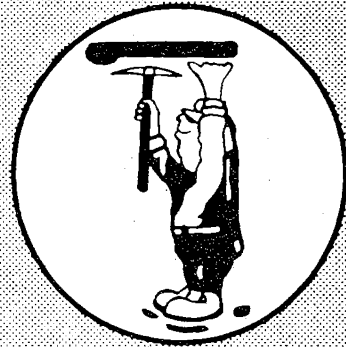
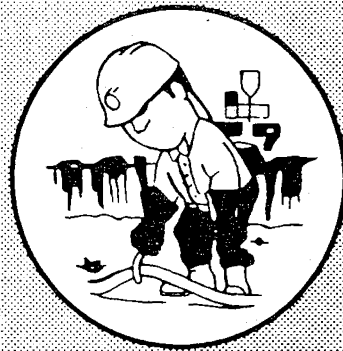


OCTOBER 1980



BULLETIN



United States Department of Labor
MSHA
Mine Safety and Health Administration

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October 1980

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

Lock Out

Do any of you want to work up a first class nightmare? If you do, I suggest that when you go to bed at night, lie there and figure out what it would be like to be working on or in a machine when someone started it up. They wouldn't know you were there, because you hadn't locked out and tagged the switch.

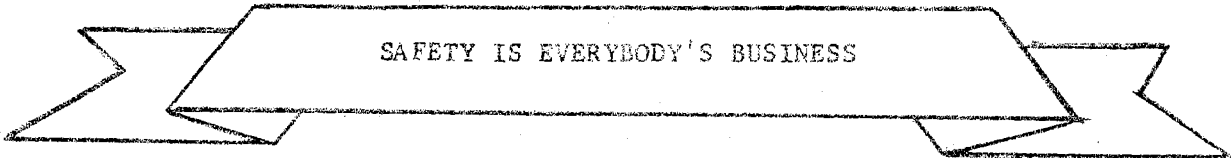
Every once in awhile, somebody, somewhere, actually gets caught that way. Unexpected starting is possible with any kind of power-driven machine, that is, if proper care is not taken to prevent it. Even the ordinary electrically-powered tools can be involved. Usually it's from failure to pull the plug before making some adjustment or minor repair. ALWAYS PULL THE PLUG OF A TOOL BEFORE YOU MAKE ANY ADJUSTMENT. Always make sure the business end of the tool can't do any business on you.

Machines that more than one person may work on can make it more difficult, but the basic idea is the same. Each person must be held responsible for everyone's safety, particularly their own. The setup must be such.

Accident records are full of cases of workers getting caught and killed or badly mangled by a machine starting unexpectedly. Sometimes, someone closes the switch, when they shouldn't. Switches get out of order and so do clutches. But it is all preventable. If we can get everyone, and it must be everyone, to make absolutely certain that the master switch is locked out and tagged, and will stay locked out until it is to be closed, we will have no more cases of workers getting injured by the machines they are working on.

Hopefully, this advice will be taken seriously--seriously enough to make sure you will never fail to protect yourself.

(For use in all mining operations)



SAFETY IS EVERYBODY'S BUSINESS



October 1980

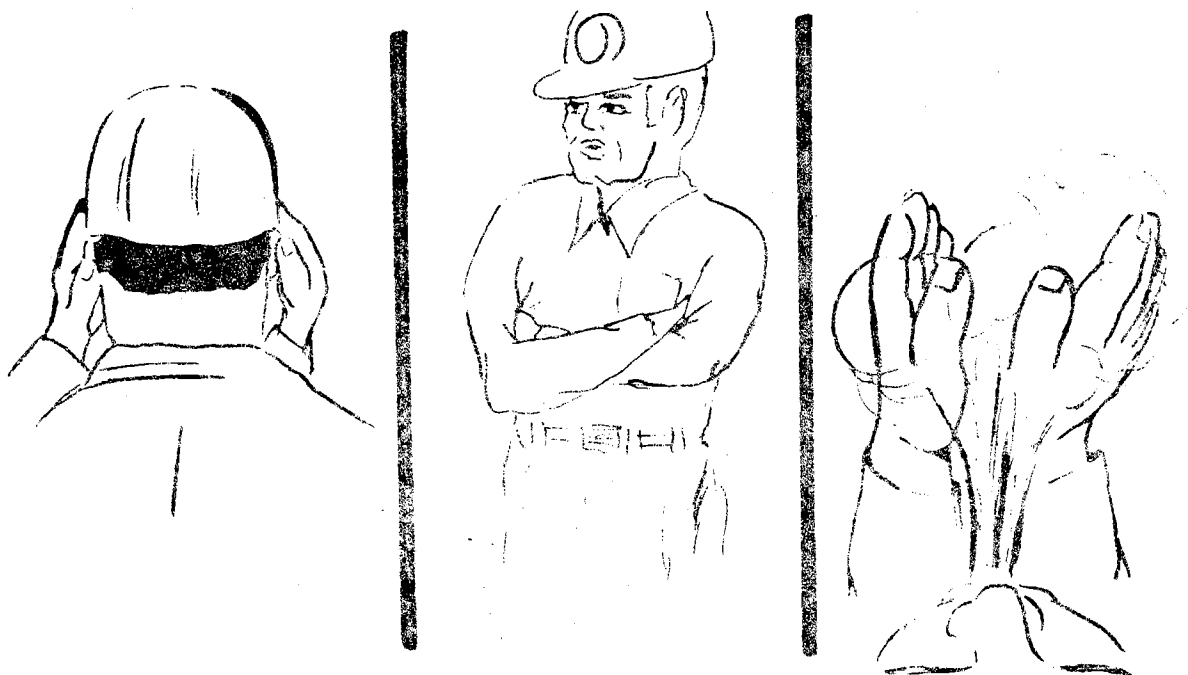
HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

First Aid--Frostbite

Sometimes, only parts of the body will be affected by cold. You may have heard of explorers getting frostbite, or maybe you or someone you know has been frostbitten.

Ears, fingers, and toes are prime examples of parts of the body which might be frostbitten. The part of the body actually freezes to some extent. In superficial frostbite, the frozen part feels doughy, and there is a redness of the skin. If the freezing is deep, the injury is more serious. The part is white and feels hard throughout.

First aid to a victim of frostbite that is only superficial is warming the part with body heat. This could mean simply covering ears with hands, or having the victim place frostbitten fingers gently in armpits or between legs, or blowing hot breath on fingers.



Only the slightest case of frostbite should be treated in the mine. All other cases must be taken to medical help immediately. Even if a victim has to walk on a frostbitten foot or leg, medical help should be obtained as quickly as possible.

SAFETY IS EVERYBODY'S BUSINESS

(For use in all mining operations)

The exception to this is that if frostbitten feet have begun to thaw, the victim should not be allowed to walk.

Putting clothing over the frostbite will prevent the injury from deepening.

Treat injured parts very gently. A frostbite injury can become worse if handling is not done with care. You may have heard people suggest that the area or part be rubbed. Never rub a frostbitten part. The injury can become infected.

Another misconception is that putting the part in cold water will help, but this is not true. Do not try to thaw the part in cold water.

The only action you should take with frostbite victims is to cover the part gently and take them to medical help.

HOLMES SAFETY ASSOCIATION



**CHANCE
TAKERS ARE
ACCIDENT
MAKERS**



October 1980

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

A Will to Live

1. You will not approach machines in motion for loose clothing may be hazardous.
2. You will not commence to repair machines before being sure that they will not start.
3. You will not climb to elevated places unless supplied with a safety belt which you can use intelligently.
4. You will not work on an electric circuit before your tester shows it to be safe.
5. You will not carry heavy or clumsy loads without the help required.
6. You will not use tools in bad condition for they frequently cause serious accidents.
7. You will wear required safety equipment under penalty of regretting it bitterly.
8. You will build platforms or temporary scaffolding, taking care to make them solid.
9. You will at all times keep work places clean, for poor housekeeping causes accidents.
10. You will think of your work at all times rather than be distracted by daydreaming.

What's Your Pleasure--Silver and Gold or Education?

Strive for learning before you grow old,
for learning is better than silver or gold,
Silver or gold may vanish away,
but a good education will never decay.

(For use in all mining operations)

SAFETY IS EVERYBODY'S BUSINESS



October 1980

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

ATTENTION--For Your Information

One of the functions of the Joseph A. Holmes Safety Association is to give honor to those to whom honor is due. This is done by giving awards to individuals, supervisors, and companies who have outstanding safety records. If you have an employee in your organization who has worked 40 years without a disabling (lost-time) injury, the Association will award them with a certificate of honor, a gold pin and gold decal bearing the insignia of the Association. Workers who complete 10, 20, or 30 years without a disabling (lost-time) injury will receive a silver pin and decal (30 years), bronze pin and decal (20 years) or a decal (10 years).

The Association also issues medal of honor awards to individuals for acts of personal heroism, certificate of honor awards for group action of heroism, to underground supervisors for working a group under their supervision 250,000 work-hours accident-free, to surface supervisors for working a group 350,000 work-hours, accident-free, to large underground mines who have worked 2,500,000 work-hours without a fatality or 5,000,000 for open-cut mining, and to small underground operations who have accumulated 250,000 work-hours without a fatality or 400,000 for open-cut mining.

These awards are nationally recognized throughout the mining, quarrying, petroleum, concentrating and mineral extraction operations. Make a check of people in your company who may qualify. The Holmes Safety Association is soliciting its membership to apply for such awards where above-average safety performance is indicated.

The records and data sheets should be submitted as soon as possible and will be accepted until March 15, 1981. For copies of the criteria and complete instructions on submitting applications, write to:

Ms. Patricia Kuhn
Mine Safety and Health Administration
Ballston Towers #3, Room 524
4015 Wilson Boulevard
Arlington, Virginia 22203

(For use in all mining operations)

SAFETY IS EVERYBODY'S BUSINESS



October 1980

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

Excerpts from Code of Federal Regulations

Subchapter N--Metal and Nonmetal Mine Safety

Part 55.6--Explosives

All of the standards are mandatory; violation of a standard will subject the mine operator to an order or notice of violation as required by Section 8 of the Act.

55.6 The term "explosives" as used in this Section includes blasting agents. The standards in this section in which the term "explosives" appears are applicable to blasting agents (as well as to other explosives) unless blasting agents are expressly excluded.

Storage

- 55.6-1 Mandatory. Detonators and explosives other than blasting agents shall be stored in magazines.
- 55.6-2 Mandatory. Detonators shall not be stored in the same magazine with explosives.
- 55.6-3 and 55.6-4 (Reserved).
- 55.6-5 Mandatory. Areas surrounding magazines and facilities for the storage of blasting agents shall be kept clear of rubbish, brush, dry grass, or trees (other than live trees 10 or more feet tall), for a distance of not less than 25 feet in all directions, and other unnecessary combustible materials for a distance of not less than 50 feet.
- 55.6-6 (Reserved).
- 55.6-7 Mandatory. Explosives, detonators, and related materials such as safety fuse and detonating cord shall be:
- Stored in a manner to facilitate use of oldest stocks first;
 - Stored according to brand and grade in such a manner as to facilitate identification;
 - Stored with their top sides up;
 - Stacked in a stable manner but not more than eight (8) feet high.

(For use in surface metal and nonmetal mines)

SAFETY IS EVERYBODY'S BUSINESS

- 55.6-8 Mandatory. Ammonium nitrate-fuel oil blasting agents shall be physically separated from other explosives, safety fuse, or detonating cord stored in the same magazine and in such a manner that oil does not contaminate the other explosives, safety fuse, or detonating cord.
- 55.6-9 and 55.6-10 (Reserved).
- 55.6-11 Mandatory. Containers of explosives, blasting agents, and detonators shall be closed while being stored.
- 55.6-12 Mandatory. Prior to interior repair of facilities for storage of explosives, including blasting agents, all materials stored within the facility shall be removed and the interior cleaned. Prior to the exterior repair of such facilities, all materials stored within the facility shall be removed if there exists a possibility that such repairs may produce a spark or flame. The explosives removed from storage facilities to be repaired shall be placed either in other storage facilities appropriate for storage of such materials under this section or a safe distance from the facilities under repair where they shall be properly guarded and protected until the repairs have been completed and the materials have been returned to storage within the facilities.
- 55.6-13 through 55.6-19 (Reserved).
- 55.6-20 Mandatory. Magazines shall be:
- (a) Located in accordance with the current American Table of Distances for Storage of Explosives;
 - (b) Detached structures located away from powerlines, fuel storage areas, and other possible sources of fire;
 - (c) Constructed substantially of non-combustible material or covered with fire-resistant material;
 - (d) Reasonably bullet resistant;
 - (e) Electrically bonded and grounded if constructed of metal;
 - (f) Made of nonsparking materials on the inside, including floors;
 - (g) Provided with adequate and effectively screened ventilation openings near the floor and ceiling;
 - (h) Kept locked securely when unattended;
 - (i) Posted with suitable danger signs so located that a bullet passing through the face of a sign will not strike the magazine;
 - (j) Used exclusively for storage of explosives or detonators and kept free of all extraneous materials;

55.6-20 (Continued)

- (k) Kept clean and dry in the interior, and in good repair;
- (l) Unheated, unless heated in a manner that does not create a fire or explosion hazard. Electrical heating devices shall not be used inside a magazine.

55.6-21 through 55.6-39 (Reserved).



HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

Excerpts from Code of Federal Regulations

Mandatory Safety Standards--Underground Coal Mines

Part 75.322--Change in Ventilation

Changes in ventilation which materially affect the main air current or any split thereof and which may affect the safety of persons in the coal mine shall be made only when the mine is idle. Only those persons engaged in making such changes shall be permitted in the mine during the change. Power shall be removed from the areas affected by the change before work starts to make the change and shall not be restored until the effect of the change has been ascertained and the affected areas determined to be safe by a certified person.

Changes in mine ventilation which affect any split or main air current, including any change which increases or decreases the volume of air flowing to any split or main air current, shall be thoroughly checked to insure that no split has been affected in such a way as to cause a hazard to the miners.

Any ventilation change in which any split of air is to be increased or decreased by an amount equal to or in excess of 9,000 c.f.m. shall be made only when the mine is idle.

Before mine power can be restored in all areas affected by such ventilation changes, an examination is required as in Section 75.303.

(For use in underground coal mines)

ABSTRACT FROM FATAL ACCIDENT

October 1980

HOLMES SAFETY ASSOCIATION
MONTHLY SAFETY TOPIC



FATAL MACHINERY ACCIDENT

General Information: A fatal machinery accident occurred on the refuse belt conveyor under construction at a preparation plant resulting in the death of a general laborer. The victim had 8 years construction experience. The accident and resultant fatality occurred when the refuse belt moved by electrical or mechanical means in a forward direction catching the victim between the conveyor belt and take-up roller.

Description of Accident: The victim had been instructed to install shims in the counterweight guides. He positioned himself on a walkway adjacent to the refuse belt in order to weld the shims in place. The victim and a helper were standing on top of the take-up roller. When they started welding, the conveyor belt began to move. The victim was caught between the conveyor belt and roller and was crushed.

Cause of Accident: The following factors were relevant to the occurrence of the accident:

1. During the installation of the conveyor, electrical power was being supplied to the belt unit through a control box located at the belt drive. This control box contained a 225 ampere breaker. There were three stop switches with pull cords installed in series along the refuse belt.
2. On the day of the accident, the 225 amp breaker was left in a closed position and the belt was being started and stopped by using the center stop switch.
3. Once activated, the stop switches required a positive action by a worker to restart the conveyor.
4. Just prior to the accident, the refuse belt was operated for approximately two minutes.
5. The investigating committee was unable to determine the exact circumstance that caused the movement of the refuse belt. A forward movement of the belt would require energizing the drive motor; however, an electrical investigation revealed no deficiencies that would allow the belt to operate when the center stop switch was open. None of the other workers in the vicinity stated that they had closed the stop switch to start the belt.

(For use in preparation plants)

Conclusion: The accident and resultant fatality occurred when the refuse belt moved by electrical or mechanical means in a forward direction catching the victim between the conveyor belt and take-up roller.

Contributing factors to this accident were as follows:

1. Work was being performed on the belt with the circuit energized.
2. Work was being performed without blocking machinery against motion.
3. The victim placed himself in a hazardous position while performing repair work.

ABSTRACT FROM FATAL ACCIDENT

October 1980

HOLMES SAFETY ASSOCIATION
MONTHLY SAFETY TOPIC



FATAL POWERED HAULAGE ACCIDENT

General Information: A haulage accident occurred approximately 80 feet outby the face of the No. 5 entry resulting in the death of a scoop operator. The victim had 3 years mining experience, 1-1/2 months of which were as a scoop operator.

Description of Accident: The section crew, under their supervisor, entered the mine in a personnel carrier and on a scoop. During travel to the section, the slippery pavement and grades resulted in the equipment getting hung up and delayed the arrival of the crew on the section. At this time, the scoop operator parked the scoop in the last open crosscut between Nos. 4 and 5 entries.

The supervisor then proceeded to examine the working faces, discussed the roof control plan with the crew, and assigned duties to the crew members. The shuttle-car operator and the scoop-shuttle-car operator were directed to assist the loading-machine operator and acting section foreman with cleaning up spillage and loading a cut of coal in the right-hand crosscut off the face of No. 4 entry. Work proceeded normally until the crew went to dinner.

Afterwards, the supervisory, the shuttle-car operator, and the scoop-shuttle-car operator returned to the face area of the No. 4 entry to finish cleaning spillage. After cleaning the spillage, the supervisor and the shuttle-car operator were in the process of moving the loading machine out of the No. 4 entry when the supervisor noticed the shuttle-car operator crawling away. He assumed that the shuttle-car operator was going to clear the trailing cable for moving the loading machine out of the place.

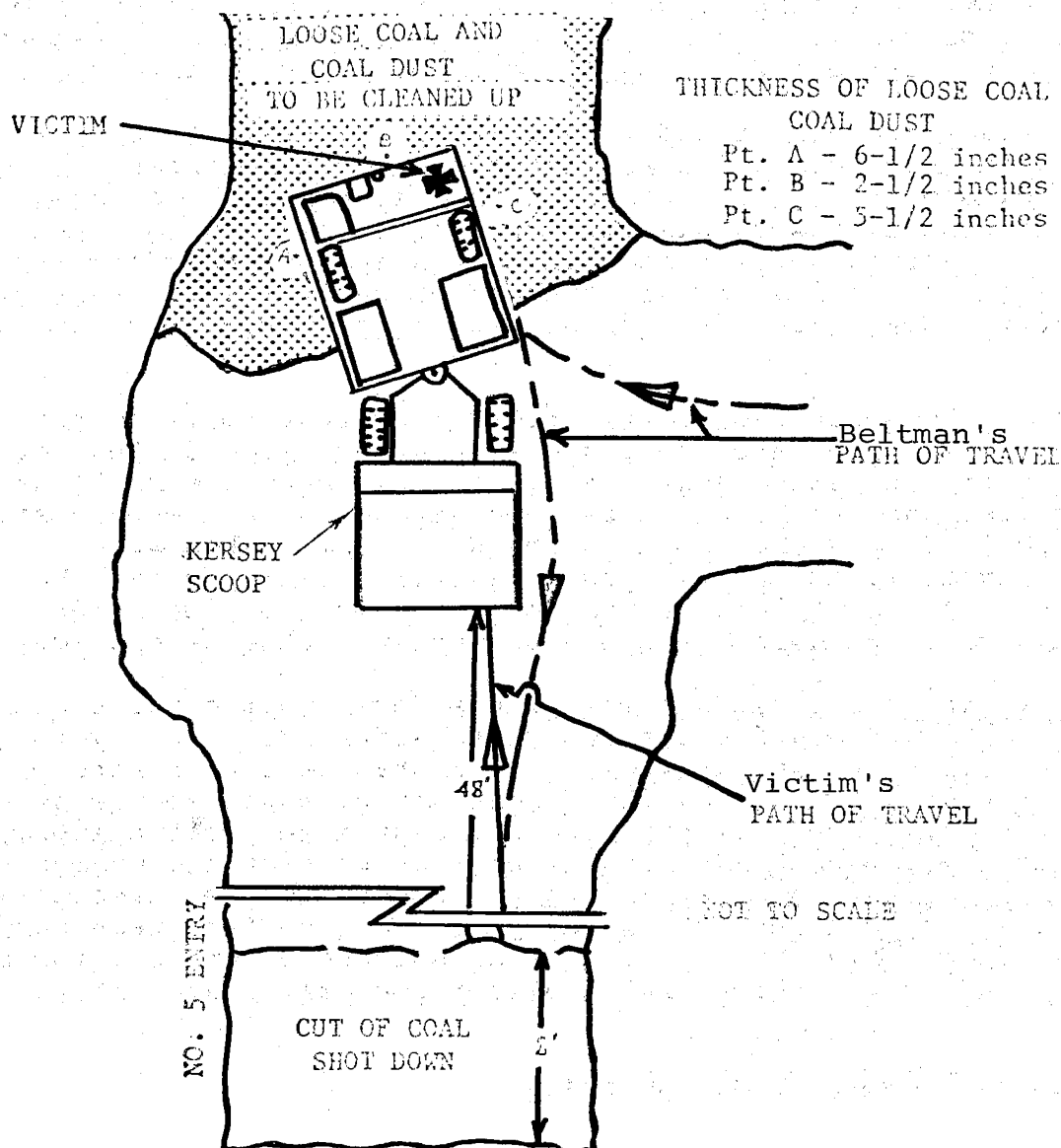
Reportedly, the shuttle-car operator crawled down the No. 4 entry, through the Nos. 4 and 5 entry crosscut, and up No. 5 entry to where the utilityman was shoveling. The shuttle-car operator notified the utilityman that the loading machine was moving to the No. 5 entry. The utilityman told the shuttle-car operator that the beltman had moved the scoop out of the crosscut and made a run up the left side of the working place pushing the loose coal to the face, but had left the scoop parked at the face when summoned by the scoop-shuttle-car operator because the section conveyor belt had stopped. The shuttle-car operator reportedly stated that he

(For use in underground coal mines)

had run the scoop before and that he would move it into the clear. He backed the scoop approximately 48 feet down the No. 5 entry when he traveled into an area where loose coal and coal dust, from cutting the bottom, had restricted the height. The utilityman saw the victims' hat fall off and when he investigated, he found the victims' head crushed between the roof and the top of the scoop. After help was summoned, the victim was removed from the scoop and transported to the hospital where he was pronounced dead.

Cause of Accident: The accident occurred when the victim operated the scoop in an unsafe manner and backed onto loose coal and coal dust.

The major contributing factor was that the victim was an untrained operator and placed himself in a position of looking over the top of the machine without assuring himself of adequate vertical clearance.





October 1980

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

Is Your Safety Program A Success?

For years safety engineers have been asked to determine why some safety programs fail, while others are most successful. Reasons for failure, in practically every instance, have been the same; top management either did not understand fully its responsibilities in a safety program or did not give its full support to the program. Therefore, first line supervision, the next echelon in a successful program, did not have the authority or the initiative to proceed effectively. Perhaps we should stop using the term safety program and substitute management's program, for that is what it must be.

A safety program can be considered somewhat analogous to a new-born child. It requires tender loving care from birth to maturity if both are to blossom. Too often, a safety program is more akin to an orphan. Today we hear it said that delinquent children are the product of delinquent parents, congruently, a poor safety program or record is generally a product of delinquent top management. For a safety program to succeed and be completely effective, it must originate with-- and have full backing and follow through of top management. When this point has been clarified, and then only, should you proceed to organize your program. This does not mean that a company president or director must personally conduct the program, but the full weight and knowledge that the office is 100 percent behind the program must be known. Not only made known, but be a matter of fact.

Once management has come to accept the need for accident prevention, the administration or coordination of a safety program can be delegated to a subordinate. Delegation of such authority in the case of the very small plant is, of course, sometimes impractical. The subordinate may be designated as "Safety Director" and acts as a direct representative of top management in all matters pertaining to safety.

In medium or small-sized plants, the safety director usually has additional duties. However, regardless of the plant size, the safety director must be afforded sufficient time to carry out the safety duties if results are to be obtained. Needless to say, the safety director cannot be just any individual. To be truly effective, the director should be genuinely interested in safety, have a good knowledge of plant operations and processes, possess sound judgement and have the ability to cooperate with and persuade others--especially front-line supervisors.

SAFETY IS EVERYBODY'S BUSINESS

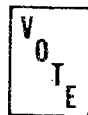
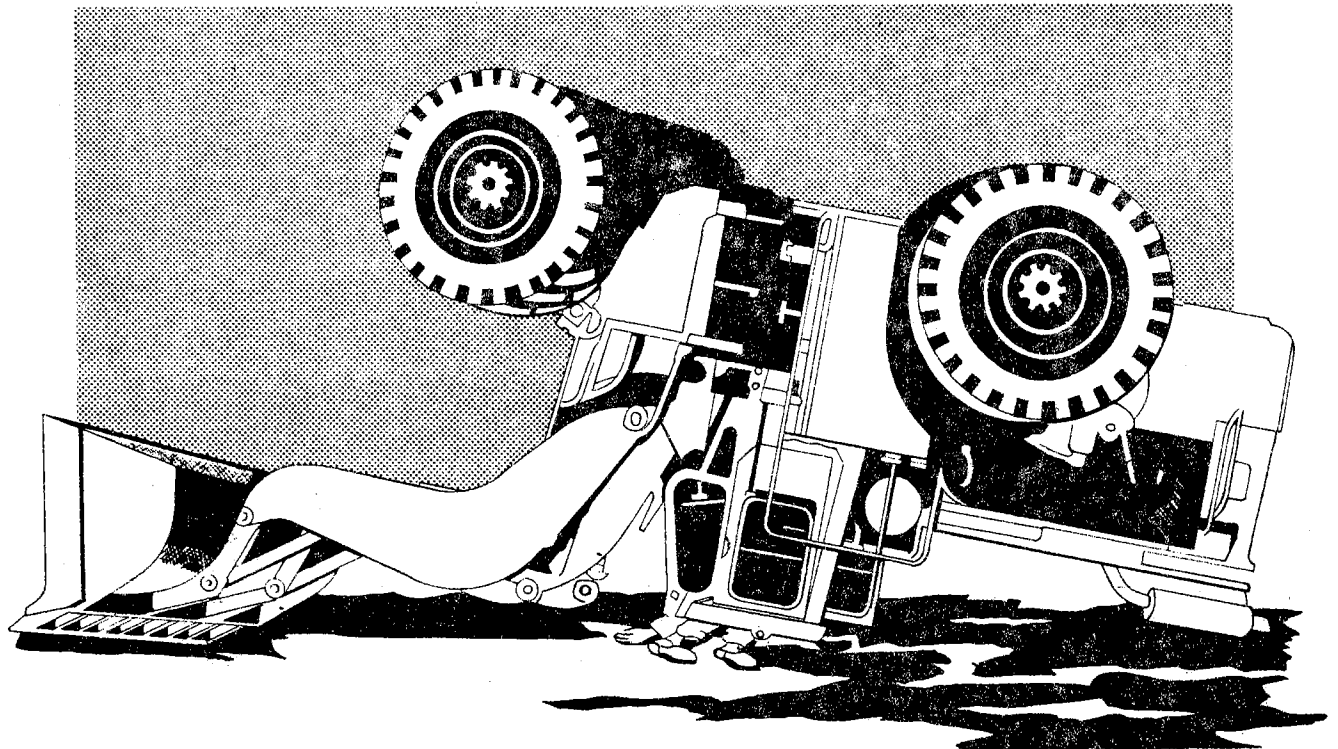
(For use in all mining operations)

While the safety director's responsibilities include the application of the safety program, the director should not be held totally responsible for the accident record of individual departments. This responsibility is that of the individual department supervisor and cannot be delegated.

The next most important level of responsibility, once that of top management is acknowledged, is that of the line supervisor. The supervisors issue orders to those working under them, generally has a voice in the selection of those assigned to their department, and is looked upon by their workers as the direct representative of management. Their attitude toward those working under their supervision will be generally interpreted as that of management. Being charged with the quality and quantity of work produced by their department, they are therefore responsible for the conduct of those under their supervision. While most line supervisors readily recognize the necessity of exercising control to get work done correctly and on time, many do not recognize the need for the same degree of supervision and control to get the work done safely. Educating the line supervisor to this end is of the utmost importance. This cannot be a hit-or-miss proposition, but requires adequate planning at the top level as well as at the job level.

In the final analysis, successful programs have the following in common: 1. Interest, support and placement of responsibility by top management; 2. Constructive, productive action; 3. Constant promotion and leadership by front-line supervision. In reality, this is no secret formula for safety success.

When will we learn that
we need
**ROLLOVER PROTECTION,
SEAT BELTS, AND BERMS.**



FOR SAFETY
IN 1980



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