and deadly—vibrations from a touch or footfall can trigger an explosion.

\* Excavated vertical cliffs—highwalls—in open pit mines and quarries can be unstable and prone to collapse.

\* Hills of loose material in stock or refuse piles can easily collapse to bury an unsuspecting biker or climber.

\* Water-filled quarries and pits can hide rock ledges, old machinery, and other hazards. Because of the depth, the water can be dangerously cold; steep, slippery walls make exiting these swimming holes very difficult.

In 1999, 17 people died while seeking adventure on mine property. The majority drowned in water-filled quarries and pits; others died from all-terrain vehicle accidents, falls, and suffocation.



***Any community with active or abandoned mines, quarries, or pits could become the scene of the next tragedy. For more information, please contact: Mark Davis, U.S. Department of Labor, Mine Safety and Health Administration, 703/235-1372, [mdavis@msha.gov](mailto:mdavis@msha.gov), or visit the MSHA web site: [www.msha.gov](http://www.msha.gov). MSHA has a toll-free hotline for reporting unsafe access to active and abandoned mine sites: 1-800-499-1038.***

## "Be Seen and Be Safe"

Article taken from MSHA Post Accident Investigation Remedies

Four fatal mining accidents occurred recently when pedestrians were struck by large, heavy equipment. Immediately before the incident, each of the victims was standing or walking in areas where the equipment operators did not expect them to be. In all cases, the victim had communicated with the equipment operator within five minutes before the accident. During these communications, the equipment operator was never warned that any pedestrian was near the area where the equipment was being operated.

**The following suggested practices may save your life:**

1. Always make sure equipment operators see you before entering any area where heavy equipment is being used.

If possible, make eye contact with the equipment operator.

It is recommended that all personnel who work after dark, or in any poorly lighted area, wear reflective clothing. As an alternative, MSHA recommends the use of a battery-powered illuminated vest. For further information contact Steven Luzik at (304) 547-2029.

2. Use of **RADIOS** to



*Pedestrians should always communicate their position to equipment operators.*

communicate would assist with these types of situations. Easy visual identification of equipment will ensure pedestrians are communicating with the right equipment operator. All equipment should be painted with large numbers (a foot high or more) on all four sides of the equipment for proper identification.

3. Pedestrians should always communicate their position to equipment operators. Before entering an area you normally would not enter, let the equipment operator know you are there.

When moving to a different area, inform the equipment operator before leaving the area.

To be safe around heavy equipment, the equipment operator must know where you are. Therefore, you should use any and all methods of communication to ensure this. Mine operators need to ensure their employees can **BE SEEN AND BE SAFE**.



*Use radios to communicate position, wear illuminated vest and reflective clothing in poorly lighted areas and when working after dark.*

# *“Working Near the Edge- Beware of Soft Areas; Stay Perpendicular”*

*Article taken from MSHA Post Accident Investigation Remedies*

*Recent accidents show the need for extra care when working near the edge of a highwall or slope.*



*Accident No. 1: A drill toppled over a highwall, crushing the driller, when the support jack near the edge of the highwall sank into soft, unconsolidated material as the tower was being raised.*

*Accident No. 2: A dragline toppled into the pit when the soft soil it was sitting on gave way as the operator swung a load of material.*



**When operating equipment near the edge of a slope, keep the following points in mind:**

- Before setting up, check the top and face of the slope for indications - such as rutting, cracking, sliding, or slumping - that the material near the edge may be too weak to support the equipment.
- Be especially alert when ground conditions change to a softer or weaker material. Uncompacted or cast spoil, for example, may be loose and contain voids.
- Position equipment perpendicular to the edge of the slope to provide better stability should a portion of the edge give way.
- Be alert for signs of movement or inadequate bearing as the equipment is being positioned and during operation. Check level sensors frequently.
- Use bearing pads or blocking to provide adequate bearing-area when the ground is soft. Make sure blocking is readily available wherever soft conditions may be encountered.

**When using leveling jacks, be sure to:**

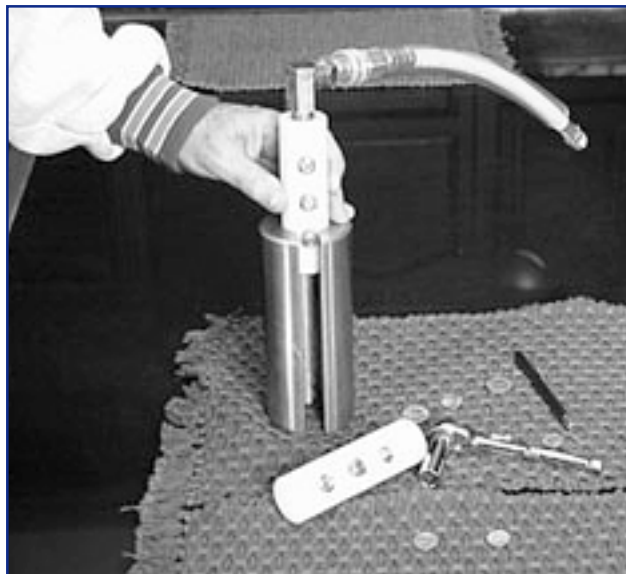
- Check the pads for excessive penetration into the ground as the load is applied;
- Extend the jacks just enough to level the equipment, keeping the equipment as low to the ground as possible; and
- Avoid using the jacks in their fully-extended position.

## Removable Water Spray System

*Would you like the flexibility of easily changing out clogged water sprays?* The Mine Safety and Health Administration (MSHA) has learned of an innovative water spray system, designed by Mr. Phil Southern, where this is made possible.

Water sprays clog on a continuous miner due to the inherent problem of water traveling through corrodible fittings, motor housings, control panels, and ultimately into steel manifolds where the foreign elements, most notably iron oxide (rust), attempt to exit through the sprays. This was dramatically demonstrated when Mr. Southern had several spray manifolds dissected that showed severe accumulations of foreign material which inevitably cause clogging of sprays.

Mr. Southern has developed removable nylon manifolds which are insertable within metal blocks that are weld-attachable to continuous miners. These manifolds have quick disconnects that can be interchanged in seconds even in difficult locations such as the conveyor throat, underneath the



Water Spray System

cutterhead gear cases, and on the sides of the gathering pan. When the sprays become clogged, the manifolds can be safely and easily detached and clean manifolds reattached. The clogged material can then be purged and clogged sprays replaced at the leisure of the operator and made available for reinsertion. Since the manifolds are made of durable but lightweight material, spare manifolds can be carried on the operator's person. These manifolds will accommodate any combination of jet, fan, or cone patterns in size No. 2, No. 3, or No. 5 sprays.

Overall, this new water spray system has the capability to:

- Provide increased respirable dust control by virtually eliminating clogged sprays during operating hours.
- Provide the opportunity to

experiment with an infinite number of spray combinations quickly and easily.

- Reduce the exposure of miners cleaning sprays in dangerous or difficult to access locations.

- Increase the mining system's availability by increasing operating time and electric motor life.

In summary, these innovative sprays appear to provide a "win/win" situation by both improving respirable dust control and enhancing productivity. For further information, please contact Mark Skiles at 703-235-1580.



## Crane Safety

By Steve Hoyle, Staff Writer



Photo by Daniel McElain

Cranes are machines that lift and transport heavy weights. A crane's lifting ability depends largely in balance rather than on the power of its engine. A crane can lift maximum loads only if the load is close in. The rated lifting capacity is less when the load is farther out and the tipping effect is greater. Because of these characteristics, cranes usually operate with their booms held high.

The crane operator has a heavy responsibility for the safety of persons and equipment. A ground person (rigger) or ground crew is usually present and can be injured if the operator makes mistakes. Crane accidents often result in disabling or fatal injuries from falling, dropped, or swinging loads. Sometimes slings or other fastenings break or slip off—both of these situations are obviously very dangerous. Crane operators should be alert for power lines and other obstructions. Accidents can also occur from collisions, people getting caught in pinch points, and slips, trips, and falls. Ground personnel can be caught in load rigging if the crane operator begins a lift while

*(See next page)*

they're still making adjustments. Here are some useful tips for crane safety.

***Crane Safety - In General***

**ALWAYS** follow manufacturer's recommendations when using a crane.

**ALWAYS** follow manufacturer's recommendations when leaving your crane unattended or shutting it down at the end of your shift. Lower your load to the ground, (these items may not apply to all makes and models of cranes) shut down the engine, and set all brakes and locking devices.

**ALWAYS** pay attention to the surrounding work area. Mining activity changes all the time, and your crane can become unstable without you noticing it.

**ALWAYS** follow all safety rules and procedures—shortcuts can kill!

**ALWAYS** conduct a work area safety inspection, and report any unsafe conditions immediately.

**ALWAYS** inspect the machine every day. Remove any defective equipment from service. Be sure the crane's log is up-to-date.

**ALWAYS** wear and use appropriate personal protective equipment for the job.

**ALWAYS** watch for pinch points.

**NEVER** get on or off a machine that's moving.

***Crane Capacity***

**NEVER** exceed the rated capacities of the machine.

**ALWAYS** know how much counterweight's on your machine.

**ALWAYS** use the machine's load chart to determine the lift capability for any load you intend to lift, and follow all manufacturer's recommendations. Remember — the charts are based on ideal conditions — so be conservative!

**ALWAYS** know the load radius. This is the horizontal distance from the boom's axis of rotation to the hoist line.

**ALWAYS** know the boom elevation angle and boom length.

**NEVER** use signs of tipping to determine if a load is within your crane's capacity.

***Booms, Blocks, and Lines***

**NEVER** get under a boom that's being repaired, assembled, etc. It can fall without warning.

**NEVER** use boom sections with bent lattice members.

**NEVER** use a boom with damaged or bent chords.

**ALWAYS** block boom sections when assembling them.

**ALWAYS** be sure all boom insert connection pins are installed before raising any boom being assembled.

**ALWAYS** check telescopic booms for sway, drops, cracks, etc.

**ALWAYS** check conditions of all boom hoist ropes and sheaves.

**ALWAYS** check reeving in the block to make sure it's symmetrical.

***Pre-Operation Check***

**ALWAYS** check cranes before starting your shift.

- Lubrication
- Fuel and fluid levels (look for leaks)
- Air tanks for proper pressure and relief pressure
- Safety devices
- Brakes and clutches
- Components used to lift, swing, and lower booms and loads
- Wire ropes, sheaves, drums, and rigging hardware
- Free rotation of all swivels
- Operating mechanisms and instruments NOTE: Replace any loose bolts found.
- Boom and jib components

- Length marked on all boom inserts
- When equipped, outriggers' condition
- Guards
- Operator's cab to make sure it's clean
- Fire extinguisher to make sure it's properly charged and accessible
- Tires

**ALWAYS** make sure before operating your crane that:

- The area around your machine is clear before starting the engine.
- All gauges and controls are "normal" after the machine warms up.
- All controls work properly.
- The air system works properly.

### *Work Practices*

**ALWAYS** plan ahead and determine possible hazards such as power lines and high winds.

**ALWAYS** use a signalman if the operator can't see the load, load landing area, path of travel, or when the load is far enough away from the operator to make judgment difficult.

**ALWAYS** watch out for power lines. This should be the number one concern when operating a crane. Use a qualified signalman equipped with a loud signal, such as a horn, when the crane is within a

boom's length of the lines.

**ALWAYS** pay attention to ground conditions. Use heavy duty blocking with a large bearing area to keep the crane from sinking. Avoid excavations, trenches, shoring, etc., — they can collapse without warning.

**CHECK** the crane level often. You can use the hoist line as a plumb bob to check the crane's level.

**IF "ON OUTRIGGERS,"** be sure the beams are fully extended, the tires are just above the ground, and that the pads are pinned. Never block under the outrigger beams inside the pads.

**IF "ON RUBBER,"** be sure tires are in good condition, meet manufacturer's specifications, and are properly inflated.

**IF "ON CRAWLERS,"** block the ends of the crawlers (if necessary) to keep the crane from tipping, sinking, or rocking.

**ALWAYS** maintain a safe distance from other equipment around the work site—especially behind your crane.

**ALWAYS** use properly maintained, correctly assembled, undamaged rigging equipment. Remove defective rigging from service immediately.

**NEVER** exceed the safe working

load of the rigging.

**ALWAYS** be alert for two-blocking when telescoping booms.

**AVOID** using multiple cranes on a lift.

### **EASY DOES IT!**

- Plan every lift. Make sure you know the weight of the load and the path of travel.
- Be sure all materials are secure before making a lift.
- Control all loads with tag lines.
- Keep load lines as short as possible to prevent excessive swinging.
- Hoist loads slowly.
- Don't swing loads rapidly; watch for centrifugal force when swinging a load.
- Be very careful when lifting a submerged load or a load that's stuck in mud.
- Don't allow booms or loads to touch structures.
- Lower loads slowly.
- Apply brakes gradually.
- Release loads slowly.
- Know the division of the sweep area in quadrants.

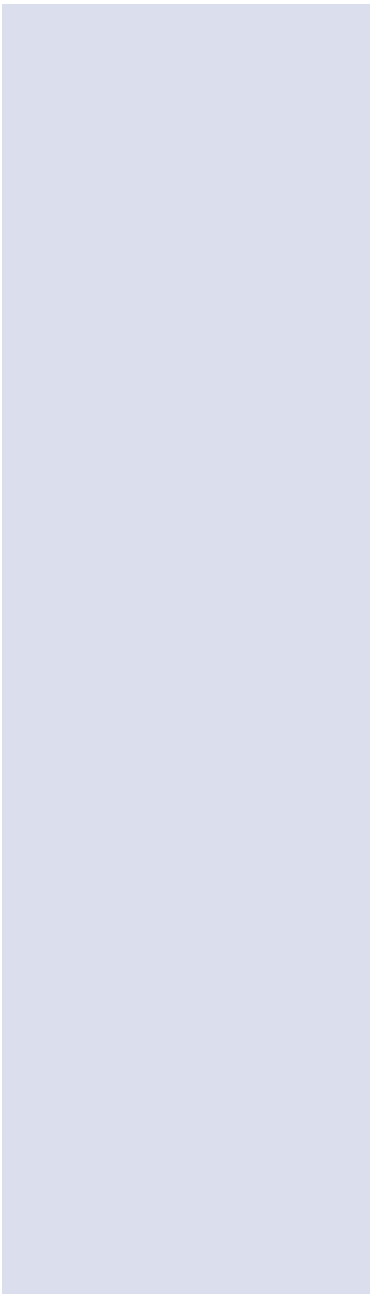
**NEVER** work under suspended loads, and stay clear of them until they're safely landed and blocked.

**ALWAYS** make sure slings have been inspected and replaced if damaged.

*(see next page)*

**ALWAYS** keep away from slings under tension—they can snap back and hit you.

**NEVER** let anyone ride the hook, block, bucket, grapple, etc. A crane is not an elevator.■



## Fork Creek Mining Signs Up With the Holmes Safety Association

*Article submitted by Steve Lipe, President, Holmes Safety Association*

Fork Creek Mining in West Virginia became a new member of the Holmes Safety Association. Mr. Robert Elam, Deputy Assistant Secretary of the Holmes Safety Association, and Holmes Safety Association President Steve Lipe was at the mine on March 29, 2000, to present General Manager Howard Epperly with a Holmes Safety Association flashlight made by the Koehler-Bright Star Company to commemorate the membership.



*Pictured is Mr. Robert Elam presenting the flashlight to General Manager of Fork Creek Mining, Mr. Howard Epperly.*



# The Cincinnati Mine Disaster of 1913

By Len Marraccini

The Monongahela River Valley, which winds sinuously northward from West Virginia to Pittsburgh, PA, has had coal mining activity since the 1700s. The first coal mine was located across the Monongahela River from Fort Pitt (now Pittsburgh) on what was called coal hill. Due to the geology of the entire river valley area, outcroppings of coal were easy to see. This fact helped develop the river valley into a major coal mining region beginning in the 1800s. One of literally hundreds of mines which came into being was the Cincinnati Mine. This mine was located approximately 18 miles south of Pittsburgh in Washington County. The mine had its beginning along the river in 1835. Little was known about the early history of the mine except for one reference which quotes "...At one time, in the early days, the coal was hauled out of the mine by dogs." This was a very common practice. Before the series of locks and dams were built along the Monongahela River in the 1840s, coal from

the mines was either transported by horse and wagon, or stockpiled along the river bank until spring thaws raised the water level sufficiently for boats to be used for transporting the coal to market. Later in 1873, the first railroad was constructed from Pittsburgh south to Monongahela, PA, thus improving the transportation of coal to markets.

Throughout the 1800s, the Cincinnati mine expanded in size and changed ownership frequently. It ran west from the Monongahela River for approximately one mile, then due north. In 1859 the mine produced approximately 300 tons, employing 30 people. At the turn of the century the mine employed 222 people, with a production of 115,322 tons, and was part of the Pittsburgh Consolidated Coal and Coke Company. In addition to the main river entrance, the mine had a mule entrance located at Mingo School and a smaller third entrance near the town of Finleyville, PA.

Since its beginning, the Cincinnati mine had a reputation as being a gassy mine. By



View of the river entrance to the Cincinnati Mine. Photo courtesy of Alphonse Dehose

one account, around 1882, an explosion occurred in the mine. It had such tremendous force that it blew mine cars out of the river entrance and halfway across the Monongahela River. One miner was killed. An even worse explosion would occur in 1913!

## **THE 1913 DISASTER**

Wednesday, April 23, 1913, started out as a bright, sunny, spring day. However, before this day was over, a major mine disaster would occur at the Cincinnati Mine. Shortly before 12 noon, a tremendous ground tremble was felt in the area. A local rancher who lived in a large stone house a short distance from the mine ventilation fan, felt the ground tremble. He looked out of the window of his house in the direction of the mine fan. At the fan, he saw large amounts of smoke and wood debris fill the air. The rancher immediately telephoned the mine office to alert them of the situation. Then he proceeded to the ventilation fan where he and the fan attendant worked at closing the large explosion doors associated with the fan. The mine superintendent was on duty at the time of the explosion at the Nottingham Mine, located a short distance away near the town of Finleyville. After receiving news of the explosion, the superintendent proceeded by mule and

(See next page)

buggy to the Mingo School entrance of the Cincinnati Mine.

Breathing apparatus and a trained rescue crew were not available on-site for immediate rescue work. The superintendent and a few men went underground in hopes of finding survivors, but they could not advance very far because of the afterdamp. Meanwhile, the news of the explosion spread to nearby towns, and one of the first rescue teams to arrive during the afternoon was the Pittsburgh Coal Company crew from Jacobs Creek, PA. The team checked out their equipment (Draeger 1907 type apparatus), and then proceeded underground. One of these "helmet" men's equipment malfunctioned; he collapsed, and died shortly thereafter. Meanwhile, personnel at the U.S. Bureau of Mines at Bruceton, Pa, heard of the "rumored explosion" and telephoned the mine company to offer the use of No. 6 rescue car, apparatus, and crew. The offer was not immediately accepted. However, the No. 6 car, crew, and supplies were transported by B&O railroad from Bruceton to Finleyville to be of service if needed. Later, their services were accepted, along with the services of other rescue teams.

For the next several days, the various rescue teams methodically advanced through the mine workings in search of survivors. Three miners were rescued alive. One miner was

rescued shortly after the explosion. Two other miners were rescued after spending two and a half days underground after the explosion! When interviewed, these two men said that they stayed alive by drinking sulphur water that they found in small pools and by eating stale bread that they found. One other rescue was successful. Four days after the explosion, rescue teams found five mules alive underground. These animals were brought to the surface. After several days of rescue efforts, the grim results were made known. Of the 167 miners who were working underground on April 23, 68 miners escaped after the explosion by means of the Finleyville, Mingo School, and Monongahela River entrances. Three miners were rescued alive. Ninety-seven men and

boys, including one rescue team member were killed. The disaster left 56 widows and 118 orphaned children.

The bodies of the victims were removed by the main Monongahela River entrance and transported by a special Pennsylvania Railroad train to the town of Monongahela, PA. At Monongahela, the victims were taken from the train to a funeral home. Because of the large number of victims, fifteen undertakers worked tirelessly to identify and prepare the bodies. Ironically, one of the undertakers, a man from Dawson, PA, had prior experience in mine disaster work. He served as an undertaker at the Marianna Mine disaster, the Darr Mine disaster, and the Monongah Mine disaster.



Family members gather outside Mingo School entrance  
Photo from U.S. Bureau of Mines

**OFFICIAL FINDINGS**

An official board of inquiry was convened to determine the cause of the mine disaster. After several days of testimonies, the board determined that the origin of the explosion was located at the working face of 12 butt off No. 14 face entry. It was determined that a miner had exposed a clay vein before leaving the working area for lunch. After eating lunch, the miner returned pushing an empty mine car. There was a slight uphill grade to the face. Thus the miner was hunched over as he pushed the empty car. At the face area, he bent over further to block the wheels of the car. When he stood up, his open flame lamp came in contact with the accumulated methane gas, and the explosion resulted. ❖

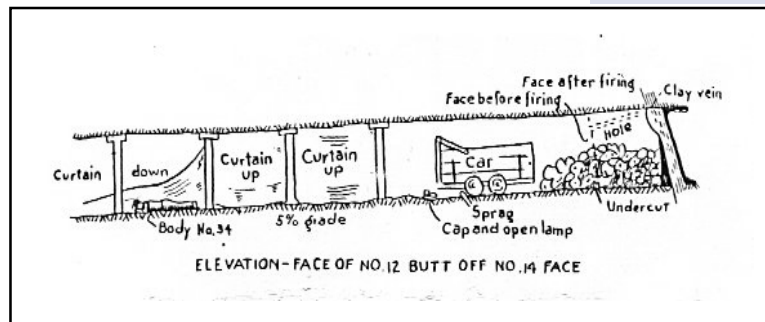
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*Illustration of explosion sight  
Historical Summary of Coal Explosions in the United States, 1810-1958*

**About the author:**

Leonard Marraccini is employed with MSHA's Pittsburgh Safety and Health Technology Center as a supervisory physicist. His expertise is in the area of acoustics. One of Leonard's favorite hobbies is researching early mining history.

MAY/JUNE 2000

**PART I:**  
***“One Spark of Time”***  
***The Winter Quarters***  
***Mine Disaster***



*By Kymberly Mele*

One hundred years ago, on May 1, 1900, the Winter Quarters Mine No. 4 exploded, leaving in its wake 200 miners dead and reverberations that would echo through the past century. In “one spark of time” the devastating disaster changed the lives of all who worked the mines at Winter Quarters and lived in the two small communities close to the mine site. Located in central Utah, the Winter Quarters mining camp lay in a canyon a mile west of Scofield, a small town at the south end of Pleasant Valley. On that fateful day, full of anguish and sorrow, Pleasant Valley was the “antithesis of its name.” In terms of men killed it was at that time in history, the most disastrous mine explosion in the United States. Within twelve years other subsequent disasters more tragic as to lives lost would leave Winter Quarters listed fifth among the most devastating mine disasters in this nation’s history. The worst disaster was at Monongah, WV, where 362 miners lost their lives on December 7, 1907; Dawson, NM, lost 263 on Oct. 22, 1913, Cherry, IL, 259 on Nov. 13, 1909, and 239 at

Jacobs Creek, PA, on Dec. 19, 1907.

At the time of the Winter Quarters explosion, J.W. Dilley, the principal of the Scofield School and the town clerk of Scofield, recognized the historical significance of the tragic events. As an eyewitness to the happenings that unfolded after the disaster, he compiled the many newspaper and witness accounts as well as official records and writings of his own into a book published that same year titled the ‘History of the Scofield Mine Disaster’. The proceeds from the sale of the book went to the relief fund for the families of the victims. Dilley’s style of writing is somewhat archaic, but he manages in a very poignant way to describe the magnitude of this very tragic event.

Of that fateful Tuesday morning Dilley wrote: “May Day or Dewey Day, dawned bright and clear, when about two hundred miners left Scofield for the mines in the miner’s coach that is run back and forth at the change of shifts, to the mines of the Pleasant Valley Coal Company at Winter Quarters. Every one of the men that were soon to meet

death in its most horrible form were feeling in the best of spirits as evidenced by the pleasant joke that was bandied back and forth through the coach. What had they to fear, were they not working in one of the safest coal mines situated in the coal region? Each one was looking forward to the evening when there was to be a dance in the new Odd Fellow’s Hall, and their children were to have a celebration in honor of the Hero of the Battle of Manilla[sic]. All were merry and joyous. The spring time of the year was at hand, the trees were commencing to put on their garb of green and all nature was smiling with the first warm days of the most glad-some part of the whole year.

“Nearly every man was at his post of duty in the mine, when from some cause or other, a most terrific explosion took place and all was changed in the twinkling of an eye. The lips that were breathing words of hope and encouragement a few hours before were now hushed and cold in death. The lips that had kissed their wives and children the customary good-bye, and the ever returning response from the loved



ones as they wished their husbands and fathers a quick return, would never more be heard to utter words of love. At about fifteen minutes past ten o'clock, the surrounding country was startled by an explosion, but as it was Dewey Day nearly every one supposed that the noise was from someone setting off a blast in honor of the day. But by and by there were seen women hurrying towards the mine, and by their blanched faces, one could read that there was something amiss at the mines. Reports came down that No. 4 had exploded, but this was not believed as this mine in particular was supposed to be the safest mine of all of the company's mines. But disaster dire and dreadful had overtaken No. 4, and all that were not working hurried to the opening as fast as possible, there to be greeted by a sight of death and destruction such as one rarely, if ever, sees in a lifetime. But if the explosion has produced such havoc on the outside, what can be the condition upon the inside where the miners are confined with no chance of escape, caught like rats in a trap? No hope to recover anyone alive, no hope to ever look upon the faces of those entombed, no hope of ever hearing loving words from lips now charred and blackened in the embrace of death."

As to the exact time of the explosion, accounts of one rescuer states that he found "on a box where a dead Finlander was picked up was his watch. It had stopped when the explosion occurred and the hands marked 10:28 o'clock."

Moments after the explosion, when the chaos and confusion settled to some degree at the mouth of Mine No. 4, it was soon discovered that a few men on the surface had been injured by the blast that issued from the mine. By some lucky chance the engineer had just stepped outside of the engine house, his normal post, when the blast demolished the small building. Nothing remained of the house except the broken and twisted boards. At the time of the explosion, "he was assisting in replacing a car upon the track that had been derailed, and although scratched and bruised, was still alive. One man that assists in pushing the loaded trip over the knuckle was found with his foot crushed, his shoulder out of place, and severe injuries were sustained in other parts of his body. The assistant helper was found with his jaw broken and the side of his face crushed. The next man to be met had one leg broken, one arm broken, and severely injured about his body. These men were immediately taken home by a few of the men that

had arrived by this time and we hastened to the mouth of the mine, where one horse was found dead but his driver could not be seen until someone looking down the gulch saw the form of someone, supposed to be the driver, John Wilson. A few of the men hurried to his side and found that life was not yet extinct, although he had been blown eight hundred and twenty feet, by actual measurement. He was tenderly picked up and conveyed to his home where it was found that the back part of his skull had been crushed, besides a stick or splinter had been driven downward through his abdomen. He was in a critical condition and no one supposed he would live to be carried home, but, strange to relate, he had recovered rapidly and although he will never be able to do a day's work again he is up and feeling quite well at present."

Within a few minutes of the explosion, Thomas J. Parmley, the mine superintendent, assembled a rescue party of about twenty men and made an attempt to enter the mine. Hampered by smoke and with the entrance blocked by debris and the dead horse, Parmley decided to enter through Mine No. 1, a quarter mile away, through which there was an alternate route into No. 4 as

*(See page 19)*



*Bodies of the miners at the school*



*The devastation after the explosion outside on Mine No. 4, where the explosion originated*

*Photographs provided by the Utah State Historical Society*



*Picture of bodies being taken 1/4 of a mile to Edward's boarding house*



*Photo of rescue team*



*Bringing bodies from the mine*

the two mines were interconnected. The rescue party was again hampered and driven back by the deadly damp that had by now reached the lower levels in No. 1. Two members of the rescue party were overcome and were carried unconscious from the mine. One tragic story tells how Will Clark, a young miner who had been working outside at the time of the explosion, rushed to the mouth of the mine with hundreds of others. His father and brother were both inside, and wild with grief, he joined the first rescue party. When the word to enter was given, he dashed recklessly ahead to search for his loved ones. Disregarding warnings of the more experienced miners, Clark raced ahead alone to find his father and brother, only to be found dead by a later rescue team.

Rescuers again tried to enter Mine No. 4 after the horse and timbers that had blocked the entrance before were cleared. Able to follow the air, the actual work of the rescue began. Superintendent Parmley's crew made slow progress and eventually found three men still alive near the mine's entrance. Badly burned and almost unrecognizable, the first miner to be carried out screamed in pain and begged his deliverers to kill him. His suffering would last for more than a day before death freed him in the night. A second

miner still breathing but unconscious died as rescuers carried him to Edward's boarding house near the Mine No. 1 entrance. The third one to be found was William Boyter, and although sitting among the dead, was found to be alive, although hardly conscious. After being assisted to his feet, he walked out with slight help although he still required hospitalization.

Boyter and Jacob Anderson (a miner who would later be brought out by rescuers 3 1/2 hours after the explosion) had been working alone off the first rise in a room that was untouched by the explosion's force and intense heat. These two men were the only ones to escape with their lives from the workings of Winter Quarter No. 4 mine.

By noon, Parmley's men had made their way about 200 yards into the No. 4 mine. "Roll after roll of canvas was brought, and brattices were fixed up on the inside to force the air into one level at a time in order that the rescuing party could force their way through the mine in the hope of finding someone still alive. But the farther the rescuers went the more apparent became the magnitude of the disaster. Men were piled in heaps as there were not enough men to carry out the dead as fast as found. Then some miners from the Clear Creek mine began to arrive at this time, and their

assistance came none too soon, for there was plenty of work for all. The new arrivals began to carry out the bodies which were placed in the company's barn across the ravine from No. 4, where they were tagged as fast as they could be identified. The heart-rending shrieks of the wives and relatives of the dead miners were not heard at this mine, but when anyone would go down the incline they would be met with lamentations that would cause even the hardest hearted men to shed tears. Women asking if their husbands or fathers had been brought out or not, children crying for the parent that was still within the mine. Many who had relatives working in No. 1, were not so much concerned at first, as it was supposed by those upon the outside that the men in that mine had not been affected, as the explosion had occurred in No. 4, but their hopes were dispelled when the rescuers had passed from No. 4 into No. 1. The first dead body carried out of No. 1 was a driver who had been caught by some of the flying debris. After this the bodies of Thomas Livsey and his son William were found badly burned, almost beyond recognition, but still alive. The dead then began to arrive at the mouth of No. 1 by the car load, sometimes as many as twelve bodies having been

*(See next page)*

loaded upon one mine car. Then it was when the horror of the situation began to dawn upon the minds of the people on the outside of the ill-fated mine. Then it was that the people realized that it was impossible to expect anything but the burned or mangled body of the loved ones that had entered the mine so light hearted that morning.”

Hope had been entertained that some of the men, especially in No. 1, would still be found alive. It was not to be as rescuers came upon men burned beyond recognition. Some men were found clutching their tools, indicating instant death. Others were found to have died while crawling to escape smoke and fire. One rescuer described how they found the dead “in every conceivable attitude. One man had filled his pipe and sat down to light it. The damp struck him and he died then and there, with the filled pipe in his outstretched hand...we found men in groups who had evidently sat down to consult.” Others were found “locked in one another’s arms and silent in a last embrace.” As the burned and disfigured bodies were carried from the mine, the litter carriers were greeted by the wails of grief-stricken widows and children and by saddened faces of others that tried vainly to comfort the victims’ families. Among miners yet unaccounted for

early that afternoon was Thomas Parmley’s brother, William, the mine foreman at Winter Quarters No. 4. Mine officials had no record of who was in the mine at the fatal moment, and the rescue teams feared that many of the men lay buried and the recovery of their bodies would be difficult.

One incredible event Dilley recounts was: “this afternoon six of as fine horses as are to be seen in the whole state of Utah came rushing out of the tunnel of No. 1, and the mystery of their being alive is one that puzzles every one connected with the mine. They had their harness and trappings peculiar to mine horses intact, and there was not a scar or scratch on one of them. They were turned down the hill and cavorted away in the direction of the stable as if just off for a feed. But there was not a man alive to tell at what point in the mine they had been stationed last.” In another part of Dilley’s book he tells how, “a number of other horses used in the tunnel were killed. They were found with their noses against the ground.”

At the time of the explosion Parmley had notified the company’s headquarters in Salt Lake City, Utah. By 3:00 p.m. that afternoon, W. G. Sharp, Superintendent of the Pleasant Valley Coal Co., arrived by special train from Salt Lake City. Other officials of the Denver and Rio Grande Western

Railroad and several doctors accompanied him. He immediately went to the mine site to supervise the recovery operations.

The progress of rescue and recovery parties was agonizingly slow. Rescuers had to contend with dislodged props, obstructions caused by cave-ins, and piles of debris resulting from the violent explosion. Despite those problems, the procession of grim-faced volunteers carrying their lifeless loads seemed endless, and the boarding house that was first to be used to treat injured miners quickly became a makeshift morgue where volunteers washed the bodies and began the process of preparing them for burial. The record is not clear as to what point in the recovery that the air was cleared enough for teams to begin bringing out victims through Mine No. 1. In Dilley’s book, he states: “as the bodies were carried down from No. 1, the women and children waiting at the boarding house, moaning and crying out the names of their loved ones, would rush frantically to the stretcher to see if they could recognize the face and form of him for whom they were waiting. Whenever one would be recognized the lamentations of the stricken ones were heartrending, causing even strong men to turn away and weep and sob like a child.”

Early Tuesday evening,

sometime around 8:00 p.m., the Utah State Mine Inspector, Gomer Thomas, arrived from Salt Lake City. In a later report to the governor he recounts: "When I reached Scofield fifty of the dead had already been taken out of the mines. I immediately entered the mine with Mr. Sharp, general manager, and took charge of a rescuing party, while Mr. Sharp, who had been in the mine for several hours, went out for a few hours rest.

"I took charge of this party near the head of the eighth rise, known as the face of the Farrish level, in No. 1 mine, and from here out to the mouth of No. 1, I found but very little damage done." Among the first bodies this rescue party found was that of young Will Clark, who had died while looking for his father and brother.

Thomas goes on to tell how, "about two-thirds of the number of men who died in No. 1 were found near the head of the seventh rise; they here encountered the deadly afterdamp which swept down this rise immediately after the explosion from No. 4 mine, to which they succumbed. This being the nearest way out through No. 4 mine, and not knowing where the explosion had occurred, they ran right into the afterdamp. There is no doubt in my mind that had these men gone down the eighth rise they would have all

saved their lives, for had they gone down the eighth rise they would have encountered fresh air.

"Most of these men were warned of the explosion but they stopped to put their tools away and lock their boxes, and some went so far as to finish loading their cars and put up props. If they had run right out they could have come right out in fresh air most all the way, but they did not seem to think there was much danger for they did not hurry as they knew the mine did not give off any explosive gas and was not known to be a dusty mine. From this point we traveled through the Farrish level, fixing up brattice and taking out bodies as we went."

Some of the miners working in No. 1 who survived, reported that they felt something was not right that morning, but they continued work instead of acting on their premonitions. One statement made to the mine inspector later on during the investigation by one of the miners who was working in No. 1 at the time of the explosion clearly shows how there could have been confusion at the time of the explosion. William C. Wilson, who first started work in the mines of England tells, "I went into the mines when I was about six months under six, and now I am very near 57. I consider I have been working in the mines fifty years. Have you ever worked in mines

giving off gases or fire-damp, as we call it? Yes, sir, in England." He further stated he had worked at Winter Quarters about three years in mines No. 1, 2, and 4 and felt the mines the safest he had ever worked. On the morning of the explosion he was working on the back-main in No. 1 and when asked if he felt the shock of the explosion where he was working, he replied: "Yes, I considered it an explosion, and I said to my partner that if this was a gassy mine, I would consider it a gas explosion, but as there was no gas in the mine, I thought perhaps it was a big cave of rock in some wide place. I put my lamp in the middle of the track—you know a concussion of the air that came together it came and went, and I put my lamp in the middle of the track to see if the air was traveling all right, and I said, 'I don't know what to think about this; the air is going in the right direction, and everything seems to be all right.' By this, we heard the car coming and I said, 'There can't be anything serious the matter; the horse is coming in.' He said, 'No, I don't think there is.' The boy comes in with the car, and I says to him, 'What's the matter?' and he said, 'I don't know.' He said, 'I was nearly blown off the end of the car,' and I said, 'Did you hear anyone say there was a

*(See next page)*

cave anywhere, or did you hear anyone running anywhere?" He said, 'No,' and then I said, 'It is strange.' I says, 'I don't know what to do.' I says, 'It is a mystery to me, now, I can't tell anything about it.' My partner says, 'Well, it seems to be all right.' He pulled the car in and begins to throw coal in, and someone comes along and says, 'There has been an explosion, and you had better get out,' and we got out. We never saw any afterdamp all the way out. There was a kind of smell, you know, but there wasn't anything that you would call afterdamp."

There were a number of miners working in No. 1 who narrowly escaped death's grasp that day, some making a miraculous and melodramatic escape. Dilley tells of one fifteen-year-old boy who 'did not lose his head in the terrible hour. When he heard the detonation he seized his hat in his teeth and kept his nostrils covered while he ran through the tunnel. He was in as far as the fifth raise which is about a mile and a half from the entrance, but he reached the outside in safety while his father, with whom he was working, perished. The boy fainted on reaching the end of his long run. The remarkable part of it is that he had no light."

The work of the rescuers was significantly retarded on account of the many caves and

falls, and many of the bodies that were buried were dug out from under tons of dirt. By 2:00 a.m., Wednesday morning, the exhausted rescue teams suspended their work and retired for a few hours of much needed rest. After sixteen hours in the debris of the mine, the men were too exhausted to continue. By the next morning miners from Clear Creek, Castle Gate, and Sunnyside arrived in Scofield. They were divided into parties and organized into shifts and the recovery work continued.

One rescuer eloquently recounts the personal challenges the teams faced. "How can we go through the ordeal of picking up the dead shift after shift? Well, I've thought of that, too, made up our minds not to give way to our feelings, to stifle them and ignore our thought of everything except the work in hand, otherwise we could not do a thing. Why, when I have gone through there and turned over a man who was a friend, an intimate associate, perhaps of year's standing, the sentiments of grief stirred in all my being, but I repressed them. It was either that or else drop down by the side of my chum, take hold of his cold hand, and just cry my heart out, for we have hearts just the same as the rest. But it would not do, we have to stifle and go forward with the work. Some of our men were nervous at first, for the scenes,

in spite of all resolution, did excite and move us; but when the death list grew to fifty, then to a hundred, then to a hundred and fifty, and now to away over two hundred, all got over it. But when the last body is out of the mine you will see more of us break down. You have seen us here for two days working as though we were machines, but there is going to be an end to that. Nature is going to assert itself and that very soon."

By Saturday, May 6, most of the bodies had been recovered as the task of identifying and preparing the bodies for burial had been well underway. A mass funeral was held that day in Scofield for the majority of the miners killed and others were planned in other locations in Utah and Colorado in the hometowns of some of the victims.

The official count at first was 199 miners dead until after going over the list it was discovered that the body of John Pitman had not been found. It was suspected that his body was buried under a cave in the room he worked and plans were made to safely undermine the cave to find him. On August 9, his body was finally found and recovered which brought the total to 200 miners killed at Winter Quarters. There were still discrepancies as to the total number dead. The Finnish miners who lost 61 of their countrymen,

many who were single, complained that there were still 15 of their men unaccounted for. Since there was no record of who was working inside the mine at the time of the explosion, it was difficult to account for all the men. Miners and others at the time estimated that the death toll was as high as 246. The actual number dead is still questioned today by historians.

A small number of about 20 young boys were killed that day, many were the sons of miners who worked as couplers and trap boys. These boys opened and closed doors inside the mine, connected coal cars and did other odd jobs. The youngest boy listed by some accounts was 13 years of age.

A total of one hundred and seventeen miners who worked in Mine No. 1 lost their lives, most by asphyxiation. The majority were located in the further reaches of the mine that connected to Mine No. 4 and were killed as they tried to escape through the closer exit and ran head-on into the afterdamp. The others who had not made it out were killed when the deadly firedamp drifted through the workings of No. 1.

In Mine No. 4 where the deadly explosion happened, the rescue teams eventually found a total of 83 bodies of friends, relatives, and fellow workers, most who were killed outright from the blast and heat. There

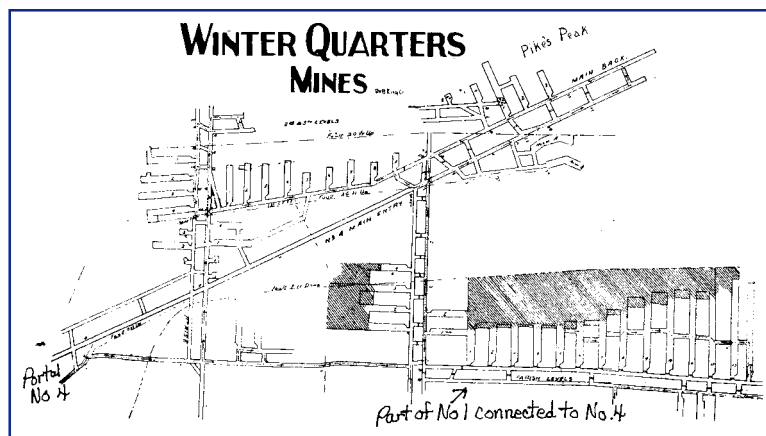
were many of the victims who could not be identified.

The official report of the state mine inspector tried to pinpoint the cause and described the findings as follows: "At about 10:25 on the morning of May 1, 1900, an explosion occurred at the Winter Quarters coal mine, apparently originating in No. 4 Mine, by which, according to the latest count after the most careful checking, 199 men lost their lives and seven were injured. One man came out of No. 4 Mine uninjured, and 103 came out of No. 1 uninjured. Most of the men in No. 4 Mine were killed by force and heat of the explosion. All the men in the first rise were suffocated by afterdamp, and more than 100 men in No. 1 Mine were

suffocated by the afterdamp which swept down from No. 4 Mine.

"No. 1 Mine and No. 4 Mine are connected, and by reason of such connection both mines suffered a loss by the one explosion.

"It seems, from all the evidence available, that some person accidentally ignited a keg of powder which caused the dust to rise, thus igniting the dust and carrying the flames from room to room from a point known as 'Pike's Peak,' and the immediate vicinity thereof. I find that nine kegs of powder were exploded near this place. Fourteen kegs of black powder exploded in other parts of the mine, making a total of twenty-four kegs of black powder exploded, thus



Map of the mine

(See next page)

adding great force to the explosion.”

Lasting less than a second, the explosion killed 200 miners leaving 107 widows and 268 children fatherless as well as those who lost sons, brothers, uncles, grandfathers, and dear friends. It has been said, “history is made in obscure places and in split-seconds of time.” The events at Winter Quarters that fateful day, May 1, 1900, will not only be remembered for the impact it had on the families and communities in Utah, but also for the effects it had on the mining industry in this country.■

*Part II of this article will discuss the effects the disaster had on the families and communities.*

*Sources:*

Dilley, J.W., History of the Scofield Mine Disaster, Utah, Knights of Pythias, 1900.

Thomas, Gomer, Report of the Coal Mine Inspector for the State of Utah, for the years 1899 and 1900, Salt Lake City, The Desert News, 1901.

## Mining Operations Recognized for Safety Records

**Coal River Holmes Safety Council Presents Awards at 2000 Coal River Holmes Safety Association Dinner**

*Story submitted by Sharon Cook*

Safety and professionalism was the focus of the 2000 Coal River Holmes Safety Association dinner held Saturday, April 8, 2000. The feature speaker, Mine Safety and Health District 4, District Manager, Pat Brady, spoke to the audience of 180 about the strides made by MSHA in enhancing safety procedures in all mines.

“There have been two fatalities in southern West Virginia this year,” Brady said. “And both of them should have been prevented.” Brady said his inspectors are constantly on the lookout to prevent such accidents, and miners should welcome them. “Our goal is to work with mining operations, and in essence, to become safety professionals.”

Brady told the audience about a new database listing contractors from all over the United States. “We can tell you where they’ve worked, the number of accidents they’ve

been involved in, and their work history,” Brady said.

The Coal River Council is named for Dr. Joseph A. Holmes, who was appointed the first director of MSHA back in 1909. He was a pioneer in mine safety, and studied accidents to determine their causes and ways to prevent them in the future.

The council presented a number of awards to various mine operations for safety. The President’s Award for Excellence, which recognizes personal achievement, was given to Ernie Marcum and employees of Arch Coal, and Jim Byus, who is employed by 3-D Mining.

Award recipients were as follows:

- Pen Coal Coporation/Kiah Creek Division, Copley Trace No. 1 Surface Mine
- Pen Coal Corporation/Kiah Creek Deep Mine No. 4
- Harris No. 1 Mine
- Harris Preparation Plant
- Eastern Associated Coal Corporation, Wells Preparation Plant
- Pine Ridge Coal Company, Robin Hood No. 9 Mine





**Coal River  
Holmes  
Safety  
Council  
Awards**



*MSHA Regional Director of Safety, Pat Brady.*



*Pen Coal Corp., Kiah Creek Division Deep Mine No. 4 winners included: Drema Ray, Ronnie Tackett, Ronnie Gibson and Roger Short.*



*Eastern Associated Coal Corp., Wells Preparation Plant award winners included: Front from left, Ronald Gillispie, Richard Caruthers and Jerry King. Rear from left, Jim Gerky, William Burgess, Harold Price and Ed Burgess.*



*Harris No. 1 Mine winners included: Jerry Weaver, Carl Egnor and Charlie Smith.*



*Ernie Marcum (left) of Arch Coal, and Jim Byus of 3-D Mining were the recipients of the President's Award for their contributions to safety in the mining industry.*



*Pine Ridge Coal Company, Robin Hood No. 9 Mine winners included: Rick Withers, Dave Garretson, Donnie Nelson, Claude Halstead, Jim Brown, Clyde Nelson, Larry Evans, Charles Sosebee, Mike Elkins, Deke Milam, Tony Workman and John Price.*



*Pen Coal Corp., Kiah Creek Division, Copley Trace No. 1 Surface winners included: Carl Hazelett, Drema Ray and Glen Messer.*



*Harris Preparation Plant winners included: Richard Thurmond, Carl Egnor and Edmond Cook.*

## *What's happening at the ...*

*National Mine Health and Safety Academy*

*Conferences/Seminars and Workshops*

Surface Haulage Safety Seminar, August 22-24, 2000  
Technical coordinator: John Tyler

If you need more information about contents of a seminar/workshop, contact the technical coordinator at 304/256-3100 or Jan Keaton at 304/256-3234.

### *Some New Academy Products*

Analysis of Underground Powered Haulage Lost Time Accidents, January 1990-March 1998 (C/MNM)  
MSHA 1999  
Cat No. OT 43

Dust - What You Can't See CAN Hurt You! (C)  
MSHA 1998  
Cat No. OT 4

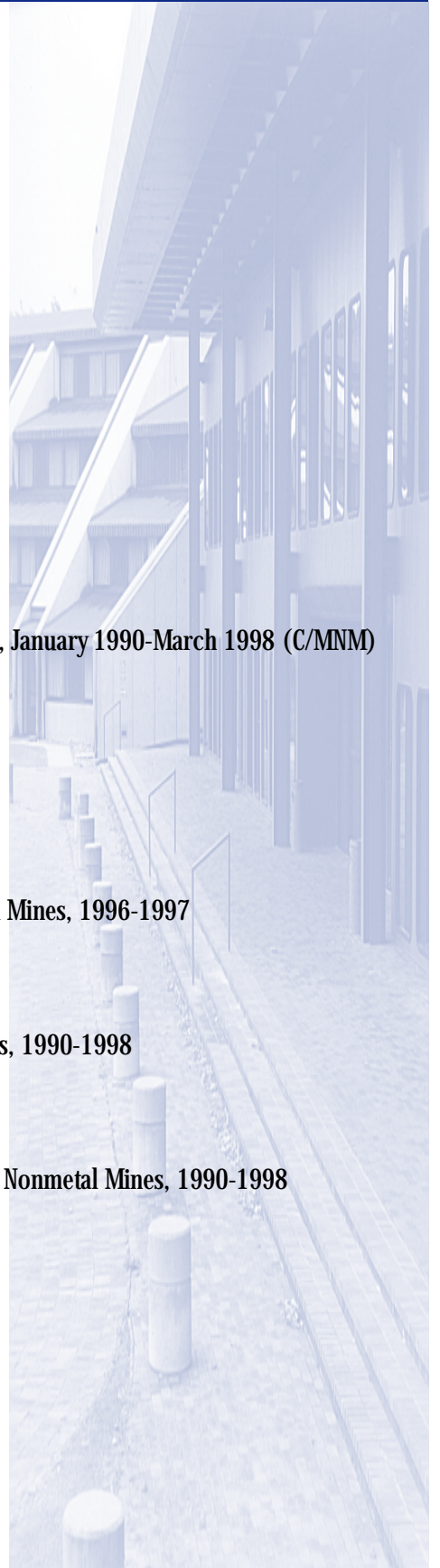
Fatal Accidents Involving Drowning at Coal and Metal/Nonmetal Mines, 1996-1997  
MSHA 1998  
Cat No. OT 34

Fatal Accidents Involving Independent Contractors at Coal Mines, 1990-1998  
MSHA 1998  
Cat No. OT 38

Fatal Accidents Involving Independent Contractors at Metal and Nonmetal Mines, 1990-1998  
MSHA 1998  
Cat No. OT 39

#### **To Order:**

National Mine Health and Safety Academy  
Attn: Mary Lord  
Department of Instructional Materials  
1301 Airport Road  
Beaver, West Virginia 25813-9426  
Phone: 304/256-3257  
Fax: 304/256-3368  
E-mail: [lord-mary@msha.gov](mailto:lord-mary@msha.gov)





## *Mining Our History*

*by Melody Bragg,  
Bulletin Staff Writer*

### **107 Years Ago**

Mine Fire  
Silver Bow No. 2 Mine  
Butte, Montana

April 21, 1893

Nine men lost their lives as a result of a fire in this mine. The bodies of the men were found on the 400-foot level, showing that the men had climbed to that level from the place where the fire had originated and were suffocated by the smoke.

### **105 Years Ago**

Explosion  
Blue Canyon Mine  
Whatcom, Washington

April 18, 1895

An explosion in the afternoon killed 23 of the 25 men in this mine. A hole drilled in the bottom rock had been charged with powder and fired. The hole was poorly directed and did not break, but the blast ignited gas

and dust. The explosion was not widespread. The men died mainly from asphyxiation.

### **95 Years Ago**

Haulage  
Conyngham Colliery  
Wilkes-Barre, Pennsylvania

April 26, 1905

Shortly after 6:00 a.m., 10 men were killed in this colliery by the breaking of the rope in the shaft in which the men were being lowered to their work. The cage had just about reached the Hillman landing where most of the men intended to get off. The engineer had slackened the speed and was about to stop when the rope parted. The safety catches failed to work and the cage dropped a distance of 400 feet to the bottom of the shaft.

### **90 Years Ago**

Ignition/Explosion of Gas  
Mulga Mine  
Mulga, Alabama

April 20, 1910

This was a comparatively new mine with few working rooms. Methane issued all around the faces but open lights were used. Permissible explosives were used; but some dynamite was found, and all coal was not cut before blasting. A fall in a pillar section forced gas out on the naked lights. The explosion was propagated by dust. Forty men working underground were

killed by the blast.

### **80 Years Ago**

Explosion  
Jefferson Island Salt  
Delcambre, Louisiana

April 15, 1920

An explosion of flammable gases given off by asphalt paint, which was being applied to the inside of an unventilated and enclosed shaft (in the process of being sunk), caused the death of six men. The ignition was caused by a lighted match.

### **75 Years Ago**

Explosion  
Hutchinson Mine  
Millgrove, Pennsylvania

April 26, 1925

This mine was in the early stages of development and the four men employed in the shaft were carpenters who were building forms for concrete work. The fifth man was a signal on the incline of the tippie when the explosion occurred about 10:00 p.m. Gas at the foot of the slope was ignited by an arc from electric-light wires. Coal dust added slightly to the force of the explosion. All five men working at the mine were killed.



## The Holmes Safety Association



### History

The Holmes Safety Association is part of the Joseph A. Holmes Safety Association organized in the United States in 1915, by 24 of the nation's leading safety organizations, representing mineral and allied industries. This safety association was established to commemorate and perpetuate the efforts of the late Dr. Joseph A. Holmes, the first director of the U.S. Bureau of Mines, to reduce the occupational injuries and diseases among employees in mining and mine-related industries, and to promote the doctrines of safety and conservation of life and health in those industries.

At a special meeting of the executive committee of the Joseph A. Holmes Safety Association held November 18, 1920, representatives of the U.S. Bureau of Mines proposed that the Association organize local chapters throughout the United States to support a movement to teach first aid, safety, and hygiene among mine workers and mine company officials. The Bureau pointed out that, as a result of its first aid and mine rescue training work, local safety societies had been frequently established in mining communities following completion of Bureau of Mines training. These societies maintained interest in mine safety and promoted the general well-being of the communities. To encourage this trend, the Bureau of Mines wanted to extend and coordinate the effort. In contemplating a proper organization to direct this safety development, the Bureau felt that by character and constitution, the Joseph A. Holmes Safety Association would be the proper medium.

### Membership

The Holmes Safety Association consists of a national council, state councils, district councils, and local chapters. The national council directs and assists state councils, state councils direct and assist district councils, and district councils direct and assist chapters.

Membership is free. Your organization can become a Holmes Safety Association Chapter by completing a membership application and submitting it to the Association Headquarters in Arlington, Virginia. Mail your application request to Holmes Safety Association, P.O. Box 4187, Falls Church, VA 22044-0187.

As a member, you will receive a monthly safety bulletin containing information and articles that will aid you in your safety meetings. In addition, you will be able to interface with other safety-conscious people from other chapters at the district council meetings in your area. They can give you new ideas for improving safety and lowering compensation costs.

### Objectives

**The objectives of the Association are to prevent fatalities and injuries and to improve health and safety among officials and employees in all phases of the mining industries.**

**Safety tip...**



## ***HARNESSES, BELTS & LANYARDS***



*This safety tip was submitted by Tank Ersley, MSHA, Metal Non-Metal, Green River Field Office, Green River, WY*

**Make The Best Selection  
Check It Over Daily  
Use Your Fall Protection!**

## *Words to think about...*

Let no man boast that he has got through the perils of winter till at least the seventh of May.

**Anthony Trollope**

Men are April when they wood, December when they wed: Maids are May when they are maids, but the sky changes when they are wives.

**Shakespeare**

Laugh thy girlish laughter;  
Then, the moment after,  
Weep thy girlish tears.

**Sir William Watson**

Awake, the land is scattered with light, and see,  
Uncanopied sleep is flying from field and tree:  
And blossoming boughs of April in laughter shake.

**Robert Bridges**

April is the cruelest month, breeding  
Lilacs out of the dead land, mixing  
Memory and desire, stirring  
Dull roots with spring rain.

Winter kept us warm, covering  
Earth in forgetful snow, feeding  
A little life with dried tubers.

**T. S. Eliot**

**NOTICE:** We welcome any materials that you submit to the Holmes Safety Association Bulletin. For more information visit the MSHA Home Page at [www.msha.gov](http://www.msha.gov). If you have any color and black/white photographs that you feel are suitable for use on the front cover of the Bulletin, please submit them to the editor. We cannot guarantee that they will be published, but if they are, we will list the contributor(s). Please let us know what you would like to see more of, or less of, in the *Bulletin*.

***For address changes and new  
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**Academy**  
**1301 Airport Road**  
**Beaver, WV 25813-9426**  
**Please call us at 304/256-3283 or**  
**Fax us at 304/256-3524**

**Reminder:** The District Council Safety Competition for 2000 is underway - please remember that if you are participating this year, you need to mail your quarterly report to:

**Mine Safety & Health Administration**  
**Educational Policy and Development**  
**Holmes Safety Association Bulletin**  
**P.O. Box 4187**  
**Falls Church, Virginia 22044-0187**

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