



# BULLETIN



BE ACCIDENT FREE IN 83"

# HOLMES SAFETY ASSOCIATION



MARCH 1983

1.	Safety Topic,	"Welcome New Members"
2.	Safety Topic,	"MSHA Volunteer Program"
3.	Safety Topics,	"Learn and Use Protective Equipment"
4.		"A Hazard in Your Home"
5.	Safety Topics,	"Eye Care is a Must"
6.		"Saint Patrick's Day"
7.	Safety Topic,	"Danger Under Booms and Buckets"
8.	Abstract,	"Powered Haulage Accident"
9.	Abstract,	"Suffocation Accident"
		"Illustration"
10.	Safety Topic,	"Tank Venting"
11.	Safety Topic,	"Run of Muck"
12.	Safety Topic,	"Safety and Waste"
13.	Safety Topics,	"It Makes Sense"
14.		"Mental Distractions"
15.	Safety Topics,	"Safe Burning or Welding on Closed Containers"
16.		"Underground Warning Systems"
17.	Safety Topic,	"Women in MiningHandling Stress during Lay-Offs"
18.	Announcement,	"HURRY, HURRY, HURRY"
19.	The Last Word	
10.	Meeting Report F	orm (chapters only)



March 1983

Kimax Coal Company Kimax Brenton, West Virginia

J.W. Manning Associates J.W. Manning Associates Iaeger, West Virginia

Maranns Mining Inc Maranns Mining Oceana, West Virginia

Logan Mohawk Coal Company No. 1A Wilkinson, West Virginia

Fannin Coal Company Alma No. 2 Freeburn, Kentucky

Mingo Coal & Coke Co Inc No. 1 Plant Kermit, West Virginia

Mingo Coal & Coke Co Inc No. 2 Plant Kermit, West Virginia

Sylvia Branch Coal Company No. 1 Gilbert, West Virginia

Sylvia Branch Coal Company No. 4 Gilbert, West Virginia

Joshua Industries Joshua Logan, West Virginia

Black Darth Coal Co Inc Black Darth Coal Stirrat, West Virginia

Low-Hol Coal Company Low-Hol Coal Gilbert, West Virginia

K-Steele Corporation K-Steele Beckley, West Virginia

Socco-Martinka Socco-Martinka Fairmont, West Virginia

Bethlehem Mines Corporation Shamrock Prep Plant Charleston, West Virginia

Walhonde Company Walhonde Peytona, West Virginia

Cannelton Industries Inc Indian Creek Peytona, West Virginia



Pittsburgh Coal Works Inc Pittsburgh Coal Works Monongah, West Virginia

Freeman Branch Mining Co Coal River Ethel, West Virginia

Perry & Hylton Coal Company Perry & Hylton Beckley, West Virginia

Colony Bay Coal Company Colony Bay Coal Wharton, West Virginia

Lambert Coal Company Lambert No. 42 Nora, Virginia

Lambert Coal Company Lambert No. 43 Nora, Virginia

Lambert Coal Company Lambert No. 44 Nora, Virginia

MSHA Norton Subdistrict Norton, Virginia

Copper Valley Coal Co Inc Copper Valley No. 6 Homer City, Pennsylvania

Cannelton Industries Inc Lady Dunn Prep Plant Cannelton, West Virginia

Cannelton Industries Inc Mine No. 8 Cannelton, West Virginia

Cannelton Industries Inc Mine No. 130 Cannelton, West Virginia

Perry & Hylton Coal Co Cannelton Surface Cannelton, West Virginia

Perry & Hylton Coal Co Boomer Surface Boomer, West Virginia

Hostetter Trucking Inc Hostetter Trucking Fayetteville, West Virginia

Big Mountain Big Mountain No. 1 Cedar Grove, West Virginia

Keenan Trucking Co Inc Keenan Trucking Cedar Grove, West Virginia Central Coal Company Phillip Sporn No. 1 Mine New Haven, W Virginia

Union Carbide Corp Morris Fork Prep Plant Clendenin, W Virginia

Union Carbide Corp No. 5 Shop Clendenin, W Virginia

Union Carbide Corp No. 7 Shop Clendenin, W Virginia

Union Carbide Corp No. 7 Mine Clendenin, W Virginia

Union Carbide Corp No. 7C Shop Clendenin, W Virginia

Union Carbide Corp No. 10 Mine Clendenin, W Virginia

Central Appalachian Coal Black Rose No. 11 Montgomery, W Virginia

Valley Camp Coal Co VC No. 41 Mine Shrewsbury, W Virginia

Valley Camp Coal Co VC No. 43 Shrewsbury, W Virginia

Valley Camp Coal Co VC No. 36 Mine Shrewsbury, W Virginia

Valley Camp Coal Co VC No. 9(Tunnel) Shrewsbury, W Virginia

Valley Camp Coal Co VC No. 17 Surface Shrewsbury, W Virginia

Valley Camp Coal Co VC No. 45 Shrewsbury, W Virginia

Valley Camp Coal Co VC No. 46 Surface Shrewsbury, W Virginia

Valley Camp Coal Co VC No. 6 Strip Shrewsbury, W Virginia

PG & H Incorporated
PG & H Prep Plant
Dry Branch, W Virginia



Kan Dredging & Minerals No. 1 Dredge Poca, West Virginia

Elm Coal Company No. 2 Mine Prestonburg, W Virginia

US Steel Mining Co Inc No. 32 Tipple Carbon, W Virginia

US Steel Mining Co Inc Carbon #9 Cleaning Plant Carbon, W Virginia

US Steel Mining Co Inc Carbon Shop Carbon, W Virginia

Princess Susan Coal Co Cambells Creek Surface Charleston, W Virginia

Princess Susan Coal Co Frozen Branch Surface Charleston, W Virginia

Princess Susan Coal Co Blakley Surface Charleston, W Virginia

US Dept of Labor/MSHA Mt Carbon Field Office Mt Carbon, W Virginia

Bucks Garden Coal Co Bucks Garden Coal Bilboa, W Virginia

K & T Excavation Inc
K & T Excavation
Oak Hill, West Virginia

K-Steele Corporation K-Steele No. 1 Surface Beckley, W Virginia

Princess Beverly Coal Co Princess Beverly Lewisburg, W Virginia

Pikco Coal Co Mine No. 1 Lobato, W Virginia

Ernie's Trucking Co Inc Ernie's Trucking Summersville, W Virginia

Ridenour Trucking Co Inc Ridenour Trucking Summersville, W Virginia

US Steel Coal Co No. 8/9 Drift Mines Leewood, W Virginia

Valley Camp Coal Co VC No. 8 Central Shop Shrewsbury, W Virginia Valley Camp Coal Co VC No. 8 Cleaning Plant Shrewsbury, W Virginia

Valley Camp Coal Co VC No. 47 Shrewsbury, W Virginia

T & S Coal Co Inc T & S Surface No. 4 Dunbar, W Virginia

Bedcor Incorporated Bedcor No. 2 Surface Comfort, W Virginia

US Steel Mining Co Inc Winifrede Central Cleaning Chesapeake, W Virginia

US Steel Mining Co Inc Winifrede Central Shop Chesepeake, W Virginia

Green River Mining Corp Green River Bridgeport, W Virginia

B & B Coal Company B & B Coal Mt Clare, W Virginia

Bell Mining Company Bell Mining Clarksburg, W Virginia

Mountain Run Coal Co Mountain Run Masontown, W Virginia

Universal Coal Corp Universal Coal Buckhannon, W Virginia

Weter Company Inc Weter Coal No. 1 Mine Kingwood, W Virginia

Thompson Coal & Const Inc Thompson Clarksburg, W Virginia

Continental Coal Corp Continental No. 2 Buckhannon, W Virginia

Jim Dandy Coals Inc No. 1 & 2 Buckhannon, W Virginia

Fancy Mining Co Inc Fancy Mining Point Marion, W Virginia

Farkas Coal Company Farkas Coal Vanderbilt, Pennsylvania

ED-E Development Co No. 4 Morgantown, W Virginia Baldwin Mining Co Baldwin Philippi, W Virginia

Viking Coal Company Viking Coal Kingwood, W Virginia

Angela Mining Company Melva Kingwood, W Virginia

Paul Harrold Inc Paul Harrold Wolf Summit, W Virginia

LaRosa Fuel Company LaRosa Fuel Clarksburg, W Virginia

Bridgeport Hills Dev Co Bridgeport Hills Clarksburg, W Virginia

Dippel & Dippel Coal Co Dippel & Dippel Morgantown, W Virginia

E & S Coal Co Inc E & S Coal Shinnston, W Virginia

McCoy Brothers Inc McCoy Philippi, W Virginia

Lecco Inc Lecco Clarksburg, W Virginia

Richard A Stutler Inc Richard A Stutler Clarksburg, W Virginia

DMG Incorporated DMG Clarksburg, W Virginia

CJ Coal Corporation CJ Coal Buckhannon, W Virginia

YNR Coal Co Inc YNR Coal Clarksburg, W Virginia

Reckart Mining Co INc Reckart Mining Bruceton Mills, W VA

Jagrti Coal Company Magrti Coal Monterville, W Virginia

Bolingreen Mining Co Bolingreen Albright, W Virginia

JEB Incorporated JEB Kingwood, W Virginia



Capitol Coal Inc Capitol Coal Buckhannon, W Virginia

HRC Coal Co Inc HRC Coal No. 1 Coeburn, Virginia

US Steel Mining Co Morton Mine Chesapeake, W Virginia

US Steel Mining Co Inc No. 36 Mine Chesapeake, W Virginia

US Steel Mining Co Inc No. 50 Mine Chesapeake, W Virginia

Cedar Coal Company Training Center Cabin Creek, W Virginia

Red Rose Company No. 7 Man, W Virginia

S & M Coal Company No. 5 Iaeger, W Virginia

Sturgion Coal Company No. 3 Mine Iaeger, W Virginia

Diamond Energy Corp No. 1 Williamson, W Virginia

Huff Incorporated Huff No. 2 Mine Logan, W Virginia

Horn Construction Co Inc Horn Paynesville, W Virginia

Blueco Sales & Processing Co Blueco Mohawk, W Virginia

Larew Lumber Company Larew Newburg, W Virginia

Big Bottom Coal Co Big Bottom Coal Lobato, W Virginia

D & C Coal Co Inc D & C Coal Pennington Gap, Virginia

Hallelujah Mining Company Hallelujah Kingwood, W Virginia

Point Coal Company Point Coal Morgantown, W Virginia US Dept of Labor/MSHA Madison Office Madison, W Virginia

Hobet Mining & Construction No. 79 Prep Plant S Charleston, W Virginia

Hobet Mining & Construction No. 21 Surface S Charleston, W Virginia

Superior Mining & Mineral Superior Mining Phelps, Kentucky

P & B Fuels Company Stewartstown Mine Morgantown, W Virginia

P & B Fuels Company No. 3 Mine Morgantown, W Virginia

Pretzel's Excavating Co Mine No. 1 Bruceton Mills, W Virginia

Royal Coal Company No. 3 Mine Layland, W Virginia

Royal Coal Company No. 5 Mine Layland, W Virginia

Royal Coal Company No. 6 Mine Layland, W Virginia

Royal Coal Company No. 10 Mine Layland, W Virginia

Royal Coal Company Claremont Prep Plant Layland, W Virginia

South Fork Coal Co Inc South Fork Jenkins, Kentucky

Jewell Coal & Coke Co No. 2 Coke Plant Vansant, Virginia

Jewell Coal & Coke Co No. 3 Coke Plant Vansant, Virginia

Jewell Coal & Coke Co Coke Screening Plant Vansant, Virginia

Jewell Smokeless Coal Coronet #2 Prep Plant Vansant, Virginia

Dominion Coal Corp Oakwood Red Ash No. 3 Vansant, Virginia Dominion Coal Corp Winston No. 9 Vansant, Virginia

Cyprus Thompson Creek Thompson Creek Challis, Idaho

McCoy Elkhorn Coal Corp No. 8-A Mine Pikeville, Kentucky

Shaybeth Mining Co No. 3 Gilbert, W Virginia

Virginia Crews Coal Co No. 2 Mine Iaeger, W Virginia

McCoy Elkhorn Coal Corp No. 2-A Mine Pikeville, Kentucky

McCoy Elkhorn Coal Corp Mine No. 5 Pikeville, Kentucky

Tall Timber Coal Co No. 1 Mine Lobata, W Virginia

Blue Springs Coal Co No. 1 Mine Lobata, W Virginia

Whitesville A&S Coal Co Layland Surface Beckley, W Virginia

Black Bear Coal Co No. 1 Mine Layland, W Virginia

Winsor-Pitman Coal Co Lady Monica Mine Webster Springs, W Va

Elkhorn Drilling Co No. 1 Surface Prestonsburg, Kentucky

Mabley Ćoal Co No. 1 Prep Plant Matewan, W Virginia

T & C Coal Co Inc T & C Mine Cyclone, W Virginia

Ro-Fer Associates Ro-Fer Mine Cyclone, W Virginia

Hobet Mining/Constr Co Pine Creek Prep Plant S Charleston, W Virginia

Hobet Mining/Constr Co No. 7 Surface S Charleston, W Virginia





#### MSHA VOLUNTEER PROGRAM

A vital part of the Mine Safety and Health Administration's (MSHA) role is to encourage state and local cooperative efforts in mine safety projects as a means of reducing mine injuries and deaths. In the November 1982 Holmes Safety Bulletin MSHA invited individuals, whether currently employed or retired to participate on a voluntary basis in various mine safety activities. The initial response to MSHA's request for voluntary assistance in mine safety activities has been very gratifying. As a result of the positive responses received in support of voluntarism, MSHA is encouraging the increased involvement of retired individuals in mine safety activities nationwide.

The purpose of the Volunteer Program is to utilize the wealth of experience represented by retired miners by transferring that knowledge to individuals presently involved in mine safety activities. Many of the mine safety activities in which MSHA and state agencies are involved lend themselves to a great deal of voluntary participation. Voluntary participation at mine rescue contests, reviewing MSHA and Bureau of Mines training materials, speaking at regional seminars or training sessions conducted at the National Mine Health and Safety Academy, providing safety training and consultant services to small mine operators, supporting new technological development in mining through an association of volunteers, reviewing new regulations and assisting in developing self-certification programs, and participating in various Holmes Safety functions are but a few activities where the experience of highly qualified volunteers will prove to be invaluable.

The Educational Policy and Development Office will provide district managers, the National Mine Health and Safety Academy, and state agencies with a list of retired and other individuals who are willing to share their knowledge to improve safety and health within the mining community. The involvement of highly qualified volunteers, when used in a coordinated fashion to solve specific mine safety problems, will compliment MSHA and state safety efforts.

If you or someone you know has extra time MSHA, state agencies, and the mining community could utilize your experience. There are many interesting mine safety programs that could benefit from the knowledge you have accumulated over the years. As a unique member of MSHA's health and safety team, you could provide invaluable

assistance to the mining community in shaping effective health and safety programs. To obtain specific information about the volunteer program and examples of other mine safety activities in which you may be of assistance, please write to:

John English
Director of Educational Policy
and Development
Mine Safety and Health Administration
4015 Wilson Blvd., Rm. 516
Arlington, VA 22203
(703) 235-1515

# LET'S ALL PUSH TOGETHER

# FOR SAFETY!





### Learn and Use Protective Equipment

"If we can't quard the machine, we must guard the operator."

There are many processes in every business where it is next to impossible either to eliminate all hazards by engineering or to enclose them by guarding and workers necessarily remain exposed to some risk. Therefore, an effort must be made to equip workers with effective personal protection that will reduce their risk to a minimum.

Supervisors are responsible for the safety of all workers under their direction. This means the supervisor must be well-informed about available protective equipment, must know how to get the employee to wear it, and must be certain that it is used wherever required.

#### HEAD INJURIES

Head injuries are common causes of death. "Look out below!" has long been the warning cry when objects are seen falling toward workers at a lower level--but not every person is lucky enough to hear such a warning in time to avoid a cracked skull--so safety specialists have done something about that hazard too, by developing hard hats.

Use of hard hats is required in every operation that involves overhead hazards. "Hard hat areas" should be designated where these hazards exist, and no one should be allowed to enter such areas without the proper head protection. There should be no exceptions; even visitors who pass through such areas must wear hard hats.

Hard hats, more properly called "safety hats," have saved thousands of lives, but sadly, other thousands have died because they neglected to protect their skulls.

Hard hats are available in many shapes to fit special requirements and are made of high-impact-resistant plastic or metal. Where electrical exposures are encountered, they are made of non-conductive material.

All are made with web suspension that holds the hard shell away from the skull, distributes the impact and cushions the blow. Suspensions can be adjusted for perfect fit and comfort. In hot weather the suspended shell allows free circulation of air; warm liners are worn under the hard hat to protect against cold.

Excuses for resisting hard hats are varied including "they're too heavy"; "they're too uncomfortable"; "they're too hot"; "they're too cold". But no excuse is valid when lives are at stake.

Supervisors must take the position that no reason is good enough to excuse a worker from wearing head protection in designated hard hat areas.

#### EYE INJURIES

The eye is one of the worker's most precious and vulnerable possessions. More than 90,000 eye injuries last year were serious enough to require more than one day's lost time. Perhaps four times that many were serious enough to require some treatment by a medical department.

Have you ever seen someone who must keep a bandage on a draining eye because of an eye injury? Is it worth your time and effort to prevent that kind of injury? Of course it is.

The simplest form of eye protection is safety glasses, the spectacle type glasses with prescription ground or plain heat-hardened lenses that resist impact. Thousands of eyes have been saved by wearing these lenses, which ward off flying particles or other missiles that would shatter ordinary glass. Conversely, thousands of eyes have been destroyed through failure to wear such protection.

Workers who wear prescription glasses should always have their lenses made of hardened safety glass. Many eye specialists would like to have all their prescriptions finished in safety glass, especially those for children.

Workers who wear contact lenses have no eye protection, unless they also wear "plain" safety glasses. They should be warned that eyes can be permanently damaged if chemicals or other corrosive particles are entrapped under contact lenses.

Special hazards require special types of protection, such as glasses with side shields, close-fitting cup-type goggles for chemical operations, face shields and many others.

The supervisor should cooperate with the safety engineer in identifying all eye hazards in the operation and should also make sure workers use the proper eye protection at all times.

Although several famous old-time movie directors and actors wore eye patches or glass eyes because they lost an eye in their early days as stunt men, a one-eyed industrial worker is just a handicapped person.

#### FOOT INJURIES

Another vulnerable part of the body is the foot. How many people have you known who have broken bones by dropping something on their foot and lost weeks or months from work. We know of one death when a man dropped hot asphalt on an inadequate shoe and fell off of a roof.

Foot protection is a continuing problem in many plants despite the wide-spread acceptance of safety shoes as normal footwear.

Only a very thoughtless worker will neglect the simple, effective protection of steel-toed shoes. Safety shoes are available in many styles, for every type of exposure, from heavy-soled boots for unusual hazards, to the lightweight dress shoes suitable for any off-the-job occasion. Even supervisors should take advantage of this wide selection and wear the steel-toed shoes at work.

High-hazard operations often require metatarsal protection and steel guards reaching above the ankle are added. Steel shin guards are worn for work in areas where heavy rolling or tumbling objects endanger the lower leg.

Protective clothing or equipment has been developed for practically every type of bodily hazard. Fire resistant clothing is used by workers in high temperatures of in rescue operations...aprons and other clothing of rubber protect against chemical splashes...gloves are made in endless variety to meet special needs...hand leathers protect workers who move sharp or rough objects...masks filter the air in dusty operations...ear plugs or muffs protect the hearing of those who must work in a noisy environment. The list is endless.

Every supervisor must be aware of the special protective equipment needed by employees. If a supervisor's sources of information about protective equipment are not adequate, it is a good idea to consult the safety director.

Above all, the supervisor should make sure that required protection is used all the time a worker is exposed to hazards. You are likely to meet resistance; it's only human nature for workers to resist change but your workers must be protected in spite of themselves.

There are many vital areas where the use of protective clothing and equipment should be made a condition of employment. Stubborn resistance should be answered with the ultimatum: "If you insist on disregarding your own safety, then try to find another employer who will put up with it."

The competent employees look to you, their supervisor, for guidance. If you insist that protective equipment is necessary on their jobs, they will accept your ruling.

But don't be hypocritical. If you tell them hazards are so serious that use of protective equipment is mandatory and then go into a hard hat area without a hard hat or into an eye hazard area without safety glasses or if you disregard foot hazards by going without safety shoes, what kind of compliance can you expect?

Tell your employees what is necessary with sincere conviction. Then set a good example by practicing what you preach!





#### HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

#### A Hazard in Your Home

An increasing number of people are keeping gasoline around the house as fuel for power mowers and boats. Unfortunately, some also use gasoline as a solvent for cleaning clothing, floors, automobile parts, and paint brushes, and for lighting piles of leaves, trash, and barbecue fires.

When it comes to having a real knowledge of the gasoline hazard, most people flunk. They believe they're safe as long as they don't bring a flame near. This is not true!

The real menace is vapor. You can't see it, but it is always present, and can and does explode like dynamite!

When gasoline is exposed to air, it evaporates and gives off 130 times its bulk in vapor, which converts more than 1500 times its volume of air into an explosive mixture. This vapor travels. It's called a vapor trail, and when it finds a point of ignition, it will explode.

And it takes a lot less than a direct flame to explode gasoline vapor. It could be a cigarette, or static electricity, or a pilot light for a stove in another room.

There's only one rule to follow! Never use gasoline in or around a house. No matter how many precautions you take, you can't use it without danger.





## Eye Care is a Must

In a survey by the Better Vision Institute among employees of 50 companies, from industrial giants with many thousands of employees down to smaller firms, four out of every 10 employees had inadequate vision for their jobs.

Of all those with faulty vision, few had any knowledge of their visual defects. Their vision "seemed" normal because they had no standard with which to compare. Optical examination under professional supervision brought out the deficiencies, among which were cases requiring immediate treatment. There were diseases present which might have caused total sight loss or could even have been fatal to the person examined. From 90 to 95 percent of those deficiencies were readily correctible by proper glasses or medical treatment.

In one company where color vision was required, many persons were hired in a rush period. The examination revealed that some were color blind. In another instance, where normal side vision was required, many employees were found lacking this capability.

In one firm, it was noted that product rejects decreased by 75 percent after the employees' eyes were examined and satisfactory glasses prescribed. In an electrical plant, training time was cut from 40 hours to 16 hours.

The application of this broad industrial study, correction of eye defects, resulted in increased production, improved personal efficiency, lower accident rates, and reduced absenteeism and employee turnover. Several companies discovered that eyesight correction helped keep experienced, older personnel on the payroll. Almost a thousand cases of disease conditions were uncovered over a period of 13 years in one firm whose employees' eyes were examined regularly.

Periodic eye examinations are recommended to safeguard vision. The survey noted that 30 percent of eyeglass wearers had not had their eyes checked in two years.

Among the non-wearers of glasses, 37 percent had never had eye examinations, and 40 percent had not been examined in two years or longer. This means that 77 percent of the non eyeglass wearers had no accurate knowledge of their sight capabilities! The same survey indicated that 85 percent of the eye examinations of current eyeglass wearers showed the need for new correction. In many of these cases, the wearer wasn't aware that his/her eyesight had changed.

A survey by the "American Association of Industrial Nurses Journal" analyzed the side effects of proper vision on employee attitudes and morale. Among those side effects noted were improved security, physical and mental well-being, and improved appearance.

Often an eyesight defect is the rirst clue to certain ailments. Among the diseases which are reflected in optical symptoms are syphilis, arthritis, diabetes, cardiac conditions, meningitis, myasthenia gravis, brain tumor, hysteria influenza, certain nervous infections, stomach disturbances, and chronic alcoholism.







#### HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

#### Saint Patrick's Day

Saint Patrick's Day commemorates the death, not the birth of Ireland's patron saint. He was born in either Dumbarton, Scotland or in Britain on the banks of River Severn, in either 387 or 389. He was the son of Calpurnius, a middle-class land owner and minor official of the Roman Empire. He was educated a christian, and at the age of 16 was captured by Irish raiders and sold into slavery. After six years serving as a sheep herder, he escaped and fled into France where he studied several years at a monastery. He returned to Ireland in 432, winning converts by the thousands. In no historical or scholarly study is there any proof for the legend that Saint Patrick drove the snakes out of Ireland.

However, let us in the mining industry, commemorate Saint Patrick's Day by driving out our "snakes," unsafe practices and unsafe conditions, from our mines thus applying a humantarian version to the legend of Saint Patrick.



## **Danger Under Booms and Buckets**

Accidents involving working or walking under crane booms and buckets are infrequent but when such accidents do occur many are fatal.

Even if the crane is in excellent condition and is being run by a first rate operator, it is never wise to expose people needlessly. Usually, the victim is a laborer doing an assigned job which has nothing to do with the crane.

The rule is simple: "Do not permit anyone to stand, walk, or work under crane booms, buckets, or suspended loads." A companion rule is the one on hard hats: "Hard hats shall be worn by all those working in the vicinity of cranes, scaffolds, or in any place where an object may fall from overhead."

This rule helps to take care of those who just won't "stay out from under."

How can workers be kept from standing, walking, or working under booms, buckets, and suspended loads?

Prior planning of crane operations should take into account the area to be covered by the swing of the boom. Cranes should be positioned so that the boom or bucket cannot be swung over workers; otherwise, operations should be scheduled only for times that workers are excluded from the swing area.

In a congested work situation, the swing area should be roped off or barricaded, and signs should be posted to keep unauthorized persons out of the hazardous area. In extreme cases, it may be necessary to post a traffic controller.

In concreting operations, it is especially necessary to keep all persons away from the vicinity of the bucket travel. A chunk of semi-hardened concrete frequently drops from the bucket and can produce a serious injury even if the victim is wearing a hard hat. Puddlers should be kept well in the clear, both when the crane operator is landing the bucket and during takeaway.



# ABSTRACT FROM FATAL ACCIDENT

March 1983

# HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC



#### Powered Haulage Accident

General Information: A powered haulage accident occurred resulting in the death of a mechanic. The accident occurred when a haulage truck being driven by the victim left the haulage road and rolled over an embankment.

<u>Description of Accident</u>: Routine coal loading and hauling activities were to begin; however, one of the two haulage trucks normally used to haul coal was in the shop for repairs. The acting superintendent instructed the workers to use only the one available haulage truck for the remainder of the shift.

A small Euclid haulage truck, which belonged to a nearby rock quarry, was parked in the mine yard for servicing. This truck had been brought to the mine a few days earlier and after servicing it was used a few times during daylight hours to haul coal while the other regular haulage truck was in the shop. The Euclid haulage truck was not provided with headlights for night operation, but the workers decided that they could light up the haulage road and use the small haulage truck. A bulldozer and two pickup trucks were then positioned along the haulage road leading from the pit to the dumping point with their headlights shining on the roadway to enable the driver of the Euclid truck to see the road. The Euclid truck was driven to the pit by the equipment operator and coal loading operations resumed. It was then decided that the victim would drive the small Euclid haulage truck. As soon as the truck was loaded with coal the victim drove the truck from the pit by way of the haulage road enroute to the dumping point. Using the parked vehicles headlights and his own cap light to light his way, the victim proceeded along the haulageway. On his first trip out of the pit, he failed to negotiate a slight curve and accidently drove the truck off the left side of the road. The loaded truck overturned into an old pit area at a point several hundred feet from the dumping point. The victim, who apparently tried to jump from the operator's cab, was crushed beneath the truck.

<u>Conclusion</u>: The accident occurred because of the unauthorized use of a vehicle unsafe for night use. Contributing factors were:

- 1. No headlight for truck operation during night hours.
- 2. The door on the driver's side was tied open.
- 3. The lack of berms or guards along the elevated roadway beside the pit area.

# ABSTRACT FROM FATAL ACCIDENT

# HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC



#### Suffocation Accident

General Information: A miner was fatally injured when the muck pile in the raise over which he was rockbolting suddenly dropped, pulling down the raise and engulfing him.

The mine, a multi-level underground uranium mine, was accessed by several shafts and from adits driven from open-pit areas. The mining method used was open stopes with random pillars. Mined ore was removed from the mine through scrams and gravity fed through transfer raises to the haulage levels, mucked or slushed into haulage cars, transported to the shaft stations, dumped into slusher trenches and moved by a slusher to the skip pocket where it was hoisted to the surface.

Description of Accident: The victim was told to begin the shift repairing and replacing the grizzly rails over a raise. He and his partner did this for about three and one-half hours when the victim started up the Wagoner loader and began backing up the ramp toward the scram. The scram had recently broken into a raise and a grizzly had not yet been installed. A slab round in the immediate area of the raise collar had been drilled and blasted. A considerable amount of material had to be cleaned up before work could begin on the grizzly. The victim mucked and dumped the material into the raise for one hour. At this time the victim told his partner to go down to the track level and barricade the drift so that the motorman would not pull any more muck. Apparently the victim felt that the back over the raise should be rockbolted before any other work was done, for he told his helper to get some rock bolts and wire mesh.

When his partner returned with the rock bolting material, the victim was drilling with a jackleg drill set up on the muck pile over the raise. Rock bolting progressed without incident. A total of 14 rock bolts had been installed and two pieces of wire mesh were hung in place. Suddenly the muck in the raise fell. The victim and his drill were drawn into the raise and were instantly engulfed by the moving material.

Cause of Accident: The direct cause of the accident was the failure of management to have observed and thereby ensured that the victim and his partner were wearing safety belts and lines or had a suitable working platform while doing work over the draw point.

A contributory cause was the lack of communication between the motormen who were pulling the draw point and the victim and his partner who were working over the draw point.



Those persons responsible for assigning work in hazardous areas should make Management and supervisors at all levels company, state, and federal should emphasize and enforce with due diligence requirements of every effort to observe how the work is being done. safety rules and regulations. Recommendations:

Effective communication should be developed among supervisors, miners, and motormen, especially when potentially hazardous work is being done in order to assure the safety of all concerned.





## Tank Venting

Quite often we hear or read about accidents involving storage and transportation tanks which have burst under built-up pressure, or which have imploded due to a decrease of inside pressure. In most cases it is only damage to equipment which results, but serious accidents have been known to occur.

Those accidents are almost always caused by improper venting on tanks or by vents becoming plugged over a period of time.

Tank vents are designed to maintain pressure inside the tank at or near atmospheric pressure, and to allow free passage of air (or liquid vapors) between the tank and the outside so that the liquid may flow in or out freely.

To prevent costly accidents from collapsing or bursting tanks, a few simple factors should be considered:

- Vents on tanks which contain corrosive materials, viscous materials, and crude solvents become plugged more easily, and should be examined regularly.
- Vents should be as short as possible, straight up (where possible), and should have as few elbows as possible.
- Vents should be directed away from any intake to buildings.
- 4. Valves should never be placed on vent lines.
- Vents should be checked prior to filling or discharging tanks.
- Cleaning of vents should be done on a regular schedule.
- 7. Particular attention should be paid to vents which may be mounted on roofs or sides of buildings.
- 8. Proper size of vent should be used to permit air to escape while the tank is being filled.

Those few pointers should be helpful in preventing accidents while filling or emptying tanks. Common sense and safety consciousness should be developed so that it becomes second nature to be on the alert for the possible hazards on every job.





### Run of Muck

Pulling chutes, mucking in draw points, and handling muck all seem to be simple, straightforward jobs, yet every year a number of people are killed and dozens severely injured while performing these tasks.

One man came to his death when he slipped and fell down the ore pass while trying to bar open the door of a chute. The man forgot to do two things. He forgot to close off the air pressure which was operating the chute door, and he forgot to attach a life line to his safety belt.

Regular daily safety talks help to remind people of the hazards of their jobs and what procedure they should follow at all times.

Another man who was killed by run of muck came to his death by suffocation and multiple injuries resulting when he accidently fell into a cone in a shrinkage stope while the cone was being pulled from the bottom by a scooptram. He was buried in the muck. Better communication should be established between mucking crews and those working in the stopes. Companies should be more specific as to where and when safety equipment should be worn.

Other cases from previous years could be mentioned, but two will suffice to point out some of the dangers in connection with the movement and handling of muck.

To prevent those accidents from occurring, a few simple rules should be followed:

- 1. Make sure you use safety belts and ropes when necessary. The supervisor should insist on this.
- 2. Make sure of your footing at all times.
- 3. Never leave a muck pile in a vertical position.
- 4. Never go directly under a hang up. Study it carefully and leave a place for a quick retreat.

The importance and value of daily safety reminders, particularly in regard to changing situations, cannot be overemphasized. Even experienced workers require reminding from time to time, as they often have other things on their minds which might distract them from the job they are doing.





## Safety and Waste

Safety and waste relate to a viewpoint on safety which is often deliberately not emphasized by supervisors and other people directly connected with the safety movement.

Reference is made to the waste that is created when an unsafe act-performed knowingly or unknowingly-is committed by an individual and an accident results.

There is one word in this last sentence that we need to explore for a better understanding; this word is "waste" and definitely not "cost."

By waste we refer to such incidents as when supplies are delivered to a section and then, because of a failure to use them-or possibly by misusing them-a roof fall develops in which no one is injured, but in which a piece of machinery is caught beneath the material. Naturally, we have to recover the equipment in order to operate the section, and, of course, time and money must be spent in order to return to a situation in which we can continue with our normal productive activities. The majority of us have worked on recovery operations, and will agree that they are, for the most part, ticklish situations requiring considerable skill and judgment.

Try as we may, we can seldom make working conditions during recovery operations as safe as they would be during normal production activities. This situation isn't good because the company doesn't want us to be exposed to hazardous conditions and, of course, we like to work under conditions that are normal and safe-and only under such conditions can we efficiently perform our duties.

What happens when a roof support is dislodged by a piece of equipment? Isn't it true that both safety and waste are involved in this seemingly innocent act? The operator of the equipment involved has created a situation that could develop into an injury. The timber that is dislodged could very well be the key support in the area.

Still another item that we often overlook in discussion of injuries is that the accident potential of the replacement for the injured person is quite often increased, since the replacement is seldom as familiar with the work area or equipment as is the injured person.

Naturally we can expect production to drop off during the time the replacement is learning the job. Even though we don't always emphasize the fact, this loss in production must be considered as a portion of the cost of an injury and as a part of the cost of producing ore, even though it may be, at times, difficult to measure.

Accidents, whether they result in injuries or not, are wasteful in time, money, and humanity, and only by our concentrated efforts can we reduce their toll and subsequent costs.





### It Makes Sense

While most accidents are caused by the mistakes of people, a few involve failures of equipment. But even these mechanical failures can be traced back to someone's mistake, such as not being alert to defects in equipment or not reporting defects.

Your senses can help you spot something wrong.

Sight: Be on the lookout for accidents in the making.

<u>Hearing</u>: Listen for the off-beat sounds of defective or improperly adjusted equipment.

<u>Smell</u>: Your nose can help you detect most gas or chemical leaks, overheated bearings, burning brakes, arcing electricity.

 $\underline{\text{Touch}}$ : Your hands can warn you of such things as excessive vibration or overheating.

And for good measure, there's your common sense!





#### HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

## **Mental Distractions**

There is no end to the things that flash through our minds during the performance of daily tasks. Some pass quickly; others we become absorbed in but our concern should be with the problem of becoming lost in thought which is entirely unrelated to what we're doing, not having our mind on what we're doing. Perhaps one answer is for each of us to make a deeper personal analysis of our current work to become fully aware of the potential danger to ourselves and others through failure to "keep our mind on what we're doing!"

Think "Alertness Prevents Hurtness!"





#### Safe Burning or Welding on Closed Containers

Any industrial concern frequently finds it necessary to burn or weld on a closed container. This may be as simple as burning the head out of a 55-gal. drum, or it may require the patching and welding of a locomotive fuel tank.

The fuel tanks of production trucks and other mobile mining equipment are particularly susceptible to developing leaks due to wear or stress. If the leak is accessible for repair, the tank can be repaired in place, thus saving many hours of downtime.

Because of the danger from explosive gases which might be residual from some previous use of the container, the procedure is used whenever any closed container is subjected to cutting, burning or welding.

#### Procedure:

- 1. The work will be done in an area with adequate ventilation.
- 2. The work area will be inspected and prepared.
  - a. Oil spills will be removed from the floor.
  - b. Wiring and hoses will be covered with an asbestos blanket to prevent welding sparks from causing damage.
  - c. The carbon dioxide bottle will be secured to prevent accidental movement or fall. Nitrogen or argon may be used if carbon dioxide is not available.
- 3. The container to be repaired will have been steam-cleaned, if it has been used for gasoline or other high volatile liquids.
- 4. If the container is a fuel tank, other than for gasoline, and the leak or repair area is accessible, it can be repaired in place, and all other provisions, excluding number two, will apply.
- 5. The container will be empty and positioned, both for the convenience of the welder, and to assure that flooding with carbon dioxide will encompass the repair area.
- 6. The area to be repaired will be cleaned of grease and dirt.
- 7. An employee assigned as fire watch will be present during the entire repair operation. This person will have a dry chemical fire extinguisher in readiness, and a water squirt can to extinguish sparks as necessary.
- 8. Personnel responsible for the safety of the operations will:
  - a. Have a portable oxygen indicator calibrated prior to use.

- b. Supervise the flooding of the container with carbon dioxide or other inert gas.
- c. Allow the cutting or repairs to start when the percentage of oxygen reaches zero in the entire container.
- d. Continue to bleed a small amount of carbon dioxide into the container for the length of time that repairs are in progress.
- e. Remain in attendance, and supervise the safety precautions until the work is completed.





## **Underground Warning Systems**

A seldom used but vital requirement for underground mines is a warning system for evacuation alert of mine workers in emergency situations. Depending upon the mine, the warning system may utilize coded blinking lights, whistles or sirens, telephone or radio, or stench systems. The latter commonly uses an ethyl mercaptanfreon mixture, and is in use in many mines, particularly where there are several, separated working areas. The stench can be injected directly into compressed air lines and/or released into the incast mine ventilation flow.

It is most important that an emergency warning system, whether visual, audible, or stench, is well marked with adequate instructions as to its use. Occasional drills in which employees follow a prescribed emergency plan is advisable and serves to insure that the warning system will alert all underground employees and that they will respond promptly.





# Women In Mining

#### Handling Stress During Lay-Offs

The Coal Employment Project recently reported in its publication, Coal Mining Women's Support Team News, that approximately 40 percent of women miners responding to their survey were laid off from their jobs.

With a national unemployment rate approaching 11 percent and as high as 20 or 25 percent in many mining communities, they offer a few suggestions for coping with the pressures and conflicts of unemployment:

1. Set up a budget. Start by listing the fixed expenses and absolute necessities of the household. Compare this to the money that is coming into the household from unemployment compensation, other family member's incomes, returns from investments, etc.

Depending on how your figures balance, you will be able to decide what you can continue to afford and what luxuries and activities will have to be curtailed. This is not always easy, especially when you have become accustomed to a certain lifestyle, but you may be surprised to discover there are many incidentals that we all spend a good deal of money on. Setting up a budget may also help you manage your money when you return to work.

2. Feelings of depression and frustration can be somewhat alleviated by realizing that other people share the same emotions. There may already be support groups functioning in your area, or you may need to establish one. This may even be a good time to form a women miner's support group or become more active in one already established.

Discussing and sharing problems and experiences as a group often helps members of the group discover possible solutions.

- 3. Periods of unemployment cause disruption in family life. But it is really a perfect opportunity to take the time to establish family ties that tend to loosen when everyone is involved with job and school responsibilities.
- 4. One of the best ways to release tension caused by stress is to engage in physical activities. Try to get the entire family involved. If you do not have a family, get together with friends or neighbors to jog or go through an exercise routine.
- 5. Most importantly, do not mope. Now is a good time to get to all those things you wanted to do but never could find time for. Use your time creatively.



ANNUAL MEETING OF THE HOLMES SAFETY ASSN., WILL BE HELD AT QUALITY INN/CENTRAL. 1190 COURT-HOUSE ROAD, ARLINGTON, VA. 22201 TUESDAY, MAY 24, 1983, 10 am.

LODGING, FOOD, DRINKS, MEETING ROOM-ALL AT ONE LOCATION 4 BLOCKS FROM SUBWAY.

THE J.A.H.S.A. WILL MEET SAME TIME AND PLACE THE NEXT DAY.

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NATIONAL SECRETARY

# THE LAST WORD

#### Simplicity, Key to Safety

The art of simplicity is to simplify. Simplicity avoids the superficial, penetrates the complex, goes to the heart of the problem and pinpoints the key factors.

Simplicity does not beat around the bush; it does not take wandering detours. It follows a straight line to the objective. Simplicity is the shortest distance between two points.

Simplicity does not elucidate the obscure; it emphasizes the obvious.

Simplicity solves problems. Listen to the testimonial of Charles Kettering, a genius of modern research; "The problem, when solved, will be simple."

Simplicity discovers great ideas; a swinging cathedral lamp inspired the pendulum, watching a tea kettle led to the steam engine, a falling apple revealed the law of gravity.

Simplicity has given all the big things little names; dawn, day, hope, love, home, peace, life, death.

Simplicity is eloquent; it is the 23rd Psalm and the Gettysburg Address.

Simplicity uses little words. It practices the wisdom of Lincoln who said, "Make it so simple a child will understand, then no one will misunderstand."

Simplicity deepens life. It magnifies the simple virtues on which survival depends: humility, faith, courage, serenity, honesty, patience, justice, tolerance, thrift.

Simplicity is the arrow of the spirit.

#### Time for a Change

If you're in a fight and the other person lands the first blow, you can figure it was just because you weren't ready.

So you try to even things up. But, if you get hit again maybe you can blame it on a lucky punch.

But, if you wade in again and get hit for the third time you'd better walk away. If you don't, you're going to get seriously injured and there's no use kidding yourself.

There's a moral in this story for the worker who's not yet sold on safety. You may charge the first accident or two to chance, but if you continue to become involved in accidents a change in attitude is in order... or else!

Here's something that's not a lot of hot air. Tires unequally inflated affect steering, cause poor braking efficiency and excessive sidesway on curves.

Knowledge is what you learn from others. Wisdom is what you teach yourself. You need both to live safely.

Overheard: "I swear I'm going to live within my income even if I have to borrow money to do it."

Inflation: That's when something that cost \$10 a few years ago now costs \$15 just to get repaired.

LAB 441

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