APRIL 1982

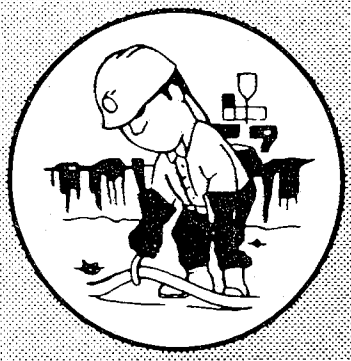
HOLMES SAFETY ASSOCIATION

E PLURIBUS UNUM

SAFETY EFFICIENCY

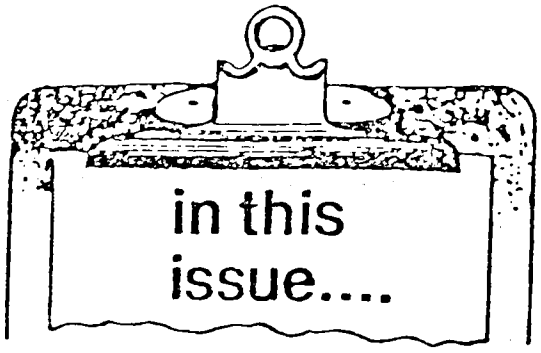
MINERAL INDUSTRIES

BULLETIN



"SAFETY" It's Up to You, In '82

HOLMES SAFETY ASSOCIATION



APRIL 1982

WITH THIS ISSUE THE BULLETIN IS RESUMING NORMAL SCHEDULE
THANK YOU FOR YOUR PATIENCE

April 1982

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

January 1982

Brown and Root-Houston
Houston Mine
Houston, Texas

Western Fuels-Utah Inc.
Utah Mine
Rangely, Colorado

U S Gypsum
Shoemaker Mine-Gypsum
Lewistown, Montana

Cyprus Industrial Minerals
Cyprus Industrial Minerals-Talc
Ennis, Montana

Big Bear Mining Company
Prep Plant No. 1
Lynco, West Virginia

Big Bear Mining Company
Big Bear No. 4
Lynco, West Virginia

February 1982

Coal Creek Mining
Coal Creek
Ashland, Montana

Thunder Mountain Mining Company
Mayflower Mine-Gold
Alleghany, California

Carbon Fuel Company
Carbon Mine
Carbon, West Virginia

February 1982

Little Rock Coal Company
Little Rock Mine
Grundy, Virginia

B and C Coal Company, Inc.
B and C Coal Mine
Grundy, Virginia

Energy Coal Corporation, Inc.
No. 10 Central Shop/Warehouse
Paintsville, Kentucky

Energy Coal Corporation, Inc.
No. 11 Mine
Paintsville, Kentucky

Energy Coal Corporation, Inc.
No. 12 Mine
Paintsville, Kentucky

Energy Coal Corporation, Inc.
No. 13 Mine
Paintsville, Kentucky

Energy Coal Corporation, Inc.
No. 14 Mine
Holden, West Virginia

Southern Eagle
Jamestown Mine
Elkins, West Virginia

March 1982

Triton Coal Company
Buckskin Mine
Gillette, Wyoming

March 1982

Freeman United Coal Mining Company
Crown III Mine
Farmersville, Illinois

High Knob Mining Company
High Knob Mine
Pilgrim Knob, Virginia

Eran Coal Company
Eran Coal Mine
Wolf Summit, West Virginia

Virginia Crews Coal Company
Virginia Crews No. 4 Mine
Iaeger, West Virginia

Mogasco Coal, Inc.
Mogasco Coal Mine
Elkins, West Virginia

April 1982

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

1981 Injury Data

Accidental deaths in the metal and nonmetal mining industry continued to decline last year while fatalities in coal mining increased, according to preliminary information from the Mine Safety and Health Administration.

For the second straight year, the number of deaths in metal and nonmetal mining was the lowest ever reported. Last year 84 workers were killed at these operations, compared to 103 in 1980. Of the 84 deaths, 42 occurred at metal mines, 14 at nonmetal mines, 19 at stone mines and nine at sand and gravel operations.

Last year at metal and nonmetal mines, accidents with powered haulage vehicles resulted in the most deaths--27. Accidents with machinery, causing 18 fatalities, were the second leading cause, and explosives accidents, with eight deaths, were third.

In coal mining, fatalities rose to 155, an increase of 22 deaths over the previous year's total. The rate for fatal coal mining accidents was .07 per 200,000 hours worked.

"These grim figures indicate a need for a renewed commitment to mine safety on the part of everyone--labor, management, and government," said Ford B.Ford, assistant secretary for MSHA. "Reductions in mining injuries will only be possible if we all actively pursue the cooperation required."

The types of coal mining accidents that were responsible for the most deaths last year were falls of the mine roof and ignitions or explosions of gas or dust. Accidents in these categories killed 37 miners each. The second leading cause of death in coal mining was accidents with powered haulage equipment, with 35 fatalities.

Both mining industries achieved considerable reductions in all injuries, with and without lost workdays, in the last calendar year.

The total for all injuries in 1981 at metal and nonmetal mining operations was 14,221, down from 17,468 in the previous year. The rate of injury also declined, from 6.46 per 200,000 employee-hours in 1980 to 5.58 last year.

The drop in injuries in the coal industry was even more substantial, where they declined 22 percent in 1981. The total decreased to 17,802 injuries from 22,723, and the rate declined from 10.03 per 200,000 employee-hours in 1980 to 8.65 last year.

"Although any injury is one too many, we at MSHA are heartened to see this reduction in injuries in the mining industries," said Ford. "This news, combined with the record low number of deaths in metal and nonmetal mining, should give mine operators and miners alike the inspiration they need to continue working together towards safer, healthier mines."

Did you Know?

It is unwise to pay too much, but it's worse to pay too little. When you pay too much, you lose a little money--that is all. When you pay too little, you sometimes lose everything because the thing you bought was incapable of doing the thing it was bought to do. The common law of business balance prohibits paying a little and getting a lot--it can't be done. If you deal with the lowest bidder, it is well to add something for the risk you run, and if you do that you will have enough to pay for something better.

Doing Something About Safety

When we talk of safety, what comes to mind, something real or something abstract? It would seem that the answer lies in whether or not we are safety-minded. If it represents just a word to one person that person is inclined to be either impractical or negligent. If safety is mentioned to a safe-minded person it immediately presents a picture of some specific protective device or practice.

To a carpenter the picture may be that of flattening protruding nails. To the housewife it may be that of removing scissors from a child's reach. To the machinist it may be that of replacing a guard that has been removed from around belts. To the welder that of wearing eye protection and so on.

Doing something about safety means being constantly aware of hazards and of being alert in preventing accidents. When an accident does occur it is usually the result of unconcern or inattentiveness. One does not walk purposely into a surefire injury--then why do it inadvertently? Why not implant in consciousness the will to remain safe from injury?

The best crafts are created by those who are careful about all details--particularly the detail of safe-practices. We owe it to ourselves, our families, and our employers to stay out of harm's way. Accidents are preventable. The surest way to avoid them is by training oneself to work safely.

ABSTRACT FROM FATAL ACCIDENT

April 1982

HOLMES SAFETY ASSOCIATION
MONTHLY SAFETY TOPIC

Rail Haulage Accident

General Information: A rewash plant operator was fatally injured when the four loaded railroad cars he was dropping to the yard storage area collided with parked railroad cars. He had 14 years of mining experience, nine years as a rewash plant operator.

The plant, a crushed stone operation, was mined by the multiple bench method. Granite was drilled, blasted and loaded into end dump trucks for haulage to the primary crusher, located on the second bench of the quarry. The stone was crushed and conveyed to the plant for further processing.

Description of Accident: The victim reported for work at his normal starting time and was assigned his regular duty as rewash plant operator. This included dropping railroad cars as the brake person. Cars were loaded out of either the rewash bins or the crusher run bins, then the cars are pushed to the storage area.

Several hours into the shift, a row of four 70-ton hopper cars were spotted under the rewash bins for loading. A water pump for the rewash broke down and these four cars had to be loaded from the stockpiles. The dozer operator stated that he pushed these cars back to the loading ramp of the stockpile area for loading.

After they were loaded, the victim got aboard the front car and hooked up his safety belt and line to the framework at the top of the car, close to the brake wheel. The brakes on the front car were located forward of the car, putting the victim ahead of the loaded cars which were to be pushed to the first switch, about 400 feet. The dozer operator proceeded to push the cars toward the first switch with a Michigan 280 rubber-tired dozer. Once the cars reached the first switch, the dozer stopped, letting the cars freewheel toward the storage area, about 1,684 feet with an approximate grade of 0 to 2 percent. The victim's job, at this point, was to work the brakes gradually to keep the cars under control; however, when the dozer operator turned his vehicle around, he noticed that the car the victim was riding in had derailed and that the victim was injured.

Cause of Accident: It was later determined that the primary cause of the accident was the draw-bar knuckle on the lead car being closed. This caused the cars to meet improperly, to not couple, and to derail.

Contributing causes were the number of cars being dropped at one time and the brake person's inability to control four loaded cars.

ABSTRACT FROM FATAL ACCIDENT

April 1982

HOLMES SAFETY ASSOCIATION
MONTHLY SAFETY TOPIC

Bump Accident

General Information: A bump accident occurred in a pillar block of a coal mine resulting in the death of a continuous mining machine helper. The victim had 12 years of mining experience, including two years as continuous miner helper.

Description of Accident: After repairs were made to the continuous mining machine, mining operations were begun in the pillar and continued until a derailment at the track-loading station caused an interruption. Meanwhile, as the shift continued, the first cut was completed in the pillar and the roof was bolted. When the track repairs were completed, the second cut was started. The continuous miner operator explained that he loaded two shuttle cars of coal from the second cut and then the continuous miner helper began operating the continuous miner. Shortly thereafter, as the helper was loading his second cut of coal, the bump occurred. According to the continuous miner operator, the bump knocked him to the mine floor and the forces from the bump filled the air with dust. He explained that when he regained his balance, he noticed the section supervisor was checking the continuous miner helper, who was trapped in the operator's compartment of the continuous miner. The victim was transported to the hospital where he later died of his injuries.

Conclusion: The mining practices and procedures in the section allowed the pillar to remain full size until the adjacent pillar lines had approached the immediate area before the pillar size was reduced. This practice of splitting pillars in close proximity to a pillar line results in abnormal pressures and subsequent bumps when the coalbed is between a strong roof and floor, such as was the case. Examination of the mine map indicated that there was about 1,485 feet of earth cover, with over 200 feet of massive sandstone roof directly over the coalbed. Further, the mining practices allowed pillar lines to intersect at right angles and allowed large pillars which resisted crushing to stand adjacent to such pillar lines.

April 1982

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

Clarification of Standard 55.12-19

In the March Bulletin, Standard 55.12, Electricity, was discussed. Following is a further clarification of Standard 55.12-19, Suitable Clearance Around Stationary Electrical Equipment.

Standard 55.12-19 requires that where access is necessary, suitable clearance shall be provided at stationary electrical equipment or switch gear. The intention of this standard is to provide sufficient access and working space around such electrical equipment to insure worker safety and to avoid contact by persons with electrical components.

The standard is intended to apply to the many and varied situations that do or will exist on mine property. Among the general factors to be considered in determining "suitable clearance" are voltages and conductors (including size), insulation, guards, existing passage or working space, direction of access to electrical components, potential exposure to live or exposed electrical parts, and the grounding of live parts.

The current edition of the National Electrical Code and the National Electrical Safety Code may be used as guidance in determining "suitable clearance." The provisions of the National Electrical Code for safe work clearances around electrical equipment can be found in Article 710 ("Over 600 Volts, Nominal, General"). Part 1 of the National Electrical Safety Code contains two sections that may be of assistance: Section 11 ("Protective Arrangements in Electrical Supply Stations") and Section 12 ("Protective Arrangements of Equipment"). The National Electrical Code may be obtained from the National Fire Protection Association, 470 Atlantic Avenue, Boston, Massachusetts, 02210. The National Electrical Safety Code (also referred to as ANSI-C2) may be obtained from the Institute of Electrical and Electronics Engineers, Inc., National Bureau of Standards, 345 East 47th Street, New York, New York, 10017.

Areas around stationary electrical equipment or switch gear should be restricted to authorized persons. Normal travel by or through such equipment should not be allowed unless no other travelway is available. However, if persons do travel by stationary electrical equipment, Standard 55.11-1 requires that a safe means of access be provided.

April 1982

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

Code of Federal Regulations
Subchapter N--Metal and Nonmetallic
Open-Pit Mines
Part 55.13--Compressed Air and Boilers

The purpose of these regulations is to promote health and Safety and prevent accidents in open pit metal and non-metal mines. Any failure to comply with these mandatory standards will result in a citation as required by Section 8 of the Act.

55.13--1 All boilers and pressure vessels shall be constructed, installed, and maintained in accordance with the standards and specifications of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code.

55.13-2 through 55.13-9 (Reserved)

Compressed Air

55.13-10 (a) Reciprocating type air compressors rated over 10 horsepower shall be equipped with automatic temperature-actuated shutoff mechanisms which shall be set or adjusted to the compressor when the normal operating temperature is exceeded by more than 25 percent.

(b) However, this standard does not apply to reciprocating-type air compressors rated over 10 horsepower if equipped with fusible plugs that were installed in the compressor discharge lines before November 15, 1979, and designed to melt at temperatures at least 50 degrees below the flash point of the compressors' lubricating oil.

55.13-11 Air receiver tanks shall be equipped with one or more automatic pressure-relief valves. The total relieving capacity of the relief valves shall prevent pressure from exceeding the maximum allowable working pressure in a receiver tank by not more than 10 percent. Air receiver tanks also shall be equipped with indicating pressure gages which accurately measure the pressure within the air receiver tanks.

55.13-12 Compressor air intakes shall be installed to insure that only clean, uncontaminated air enters the compressors.

55.13-13 and 55.13-14 (Reserved)

55.13-15 (a) Compressed-air receivers and other unfired pressure vessels shall be inspected by inspectors holding a valid National Board Commission and in accordance with the applicable chapters of the National Board Inspection Code, a Manual for Boiler and Pressure Vessel Inspectors, 1979. This code is incorporated by reference and made a part of this standard, may be examined at

any Metal and Nonmetal Mine Safety and Health District Office of the Mine Safety and Health Administration, and may be obtained from the publisher, the National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Avenue, Columbus, Ohio 43229.

(b) Records of inspections shall be kept in accordance with requirements of the National Board Inspection Code, and the records shall be made available to the Secretary or his authorized representative.

55.13-16 (Reserved)

55.13-17 Compressor discharge pipes where carbon build-up may occur shall be cleaned periodically as recommended by the manufacturer, but no less frequently than once every two (2) years.

55.13-18 (Reserved)

55.13-19 Repairs involving the pressure system of compressors, receivers, or compressed-air-powered equipment shall not be attempted until the pressure has been bled off.

55.13-20 At no time shall compressed air be directed toward a person. When compressed air is used, all necessary precautions shall be taken to protect persons from injury.

55.13-21 Except where automatic shutoff valves are used, safety chains or other suitable locking devices shall be used at connections to machines of high-pressure hose lines of 3/4-inch inside diameter or larger, and between high pressure hose lines of 3/4-inch inside diameter or larger, where a connection failure would create a hazard.

55.13-22 through 55.13-29 (Reserved)

Boilers

55.13-30 (a) Fired pressure vessels (boilers) shall be equipped with water level gages, pressure gages, automatic pressure-relief valves, blowdown piping, and other safety devices approved by the American Society of Mechanical Engineers to protect against hazards from overpressure, flameouts, fuel interruptions and low water level, all as required by the appropriate sections, chapters and appendices listed in paragraphs (b) (1) and (2) below.

(b) These gages, devices and piping shall be designed, installed, operated, maintained, repaired, altered, inspected, and tested by inspectors holding a valid National Board Commission and in accordance with the following listed sections, chapters, and appendices:

(1) The ASME Boiler and Pressure Vessel Code, 1977, published by the American Society of Mechanical Engineers.

Section and Title

I Power Boilers.
II Material Specifications--Part A--Ferrous.

II Material Specifications--Part B--Nonferrous.
II Material Specifications--Part C--Welding Rods, Electrodes, and Filler Metals.
IV Heating Boilers.
V Nondestructive Examination.
VI Recommended Rules for Care and Operation of Heating Boilers.
VII Recommended Rules for Care of Power Boilers.

(2) The National Board Inspection Code, a Manual for Boiler and Pressure Vessel Inspectors, 1979, published by the National Board of Boiler and Pressure Vessel Inspectors.

Chapter and Title

I Glossary of Terms.
II Inspection of Boilers and Pressure Vessels.
III Repairs and Alterations to Boiler and Pressure Vessels by Welding.
IV Shop Inspection of Boilers and Pressure Vessels.
V Inservice Inspection of Pressure Vessels by Authorized Owner-User Inspection Agencies.

Appendix and Title

A Safety and Safety Relief Valves.
B Non-ASME Code Boilers and Pressure Vessels.
C Storage of Mild Steel Covered Arc Welding Electrodes.
D-R National Board "R" (Repair) Symbol Stamp.
D-VR National Board "VR" (Repair of Safety and Safety Relief Valve) Symbol Stamp.
D-VR1 Certificate of Authorization for Repair Symbol Stamp for Safety and Safety Relief Valves.
D-VR2 Outline of Basic Elements of Written Quality Control System for Repairers of ASME Safety and Safety Relief Valves.
D-VR3 Nameplate Stamping for "VR".
E Owner-User Inspection Agencies.
F Inspection Forms.

(c) Records of inspections and repairs shall be kept in accordance with the requirements of the ASME Boiler and Pressure Vessel Code and the National Board Inspection Code. The records shall be made available to the Secretary or his authorized representative.

(d) Sections of the ASME Boiler and Pressure Vessel Code, 1977, listed in paragraph (b)(1) above, and chapters and appendices of the National Board Inspection Code, 1979, listed in paragraph (b) (2) above, are incorporated by reference and made a part of this standard. These publications may be obtained from the publishers, the American Society of Mechanical Engineers, 345 East Forty-seventh Street, New York, N.Y. 10017, and the National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Avenue, Columbus, Ohio 43229. The publications may be examined at any Metal and Non-metal Mine Safety and Health District Office of the Mine Safety and Health Administration.

55.13-31 through 55.13-24 (Reserved)

April 1982

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

Excerpts from Code of Federal Regulations
Part 75--Underground Coal Mines
Subpart E--Combustible Materials and Rock Dusting

Today's discussion is concerned with Part 75.403, maintenance of incombustible content of rock dust. This states that where rock dust is necessary, it shall be distributed upon the top, floor, and sides of all underground areas of a mine and maintained in such quantities that the incombustible content of the combined coal dust, rock dust, and other dust shall be not less than 65 per centum, but the incombustible content in the return air-courses shall be no less than 80 per centum.

Where methane is present in any ventilating current, the per centum of incombustible content of such combined dusts shall be increased 1.0 and 0.4 per centum for each 0.1 per centum of methane where 65 and 80 per centum, respectively, of incombustibles are required.

Compliance with this subsection is determined by chemical analyses of that portion of the collected mine dust that will pass through a No. 20 sieve. Application of the dust shall be by dry methods, except rock dust may be applied wet in the following manner: Wet rock dust shall be limited to rib and roof surfaces in face areas. It shall not be used on the floor or for redusting mine surfaces. In such applications, only limestone or marble dust that meets the specifications contained in Section 318(d) of the Act shall be used; the application shall be at the rate of not less than 3 ounces (weight) of dust per square foot of surface and shall be by a mixture of not more than 6 to 8 gallons of water with 100 pounds of dust, whether by premixed slurry or by mixing at the nozzle of a hose, to assure that the mixture is not too fluid and that sufficient dust adheres to the surfaces. After the wet rock dust dries, additional rock dust shall be applied to all surfaces to meet applicable standards. Wet rock-dusting of ribs and floor does not eliminate the necessity for dry rock-dusting the floor.

To rock-dust effectively, the rock dust must be applied on the top, floor, and sides of all openings. Tests and experience have shown that these incombustible contents are necessary to prevent the dust from entering into an explosion, and the required incombustible content must be maintained on the roof and ribs as well as the floor. A deficiency in inert material in the dust on the ribs (for example) is not compensated by an excess on the floor.

Further, these incombustible contents are, for all practical purposes, minimum standards. They give no assurance that an explosion will never occur; but, they give assurance that, if reasonable care is taken, wide-spread explosions will not develop.

Reasonable care requires that rock-dusting be adequate within 40 feet of the face, that no strong igniting source is present, that coal-dust accumulations have been removed, and that the rock-dust application is not patchy. Fortunately, a factor of safety of another sort does exist. To produce a dust explosion in a coal mine, a particular set of conditions must exist simultaneously. There must be a certain amount of coal dust in suspension, there must be a proper mixture of this dust with the air, and there must be a sufficiently strong source of ignition. These conditions occur simultaneously only on very rare occasions, if this were not the case, there would be a greater possibility for mine explosions.

Safety is Elementary

Most of us respect the laws of society because we recognize their worth. Usually, we even remember, consider, and respect these laws without realizing it too much. They are part of our culture which is learned. We learn not to walk into a strange home unless invited. We learn not to push someone off the sidewalk because we want to pass. We abide by a code to maintain a certain self-respect and dignity.

Safety should be practiced similarly, but in many cases, it is pushed out of our minds and doesn't receive the recognition or respect it deserves. Safety is very real and elementary and embodies the natural laws of self-preservation. A mental restraint can be as protective as an armor plate--if heeded! Warning signals in our minds are just as realistic as sentries on guard--if we believe them! Unfortunately, we don't always heed and believe our better judgment.

It is important that safety consciousness influence our judgments and decisions. Safety is not a theory or a formula, but an elementary part of our consciousness which we must encourage and train to mesh with our everyday activities.

Don't be a Slave to Safety!

Many people can be classified as slaves to safety. The person who grudgingly attends safety meetings, or abides by safety regulations for necessity's sake, is a slave to be pitied.

What does it take to sell one on safety? Just a good, honest self-examination. Analyze those prejudices and critical attitudes. Discard those that can't stand up under careful scrutiny, and substitute some positive, constructive thinking, and the first thing you know, you will find yourself free again! You can find safety to be a way of life instead of a task-master.

April 1982

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

Excerpts from Code of Federal Regulations Part 77--Surface Coal Mines and Surface Work Areas of Underground Coal Mines Subpart R--Miscellaneous

This discussion concerns the safety standards as they pertain to communications. Webster defines communications as giving or receiving information, signals, or messages by talk, gestures, writing, etc. Good communications between you and another person may help you to prevent an accident. Should an accident occur, your ability to obtain prompt medical assistance may mean the difference between life and death for any worker who may have been injured.

Section 77.1700--Communications in work areas.

No employee shall be assigned, or allowed, or be required to perform work alone in any area where hazardous conditions exist that would endanger his safety unless he can communicate with others, can be heard, or can be seen.

Section 77.1701--Emergency communications; requirements.

(a) Each operator of a surface coal mine shall establish and maintain a communication system from the mine to the nearest point of medical assistance for use in an emergency.

(b) The emergency communication system required to be maintained under paragraph (a) of this section may be established by telephone or radio transmission or by any other means of prompt communication to any facility (for example, the local sheriff, the State highway patrol, or local hospital) which has available the means of communication with the person or persons providing emergency medical assistance or transportation in accordance with the provisions of paragraph (a) of this section.

Section 77.1702--Arrangements for emergency medical assistance and transportation for injured persons; reporting requirements; posting requirements.

(a) Each operator of a surface coal mine shall make arrangements with a licensed physician, medical service, medical clinic, or hospital to provide 24-hour emergency medical assistance for any person injured at the mine.

(b) Each operator shall make arrangements with an ambulance service, or otherwise provide for 24-hour emergency transportation for any person injured at the mine.

Section 77.1702 (a) and (b) "24-hour emergency medical assistance and emergency transportation", does not mean that a physician and

ambulance shall be on a standby basis at the mine. It means that these services must be arranged for and be readily available.

(c) Each operator shall, on or before September 30, 1971, report to the Coal Mine Health and Safety District Manager for the district in which the mine is located the name, title and address of the physician, medical service, medical clinic, hospital, or ambulance service with whom arrangements have been made, or otherwise provided, in accordance with the provisions of paragraphs (a) and (b) of this section.

(d) Each operator shall, within 10 days after any change of the arrangements required to be reported under the provisions of this section, report such changes to the Coal Mine Health and Safety District Manager. If such changes involve a substitution of persons, the operator shall provide the name, title, and address of the person substituted together with the name and address of the medical service, medical clinic, hospital, or ambulance service with which such person or persons are associated.

(e) Each operator shall, immediately after making an arrangement required under the provisions of paragraphs (a) and (b) of this section, or immediately after any change, of such agreement, post at appropriate places at the mine the names, titles, addresses, and telephone numbers of all persons or services currently available under such arrangements to provide medical assistance and transportation at the mine.

We Believe

...THAT <u>everyone bears</u> the unalterable responsibility for keeping out of harm's way. We all owe this to ourselves, our families, our co-workers, and our employers.

..THAT <u>no one lives</u> or works entirely alone. We are all involved with each other, touched by the accomplishments of others, and marked by their failures. If we fail the person beside us, we fail ourself, and everyone will share the burden of that loss. When an accident occurs, not only has someone failed; but that person's co-workers have also failed in their duties.

...THAT <u>accidents are conceived</u> in improper attitudes, and born in moments of action without thought. They will cease to be only when the proper attitude is strong enough to precede the act--when the right attitude creates the awareness that controls the act.

...THAT <u>the prevention of accidents is an objective which crosses all levels of rank, organization and procedure</u>.

...THAT <u>freedom from harm</u> is not a privilege but a goal to be achieved and perpetuated day by day.

...THAT <u>the elimination of injury</u> and pain through accidents is a moral and human obligation upon which the final measure of our performance directly depends.

April 1982

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

The Roof Fall Problem

The greatest danger in coal mining is, and always has been, coal or rock falling from the roof, rib, or face. Year after year, falling materials injure and kill far more miners than do mine fires, explosions, and flooding. Roof fall fatalities to date have more than doubled over the same corresponding period in 1981.

Everyone knows that blasting, electricity, or a fast-moving trip can be dangerous, but all these hazards have not produced as many deaths as have roof fall injuries. One-half or more of all miners killed in underground coal mines met with death from a fall of roof, face, or rib.

Roof falls have no respect for anyone who works underground, whether it be a mine owner, superintendent, section boss, the first shift of a new miner, or even an old timer. Experience won't keep the roof off anyone's back. Mine supervisors and miners with several years of experience are being injured and killed. The average experience of miners killed by a fall of roof is about 22 years.

We must profit from the mistakes that have caused the most frequent and serious injuries in the past. These mistakes always involved disregarding one or more of the three "T's" for self-protection from loose roof, namely, Testing the roof; Taking down loose roof; or Timbering weak roof.

Experience has proven that failure to test the roof by sight, hearing, and by touch has been a major factor in numerous roof fall injuries. In many cases, a casual visual examination was not enough to prevent an injury.

Probably the worst mistake being made, especially by experienced miners, is attempting to "out guess" roof which is known to be loose. In numerous reported injuries, taking down or supporting the loose area was postponed on the assumption that the roof would hold a few minutes longer, until some small task was done. Our eyes, ears, and sense of touch can only tell us where the roof may be tight or loose, not how long it will stay in place.

Systematic supports will eliminate numerous misjudgments of roof conditions. Unfortunately, the safety effectiveness of standard support methods is not fully appreciated. At least one-half of the fatalities from roof fall injuries has been traced to the failure of not following standard roof-control plans.

April 1982

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

Temporary Repairs

There is an old saying that goes, "You can get used to hanging if you hang long enough." This adage is appropriate to explain how temporary, makeshift repairs become so tolerated that the tendency is to forget them, unless some unusual circumstance causes other action.

Makeshift repairs give apparent temporary relief; they are like painting over rusty spots in a steel structure without first wirebrushing the rust. With such practice, the paint does not prevent the spread of corrosion; it only has the appearance of doing some good.

It is not unusual in coal mines to have repairs become permanent that were originally intended to be temporary. Conditions arise in coal-mine operation requiring temporary repairs, but these should be corrected at the first opportunity.

Temporary or makeshift repairs are made in connection with electrical machinery and appurtenances probably more than any other group classification in a mine. These makeshift repairs have been the cause of numerous mine fires and explosions.

Not only from the safety standpoint, but also from the economy angle, makeshift repairs are poor investments. In many instances, the cost of the labor for doing a repair job far exceeds the material cost. A good permanent repair job may cost little, if any more, in the aggregate than a poor temporary one. At the same time it may eliminate danger to the miners.

Safety Attitude

Keeping safe is often a matter of keeping cool or keeping the mind on the job. Or in other words--keeping a proper attitude.

There are various states of mind that detract from a state of safety. Notorious among these are anger and absentmindedness. The latter might stem from daydreaming or worry.

At work there is only one place to focus one's thoughts and that is on the job. Safety does not allow for emotional upheavals or mental lapses.

April 1982

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

Safety is Everyone's Business

There is no excuse for an accident - only a reason!

History tells us that the first electrocution by man-made electricity occurred in 1879 when a stagehand got tangled in wires to arc lights. Since then acres of graveyards have been planted with thousands of people who, due to thoughtlessness, carelessness or ignorance, allowed their bodies to become part of an electrical circuit.

There are rules governing all human conduct. The first written rules, the Ten Commandments, are still on the books. They have not been amended or repealed. Mother Nature does not ignore her laws. No one needs a college degree in physics or engineering to understand the natural laws of gravity, inertia, centrifugal force. It is not "unlucky" to walk under a ladder, it is just plain common sense to avoid being struck by a falling object - the law of gravity. A sleepy mother gets up in a darkened room to answer her baby's cry and bumps into a door - the law of inertia. A speeding car turns off a curve, hits an electric pole - the combined laws of centrifugal force and inertia.

Safety is so simple and easy when you THINK about it. Guard against the hazard and the accident is prevented. The regrettable thing about any accident is not only the injury to personnel or the damage to property, but the fact that a condition existed that permitted it to occur.

Safety rules are compiled from the histories of many thousands of accidents which have happened over many years. Hindsight can explain what foresight should have prevented. The reason history repeats itself is that so many of us did not listen or hear the first time. Some people learn from experience; others never recover.

The foreword of any company rule book should read: "It is the definite responsibility of every employee while on the job, to provide: (1) Safety to her/himself, (2) Safety to co-workers, (3) Safety to the public, (4) Safety to company property."

Your company has rules, too. Are you following and observing the rules? All the time? Most of the time? Sometimes? When it is convenient?

An accident is a reflection upon the intelligence of an individual, a department, a company. Each individual is writing the history of the company. It should be written with safety as a guideline. Then after each job that person can think with pride, "This was a good job, performed safely. And I helped to do it."

April 1982

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

Sell Safety

Unfortunately, safety seldom enjoys the advantage of a buyer's market. It must always be sold. The accident prevention program is designed to sell the product, much like a parent may sell a dose of medicine to a child--doctored up to disguise the smell and taste.

While safety is hardly the same as an unpleasant medicine, the reaction of some people to it at times appears to give it that quality. The realistic safety program tries to make the subject interesting and palatable--thus opening deaf ears that ordinarily do not hear, and eyes that do not see,to the importance of safety as it respects the individual.

No accident prevention program will succeed unless its leaders are aware of the basic fault or quirk of human nature which sets up mental road blocks that will not permit a safety message getting through. Give someone a compliment or some good news--often it will be heard even if you whisper; but, try to impress the importance of safety and you may have to shout. The effective safety program does both. It whispers to some and shouts to others.

Safety is a product of civilization. It is not inherent at birth. It is not something people automatically accept as applicable to them, nor is it something that can be legislated into being by law. People must be led into a safer way of life. There is no such law as the law of self-preservation. Anyone who doubts that statement may confirm its truth by reading tomorrow's headlines. It may be further confirmed by driving a car without regard to the actions of other drivers. A rude awakening may await those who do not take the trouble to drive defensively.

A safe individual is the product of constructive leadership--leadership that is positive in its approach to safety, not only in words but in deeds.

Safety is best sold by one individual to another individual. It needs to have every individual in the plant on the safety team to be truly effective.

Good Example

Anyone who believes in safety will set a good example. Demonstrating safe work methods and pointing out the hazards to new miners is an attribute of a safety-minded employee.

Wearing a hard hat during work hours is a simple way to illustrate a belief in one of the elementary principles of safety. Wearing other protective apparel when the need is indicated sets an example which is easy for others to follow. Be a good example, for your own sake and for others.

April 1982

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

Vacation Safety

For outdoor fires, select a site clear of bushes or low overhang. Restrict the fire to a small area and keep it under control. Don't toss chemicals or aerosol cans into a fire. When leaving, make sure it is thoroughly stamped out or drenched with water. Be sure burning matches, cigarette butts and tobacco are extinguished before discarding them.

Before diving into strange water, get to know something about what's beneath the surface. Avoid swimming alone, beyond your depth, too great a distance, or in darkness.

Watch out for poison ivy and other such weeds and be alert for children eating strange berries. They could be poisonous.

Start out knowing your car is safe for the road. Avoid over-crowding. Drive in easy stages and at moderate speed. Be alert for traffic signs and defective conditions of road and other drivers.

Avoid drinking water at roadside springs. If doubtful as to the purity of water, boil it.

Make sure your boat is in good shape. Don't overload it and see that everyone is seated and provided with a life preserver. See that children don't lean over the side. Don't show off or turn a bathing area into a speed boat course.

Stay out of water and boats during a lightning storm. Avoid sheltering under a tree as lightning usually strikes the tallest object. Be careful on the golf course, a metal club could become a lightning rod.

Sound Familiar?

In the course of accident investigations, how often have you heard this said: "I don't know how it could have happened--he was one of the most careful people I ever worked with!"

If that is true of those who are careful, then what of those who are lukewarm regarding safety and accident prevention?

HOLMES SAFETY ASSOCIATION

WE NEED YOU

TO VOLUNTEER

IF YOU ARE RETIRED, OR WORKING, AND HAVE SOME EXTRA TIME TO SPARE, MSHA AND THE HSA NEED YOUR EXPERIENCE. WE HAVE MANY INTERESTING PROGRAMS THAT WOULD APPRECIATE YOUR HELP.

FOR FURTHER INFORMATION, CALL OR WRITE TO:

William H. Hoover, Chief
Office of Holmes Safety
Association, MSHA
301 West Congress
Room 7K Box FB-53
Tucson, Arizona 85701
Phone : 602/792-6631
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Linda M. Lofstead, Office
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4800 Forbes Avenue Room A273
Pittsburgh, Pennsylvania 15213
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649 or 650
FTS/721-8649 or 8650

LET'S ALL PULL TOGETHER!

April 1982

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

HOLMES SAFETY ASSOCIATION

INSIGHTS

SUPERVISOR'S SELF-EXAMINATION

Do you ever take time for meditation? A bit of inward searching now and then may help you to find ways of improving your relationships with people --and to do a much better job as a supervisor--if you'll question yourself sincerely.

To help you probe the critical areas--and to provide food for thought--here's checklist FOR YOURSELF ALONE. You don't even need to write down your answers--but you should answer honestly, in your mind, and then take a good look at your score. How do you stack up?

	Yes	No
Do I practice what I preach about safety?.....	___	___
Do I know all the hazards in my department?.....	___	___
Do I inspect continuously for hazards?.....	___	___
Do I permit unsafe shortcuts by workers?.....	___	___
Do I check on their personal protection?.....	___	___
Do I stop unsafe practices without delay?.....	___	___
Do I criticize in friendly, helpful manner?.....	___	___
Do I see that workers have proper tools?.....	___	___
Do I make sure tools are in good condition?.....	___	___
Do I insist on prompt first aid for injuries?.....	___	___
Do I encourage reports on unsafe conditions?.....	___	___
Do I investigate accidents promptly, fully?.....	___	___
Do I encourage housekeeping for safety?.....	___	___
Do I encourage safety suggestions?.....	___	___
Do I act promptly on all suggestions?.....	___	___
Do I give proper credit for good suggestions?.....	___	___
Do I help workers feel secure in their jobs?.....	___	___
Do I commend good work whenever possible?.....	___	___
Do I try to counsel worried employees?.....	___	___
Am I considerate in handling grievances?.....	___	___
Am I a good listener?.....	___	___
Do I administer discipline fairly?.....	___	___
Do I keep emotion out of job decisions?.....	___	___
Do I prepare for opportunities ahead?.....	___	___
Am I training others to take over my job?.....	___	___
Do I consider my own health and safety?.....	___	___

HURRY....HURRY.....HURRY!

NATIONAL COUNCIL NEWS BRIEF

ANNUAL MEETING OF THE HOLMES SAFETY ASSN., WILL BE HELD AT QUALITY INN/CENTRAL, 1190 COURT-HOUSE ROAD, ARLINGTON, VA. 22201 TUESDAY, MAY 25, 1982, 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.

Everyone is invited. For further information contact Holmes Safety Association office, 4800 Forbes Avenue, Room A-273, Pittsburgh, Pennsylvania 15213. (412) 621-4500 extension 649 or 650

NATIONAL SECRETARY

☆ U.S.Government Printing Office: 1982—576-091/6

The Joseph A. Holmes Safety Association was founded in 1916 by 24 leading National organizations of the mining industries.

The Joseph A. Holmes Safety Association is named to commemorate the first director of the Bureau of Mines for his efforts in reducing accidents and illness throughout the mineral industries.

The following is the different award criteria:

Type "A" Awards - For Acts of Heroism

The awards are medals with Medal of Honor Certificate.

Type "A" - For Acts of Heroic Assistance

The awards are Certificates of Honor.

Type B-1 Awards - For Individual Workers

(40 years continous work experience without injury that resulted in lost workdays)
The awards are Certificate of Honor, Gold Pins and Gold Decal.

Type B-2 Awards - For Individual Officials

(For record of group working under their supervision)
The awards are Certificate of Honor.

Type C Awards - For Safety Records

(For all segments of the mineral extractive industries, meeting adopted criteria)
The awards are Certificate of Honor.

Other Awards - For Individual Workers

(For 10, 20, or 30 years without injury resulting in lost workdays)
The awards are 30 years-Silver Pin and Decal, 20 years-Bronze Pin and Decal, 10 years-Decal bearing insignia.

Special Awards - For Small Operators

(Mine operators with 25 employees or less with outstanding safety records)
The awards are Certificate of Honor.

Contact: HSA Office

Department of Labor
MSHA, Holmes Safety Association
4800 Forbes Avenue, Room A268
Pittsburgh, PA 15213

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