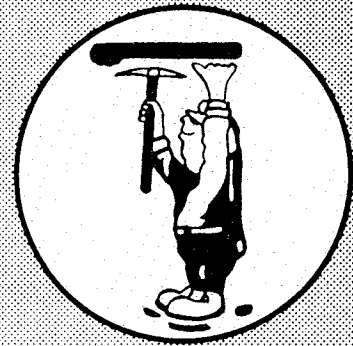


JULY 1983



# BULLETIN



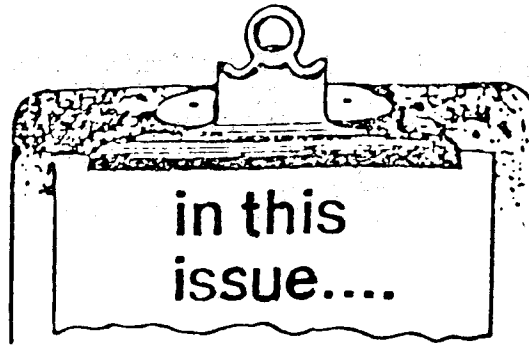
**BE ACCIDENT  
FREE IN**



**"83"**



# HOLMES SAFETY ASSOCIATION



July 1983

1. Safety Topic, "Welcome New Members"
2. Safety Topic, "HIGHLIGHTS---Executive and Regular Meetings  
National Council Holmes Safety Association"
3. Safety Topic, "Suggestions for Councils"
4. Abstract, "Fall of Material Accident"
5. Safety Topic, "Powered Haulage Accident"
6. Safety Topic, "Women in Mining--Sexual Harassment"
7. Safety Topic, "Eye Injuries--Metal/Nonmetal Mines"
8. Safety Topics, "Footnotes"  
"There's a Hitch in It"
9. Meeting Report Form (chapters only)



## HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

July 1983



Dundee Cement Co  
Dundee/Cement  
Clarksville, Missouri

Briar Coal Co  
Buckcreek No. 2  
Whitesburg, Kentucky

K & B Coal Co Inc  
Buckcreek  
Whitesburg, Kentucky

Maynard Branch Dredging  
Dredging  
Beauty, Kentucky

Carrie Coal Co  
Carrie Coal  
Beauty, Kentucky

Tara Coal Co  
Tara Coal  
Beauty, Kentucky

Mary F Coal Co  
Mary F Coal  
Warfield, Kentucky

Demar Coal Co Inc  
Demar Coal  
Ashland, Kentucky

Little Bill Coal Co Inc  
No. 4 Mine  
Phyliss, Kentucky

Big Ridge Coal Co Inc  
No. 7  
Elkhorn City, Kentucky

Ranchero Coal Co  
No. 3  
Kimper, Kentucky

Coal Branch Coal Co Inc  
Coal Branch  
Dorton, Kentucky

Stapleton Coal Co  
Noma Mine No. 1  
Whitesburg, Kentucky

D M Coal Co Inc  
D M Coal  
Richlands, Virginia

Nichols Coal Co Inc  
No. 1 Mine  
Grundy, Virginia

Tramel & Cline Mining Inc  
Tramel & Cline  
Gilbert, W Virginia

Davis & Whited Coal Co  
Davis & Whited Coal  
Raven, Virginia

Sykes & Lambert Coal Co Inc  
Sykes & Lambert Coal  
Lebanon, Virginia

B & B Services  
Services  
Smithfield, Pennsylvania

Mountain Energies Co  
Mountain Energies  
Kingwood, W Virginia

Uphold Trucking Co  
Trucking  
Morgantown, W Virginia

Lee Ann Coal Co  
Lee Ann Coal  
Madison, W Virginia

Camp Branch Coal Co  
No. 1 Mine  
Lyburn, W Virginia

BRJ Coal Inc  
Sales & Service  
Clarksburg, W Virginia

Kan Products  
Nuts & Bolts  
Salem, W Virginia

La Rosa Fuel Co  
Mabie Tipple  
Clarksburg, W Virginia

Belington Mining Co  
Belington Mining  
Weston, W Virginia

B & N Mining Co  
B & N  
Elkhorn City, Kentucky

Lone Star Hawaii Inc  
Rock Products  
Aiea, Hawaii

J & R Coal Co  
J & R  
Bicknell, Indiana

Montpelier Stone Co  
Crushed Limestone  
Montpelier, Indiana

Stoney Creek Stone Co Inc  
Crushed Limestone  
Noblesville, Indiana

Erie Stone Inc  
Huntington/Limestone  
Huntington, Indiana

Erie Stone Inc  
Bluffton/Limestone  
Bluffton, Indiana

Erie Stone Inc  
Markle/Limestone  
Markle, Indiana

Irving Bros Stone/Gravel Co  
Sand/Gravel/Limestone  
Muncie, Indiana

Pipe Creek Jr Co  
Limestone  
Swayzee, Indiana

Irving Bros Gravel Co Inc  
Sand/Gravel  
Marion, Indiana

Pipe Creek Stone Co  
Limestone  
Swayzee, Indiana

Bow Valley Coal Co  
Bow Valley Coal  
Coalgood, Kentucky

Leeco Inc  
No. 22  
London, Kentucky

Leeco Inc  
Nos. 42/47 Mines  
London, Kentucky

Leeco Inc  
Nos. 44/45/48 Mines  
London, Kentucky

T & W Coal Co Inc  
T & W Coal  
Duffin, Kentucky

Hillen Fuel/Coal Co  
Hillen Coal  
Prestonburg, Kentucky



Tower Resources Inc  
Pinnacle Mine/Coal  
Price, Utah

Tower Resources Inc  
Apex Mine/Coal  
Price, Utah

4 RC Coal Co Inc  
No. 3 Mine  
Cleveland, Virginia

H & M Coal Co  
No. 1 Mine  
Cedar Bluff, Virginia

Apple Coal Co  
No. 1 Mine  
Richlands, Virginia

Oneida Highway Dept  
Sand/Gravel  
Rhineland, Wisconsin

J & L Colliery Co  
J & L Colliery  
Wise, Virginia

Powell Mountain Coal Co  
Powell Mountain  
Big Stone Gap, Virginia

K W Mining Inc  
K W Mining/Coal  
Wittensville, Kentucky

Hustler Coal Co Inc  
No. 3 Mine  
Conway, Virginia

Beaver Creek Coal Co Inc  
CU Spur Prep Plant  
Price, Utah

Elk River Sewell Coal Co  
Stillhouse Run No. 1  
Bergoo, W Virginia

Elk River Sewell Coal Co  
No. 1 Prep Plant  
Bergoo, W Virginia

Bureau of Bit Deep Mine  
Safety/Ebensburg Rescue  
Ebensburg, Pennsylvania

RE Miller Paving & Const  
Sand/Gravel  
Tucson, Arizona

Emerald Anthracite Co  
Emerald Anthracite  
Nanticoke, Pennsylvania

Swatara Coal Co  
Swatara  
Minersville, Pennsylvania

Wootons Creek Mining Inc  
Wootons Creek  
Manchester, Kentucky

Burn Rite Coal Co  
Burnrite  
Grundy, Virginia

Horn Construction Co Inc  
Horn/Coal  
Grundy, Virginia

Pine Grove Coal Co  
Pine Grove  
Rocky Gap, Virginia

Juliana Mining Co Inc  
Prep Plant No. 1  
Erbacon, W Virginia

Juliana Mining Co Inc  
Amos Run Mine No. 1  
Erbacon, W Virginia

AAA Garage  
Equipment  
Kilsyth, W Virginia

Hilcrest Industry  
Tipple No. 1  
Ameagle, W Virginia

Consolidation Coal Co  
Robinson Run No. 95  
Fairmont, W Virginia

Seavyn Coal Corp  
Seavyn Coal  
Appalachia, Virginia

Pomo Company  
Pomo No. 1/Coal  
Big Stone Gap, Virginia

Hilcrest Industry  
Hilcrest Mine  
Ameagle, W Virginia

Westinghouse Co  
Electric Equipment  
Prosperity, W Virginia

Maben Energy Corp  
Maben Energy/Coal  
Bud, W Virginia

Virginia Pocahontas Co  
VP No. 6 Prep Plant  
Oakwood, Virginia

Garden Creek Pocahontas Co  
VP No. 6 Mine  
Oakwood, Virginia

Cardinal Resources Co  
No. 18 Mine  
London, Kentucky

CO-Op Mining Co  
Co-Op/Coal  
Huntington, Utah

Joshua Industries Inc  
No. 2 Mine  
Logan, W Virginia

Bills Electronics Inc  
Electronics  
Logan, W Virginia

R J Stern Co  
R J Stern  
Logan, W Virginia

Peerless Alma Co  
No. 8 Mine  
Gilbert, W Virginia



July 1983

HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

# HIGHLIGHTS

## Executive and Regular Meetings

### National Council

#### Holmes Safety Association

The meetings were held at the Quality Inn/Central, 1190 North Courthouse Road, Arlington, Virginia, on May 24, 1983, with president C. William Parisi presiding.

A total of 74 delegates from 12 states, representing the mining, metallurgical, mineral extractive and allied industries were in attendance.

Nineteen delegates were called upon for brief activity reports from their geographical areas.

#### Moved, carried and adopted

Ten proposals were nominated for outstanding in and longevity of services in promoting the humanitarian objectives of the Holmes Safety Association; the association's highest honor, the Merit Award. President Parisi presented the Merit Awards to the following:

Raymond Lang, supervisor of training, Rochester & Pittsburgh Coal Company, Indiana, PA;

Rick Radakovich, training instructor, Rochester & Pittsburgh Coal Company, Indiana, PA;

John O. Miller, training specialist, MSHA, Hastings, PA;

Bobby A. Gibbs, safety specialist, MSHA, Vincennes, IN;

Ivan Mansell, retired mine inspector, MSHA, Carmichaels, PA;

Gary Swift, coal mine clerk, Duquesne Light Company, Warwick Mine No. 3, Greensboro, PA;

Robert Nelson, supervisory coal mine inspector, MSHA, Indiana, PA;

Clement Dovidas, retired training administrator, MSHA, Vincennes, IN;

Vern Demich, superintendent of maintenance, Canterbury Coal Company, Avonmore, PA;

Joseph Bozarth, training supervisor, Inland Steel Coal Company, Sesser, IL;

John English presented HSA Outstanding Service Awards to the following district managers on behalf of their district personnel's organizational work at chapter and council levels:

Ron Keaton, district manager, District 3, Coal Mine Safety & Health, Morgantown, WV;

James Krese, district manager, District 4, Coal Mine Safety & Health, Mt. Hope, WV;

Ray Ross, district manager, District 5, Coal Mine Safety & Health, Norton, VA;

L. D. Phillips, district manager, District 6, Coal Mine Safety & Health, Pikeville, KY.

Ford B. Ford presented HSA Safety Awards to the following for outstanding and improved mine safety records:

Russell Smith, supervisory mine inspector, on behalf of the inspectorate and personnel in Oklahoma City, OK;

Harry Thompson, supervisory mine inspector, on behalf of the inspectorate and personnel of Coal Mine Safety & Health, District 2, Pittsburgh, PA.

Secretary Hoover presented Marge Burton, Deputy Director/Admin. & Mgmt., with the Woman of the Year award for many faithful and dedicated years of service and support to the HSA.

The Man of the Year award was presented to Steve Lipe, Director of Safety, Carbon County Coal Corporation, Hanna, Wyoming, for his outstanding volunteer organizational work in the first and second National Western HSA council meeting at Laramie, Wyoming.

John English presented Ford B. Ford with the HSA certificate of Service Award for his monumental support and promotion of the HSA.

Thomas Shepich, president elect for 1983-84 presented William Parisi with the Past President Award for his outstanding leadership in the HSA.

Moved, carried and adopted

Elected to 1983-84 Term

President	Thomas J. Shepich	MSHA
First Vice President	Walter J. Vicinelly	State
Second Vice President	Cecil Roberts	Labor
Third Vice President	David E. Hazlett	Insurance
Fourth Vice President	James Clem	Management
Secretary-Treasurer	William H. Hoover	MSHA

The following three delegates, representing the HSA, were elected to serve with the previous elected on the board of directors of the Joseph A. Holmes Safety Association:

Term Expires 1985

James Clem  
Robert Barrett  
Harry Tuggle

Seven new members were elected to serve on the Executive Committee for a nationwide representation of 38 delegates and 5 members-at-large. Committees appointed by President Shepich were:

Finance Auditing

John O. Miller (Chair)  
Herschel Potter  
Robert L. Vines

Merit Awards Committee

Robert Barrett (Chair)  
William H. Hoover  
John O. Miller

Nominating Committee

Harry Thompson (Chair)  
Earle Rudolph  
David Hazlett  
John Takacs

NATIONAL COUNCIL PROGRESS REPORT  
1982

The year 1982 was "The Year That Was" when all previous existing Holmes Safety recruitment records were broken following a letter of endorsement by the assistant secretary for MSHA, Ford B. Ford, recognizing the association's flexibility and potential as a nationwide volunteer safety program. Mr. Ford's department-wide letter encouraged and requested that all of MSHA's departments get into the act to support and consider expanding the association in all MSHA districts as a number one activity on their forthcoming agendas.

Chapters were formed in 14 states as follows: West Virginia, 432; Virginia, 51; Eastern Kentucky, 13; Pennsylvania, 6; three each in Montana, California and Illinois; Texas, 2; and one each in Wyoming, Florida, New Mexico, Nebraska, Western Kentucky and Arkansas.

A survey was conducted during the year of mines permanently abandoned which resulted in dropping 123 chapters from the records.

Current active safety chapters total 2,128; of which 387 are west and 1,741 are east of the Mississippi River with a grand total of 269,728 members.

During 1982, 16 district councils were formed; 13 in West Virginia, one in Maryland, one in Virginia and one in Montana. This expanded the association's number of state and district councils to four state and 62 district councils.

From the 44 states and Canada, chapter members voluntarily reported 105,123 on-the-job safety meetings with 1,305,265 persons attending. The state and district councils held 101 safety meetings with 5,309 industry members and guests attending.

During the last quarter of 1982 and the first quarter of 1983, the national office forwarded three separate letters of inquiry to each state and district council president and secretary requesting the names of elected officials, activities, and locations, times and dates of meetings to be held. The final notice, sent on February 7, 1983, declared that the national council would delete inactive state and district councils from its rolls where no activity was present. Therefore, due to either no response or reports of inactivity, two state and 17 district councils were deleted from the national records and the 1982 annual report.

These councils may reorganize under the existing charter if representatives of the district or state areas care to do so.

This survey resulted in the association having two state and 45 district councils as of January 1, 1983.

The HSA monthly safety bulletin is free to all members and is unique in providing a regular selective source of readily available safety and health topics designed for use at safety meetings involving management and labor. Without this resource, safety directors, training personnel and supervisors would have to individually research technical journals, general mining and safety publications and other sources. The bulletin addresses this need on the part of management and labor.

It is most important to realize that safety directors and the safety chapters are the heart and life of the association and only at the grassroots level can we all succeed. If continuous safety training and contact with employees becomes negligent and a failure to hold on-the-job safety meetings results, your chapter will die and this will affect the entire body of the association.

Appreciation is expressed to the president and officers of our parent, the Joseph A. Holmes Safety Association, and the national council of the Holmes Safety Association, the officers and members of the executive bodies, various committees and representatives from all five segments of the mining, mineral extractive and allied industries who have taken an active part in our programs. We also thank the district and subdistrict managers and field personnel of all departments of MSHA for their sincere cooperation in their areas.





July 1983



HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

## Suggestions for Councils

Since the prevention of accidents through the program of the Holmes Safety Association is primarily based on the promotion of safety-awareness through the dissemination of information at safety meetings, council presidents and secretaries are urged to:

1. Encourage every affiliated chapter mine to hold a sufficient number of safety meetings to insure every worker and supervisor a chance to attend as many as possible.

At some mines, the employees live long distances from the mine or plant and are so dispersed that it is not practical to select a central place for meetings. At such mines, successful meetings have been held in mine buildings before starting work or at quitting time.

Locations where the employees assemble for the man trips have been used to good advantage for the meetings. When employees from other locations enter a mine at different entrances, often, it is good practice for the assistant or section supervisor to conduct monthly safety meetings by assembling them in groups at lunchtime near their working places. There is nothing to prevent the same chapter mine from holding separate meetings in different locations.

2. Have a reasonable representation from every affiliated chapter mine at every council meeting. Some council presidents have met with success in this respect by appointing an attendance committee, with a federal and state mine inspector as cochairs, who in turn, have one or more members from every chapter mine serve on the committee.

3. Have chapter representatives present at council meetings discuss briefly any lost-time injuries that occurred at the mine during the month.

4. Have announcements of council meetings sent out about one week before the scheduled meeting. The announcements should show the time and location of the meeting, the name and title of the principal speaker or film, the minutes of the previous meeting and perhaps a data sheet showing the standing of each affiliated chapter.

5. Present monthly safety awards, plaques or banners to the chapter in each group with the lowest lost-time incident rate--the chapter with the best record for the year being permitted to keep the award permanently.

If all council officers make an earnest effort to institute these suggestions promptly in their respective councils, 1983 will be a much happier year for many members of the Holmes Safety Association and their families.

# HOLMES SAFETY ASSOCIATION

## Report of Holmes Safety Council Meeting

Name of Council GAULEY DISTRICT COUNCIL

Date April 12, 1983 Time 7:00 p.m. Meeting Place MSHA Office

Summersville Nicholas West Virginia 26651  
(Town) (County) (State)

Total Council Membership 43

Attendance at First Quarterly Meeting

Company officials	<u>21</u>
Workers	<u>10</u>
State Dept. of Mines	<u>02</u>
MSHA	<u>06</u>
Others	<u>01</u>
Total	<u>40</u>

Invocation by Charles R. Grose

Entertainment Entire meeting interesting and entertaining.

Address by We did not have a Guest Speaker-we presented award certificates for accident incident rates below the average rate of our District Subject of Address Council, in the categories of underground, surface and preparation plant facilities. We also presented plaques in recognition of the lowest incident rates, (for year 1982), each category of large underground mine, small underground mine, surface and prep-Demonstrations, pictures, etc. aration plant facilities.

FUND RAISING: We are selling belt buckles with the Holmes Safety Assn. emblem and wording. Also proclaims the wearer to be a member. Proceeds will be used to purchase future awards and promote safety.

Remarks We gave away door prizes-donated by suppliers, coal companies and the Council. Announcements were carried over the local radio stations prior to the meeting. We had a reporter from the local newspaper on hand for a story and pictures.

For our efforts, we had representatives from nine coal companies, one supplier, MSHA and the State Dept. of Mines.

Benediction by Harold Brown

Signed *Harold R. Brown, Secretary*

NOTE: Use this form for postage paid return. Fold on dotted lines and staple.

★ HERE IS AN EXAMPLE OF AN EXCELLENT MEETING HELD BY THE GAULEY DISTRICT COUNCIL, FORMED IN 1982 IN SUMMERSVILLE, WEST VIRGINIA. NOTE FUNDRAISING ACTIVITIES HELD BY COUNCIL. ★

# ABSTRACT FROM FATAL ACCIDENT

July 1983

HOLMES SAFETY ASSOCIATION  
MONTHLY SAFETY TOPIC



## Fall of Material Accident

General Information: A miner was fatally injured when concrete material fell on him while attempting to shoot a hangup. He had over two years experience in the mining industry.

Mining operations for production of ore was carried out on two levels, with the third level currently under development. The mining method used was block-caving. The production of ore was caved over the top of draw-dashes, which normally have six fingers that ore runs through into the dash. From the dash, it is slushed into ten-ton ore cars with 150-horsepower slusher using a six-foot wide folding dipper.

Description of Accident: The miner, a hang up man, was assigned to pull muck from the drift. When a muck car derailed he went to the hanging wall to help reraill the car. While attempting to put the muck car back on the track, the victim told his boss that he had shots to put up. He took another miner with him to help.

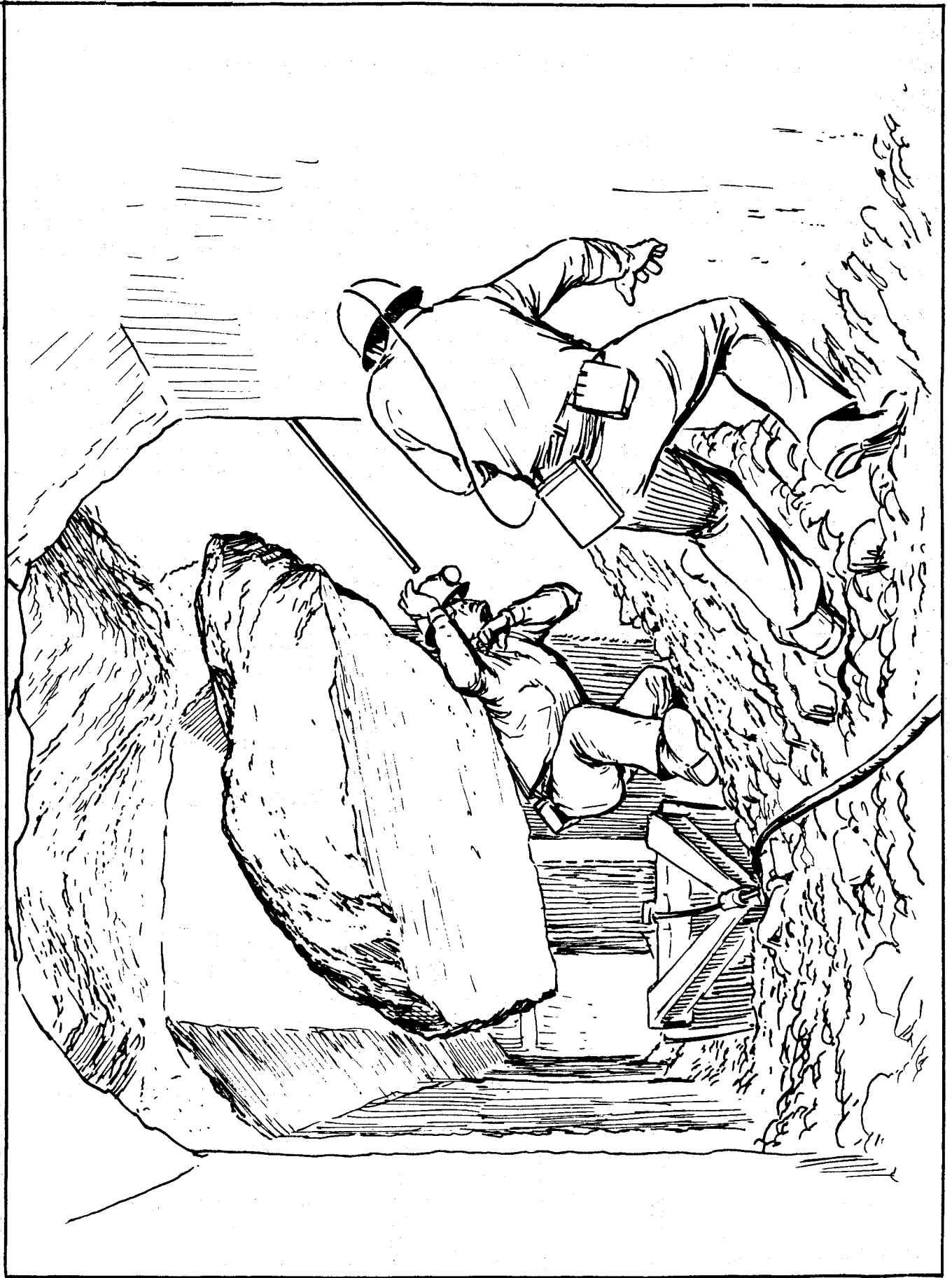
The victim positioned himself on the dash floor and was making an evaluation as to the best place to put the bombs, while his coworker was on the dash floor positioned just to the front and right of him. The coworker had just started bending over to push up a bomb to hand to the victim when he saw from the corner of his eye a slab of concrete falling from the back.

The coworker was knocked down by the concrete but not hurt. The victim was pinned by two large pieces of concrete across his lower body.

Cause of Accident: The accident resulted from the following:

1. Failure of the company to maintain the mining areas in a manner suitable for the mining method.
2. Failure of the company to install proper support of the concrete channel when both sides became exposed to damage from secondary blasting.
3. Failure of the company to conduct regular safety inspections and establish proper records of the findings.
4. A contributing cause may have been the inexperience of the persons assigned to perform production work.

Recommendations: A majority of the persons assigned to a job should be those who have the experience for the job and who have shown in past practice that they are competent in recognizing hazards that may not be directly related to performing the task but also hazards that are around them that can result in serious injury.





July 1983



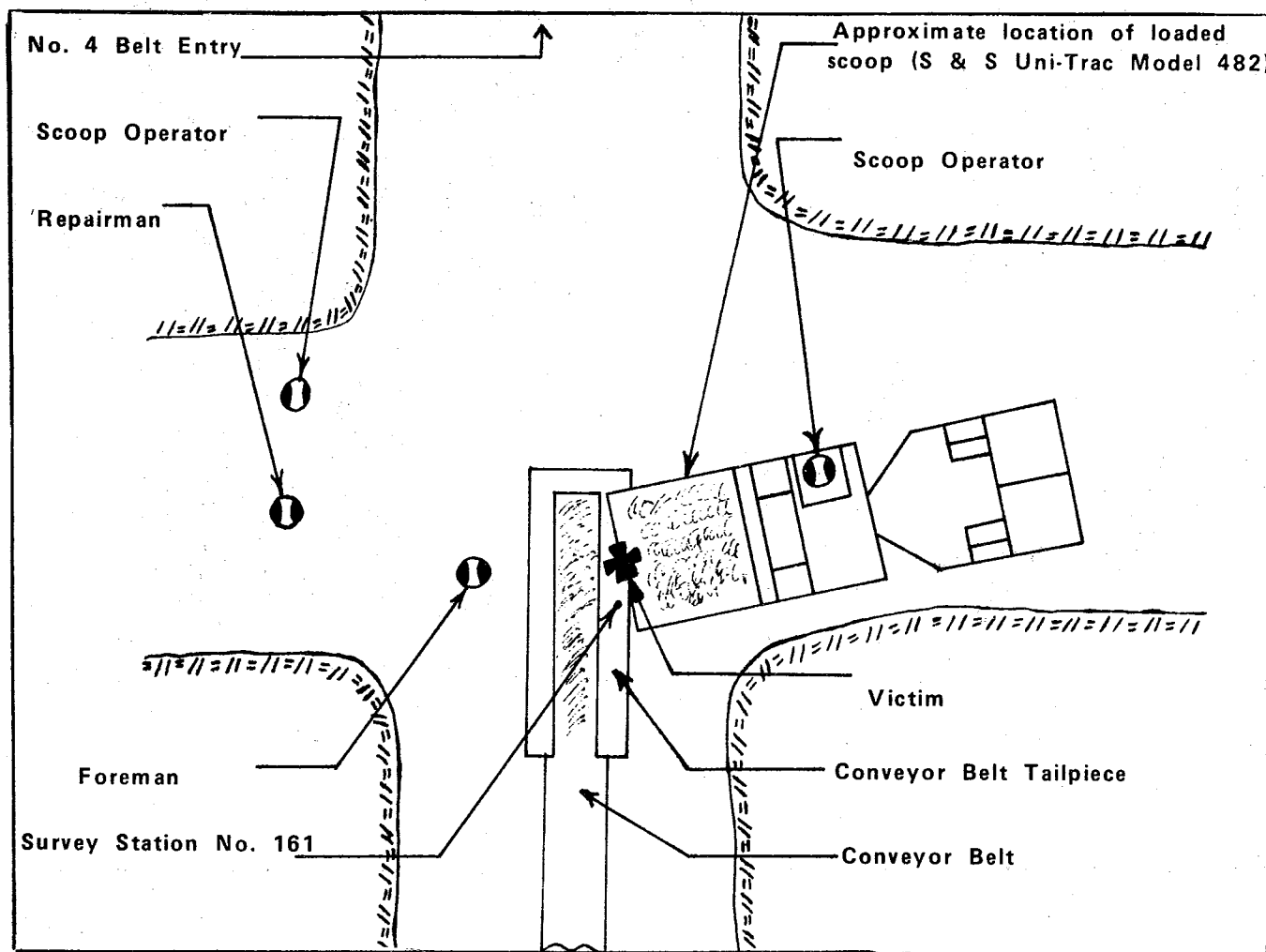
## HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

### POWERED HAULAGE ACCIDENT

Description of Accident: The victim, a belt cleaner, was assigned to keep the tailpiece free of loose coal and to clean the loose coal from the outby rib of the crosscut between Nos. 4 and 5 entries, which had been shot to make more clearance for the scoops discharging onto the tailpiece.

The section foreman arrived at the tailpiece and started helping the victim, who was shoveling the loose coal from the rib of the crosscut. After cleaning the rib, the foreman moved to the opposite side of the tailpiece and started shoveling. The foreman noticed a scoop about 60 feet away approaching the tailpiece and told the victim to get in the clear. When the victim answered okay, the foreman turned away from the tailpiece. Hearing the victim scream, the foreman looked around and saw that the scoop had caught the victim between the blade of the scoop and the tailpiece.

Conclusions: MSHA's investigation did not reveal any violations of Title 30, CFR, that caused or contributed to the cause of the accident. The accident and fatality occurred because the victim, after being made aware of the approaching scoop, failed to move out of the scoop's path.





July 1983



HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

## **WOMEN IN MINING**

### **Sexual Harassment**

Sexual harassment, in the mines and elsewhere, poses a difficult problem with no real easy solution for several reasons.

First, people have a wide variety of conceptions of just what constitutes sexual harassment. Managers attempting to deal with sexual harassment complaints will find a wide divergence of perceptions.

Another problem for managers is that the complaint often takes the form of the word of one person against the word of another. Managers must listen to both sides in order to make a fair determination but often it is a question of two different interpretations.

Those offended may be unwilling to report sexual harassment if they think that it may become public knowledge. Also, the person offended may be reluctant to report the harassment because they fear retaliation from those they complain about. This is often the case when the harasser is in a supervisory position.

What is defined as sexual harassment and what can you, as a victim, do about it?

Sexual harassment, as defined by 1980 federal Equal Employment Opportunity Commission guidelines, includes any unwelcome sexual advance, proposition or sexually aggressive conduct when any of the following conditions are met:

1. When submission to harassment is made a condition of employment.
2. When the worker's response to the harassment is used as a basis for decisions affecting employment, such as job training and advancement.
3. When such conduct has the purpose or effect of unreasonably interfering with work performance by creating an intimidating, hostile, or offensive work environment.

Sexual harassment is a form of sexual discrimination, prohibited by Title VII of the 1964 Civil Rights Act. Enforcement power is in the hands of the Equal Employment Opportunity Commission. As a victim, you can decide to file a charge with the EEOC, if other more direct methods haven't worked. You may choose to confront the harasser, file a union grievance or notify a superior in the company.

If these methods fail to correct the situation, you can file a complaint with the federal EEOC or the state Human Rights Commission. There is no fee to file a complaint but there are deadlines which can be as short as 30 days or as long as one year.

The following are suggestions from the Coal Employment Project regarding how to act if you are being sexually harassed:

1. Don't quit your job. You are entitled to work in a place free of sexual harassment.
2. Act quickly. As soon as the behavior becomes offensive to you, ask the harasser to stop. Tell him his behavior offends you.
3. Get support from your coworkers. Don't suffer in silence. Let others know what is going on and that you object.
4. Use the union-grievance procedure. Most contracts contain an anti-discrimination clause. Contact your union representative and consider filing a grievance.
5. Notify the company. Put your notification in writing and keep a copy.
6. Keep a diary. Write down what was said or done. Include dates, times and witnesses. Put exact quotes if possible.
7. Talk to others. See if this person has harassed or abused others who work with you. The more evidence, the better your chances of getting the harassment stopped for good.



July 1983



# HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC



EYE INJURIES  
Metal/Nonmetal Mines  
1978 - 1981





## HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

### EYE INJURIES AT METAL/NONMETAL MINES AND MILLS 1978 - 1981

This report covers eye injuries for the years 1978 - 1981. A detailed analysis of all eye injuries was performed for the year 1981 and was assumed to be representative of the eye hazards for the previous three years. There were 5, 575 eye injuries reported during the four years and 12 of these involved the loss of sight.

Small particles (pulverized material, dust, dirt, and mud, etc.) accounted for 51 percent (2,838) of the incidents with burns (chemical, caustic, acid, alkalies, molten metals, etc.) contributing 19 percent (1,072). Tables 1 and 2 show the number of reportable eye injuries and the incidence rates by nature of injury.

Data for this analysis were obtained from accident/injury reports in the data base at the Health and Safety Analysis Center, Denver, Colorado.

Tables 3 and 4 show the number of reportable eye injuries and the incidence rates for the various commodities. Limestone and lime and cement accounted for 25 percent (1,407) of the injuries, copper 12 percent (642), and sand and gravel 11 percent (608) of the incidents.

Over 61 percent of the source of eye injuries may be classified as radiation, chemical or mechanical. Burns resulting from sparks or hot metal entering the eye behind the safety lens occurred most often while cutting metal or chipping welds. While welding, numerous flashburns resulted from striking metal with an energized electrode before lowering the welding hood. Many of the flashburns involved employees working in close proximity to the welding operation without proper screening. Other employees were injured while working in areas where grinding was taking place nearby. Burns, from acids or alkalies resulted from activities such as loading and unloading caustic material, concrete work, slushing and mucking, pulling chutes at cement or lime operations, general activities in areas with acid water dripping from the back and servicing batteries. Workers operating bagging machines were injured by powdered lime or cement expelled during bagging operations. A lack of ventilation and dust collection may have contributed to these eye injuries.

Projectile eye injuries during general mining activities generally involved hooking or breaking boulders with powered or nonpowered hand tools, using defective or excessively worn hand-tools, or applying excessive pressure on hand tools.

Eye injuries that occurred while performing mechanical repairs on underground and surface equipment generally involved activities such as cutting cables, repairing hydraulic lines, or material falling or flying off of equipment under repair. A contributing factor to many eye injuries was gusting winds which blew dust and small particles into the eyes during the operation of equipment such as crushers, trucks, loaders etc.

It should be noted that in many cases where some form of eye protection was worn, eye injuries were incurred when material entered from the side. In hooking and breaking boulders, chips hit the "safety glasses" and shattered the lens with slivers of glass entering the eye. While the operator specified safety glasses on the accident report, they probably involved normal prescription glasses rather than safety glasses. Only 13 percent of the accident forms indicated that the miners were wearing safety glasses and two percent said there was no protective equipment worn.

Metal/NonMetal  
1978 - 1981

Table 1. - Total Number of Reportable Eye Injuries by Nature of Injury

<u>Nature of Injury</u>	<u>Under ground</u>	<u>Surface</u>	<u>Processing Plant</u>	<u>Total</u>	<u>Percent</u>
Small particles (dust, etc.)	554(2)	979	1305	2838(2)	51
Burns (chemical, acid & alkalis, molten metal, etc.)	124(1)	334	614	1072(1)	19
Cut, laceration or puncture	136	218(4)	224	578(4)	10
Scratches & abrasions	111	125	157	393	7
Other (each element less than 1 percent)	127(2)	300(2)	267(1)	694(5)	13
<b>Total</b>	<b>1052(5)</b>	<b>1956(6)</b>	<b>2567(1)</b>	<b>5575(12)</b>	<b>100.0</b>

NOTE: Figures in parenthesis are permanent partial disability eye injuries and are included in the totals.

Metal/Nonmetal  
1978 - 1981

Table 2. - Reportable Eye Injury Incidence Rate  
by Nature of Injury

<u>Nature of Injury</u>	<u>Underground</u>	<u>Surface</u>	<u>Processing Plant</u>
Small particles (dust, etc.)	0.41	0.24	0.32
Burn (chemical, acid & alkalis, molten metal, etc.)	.09	.08	.15
Cut, laceration or puncture	.10	.05	.06
Scratches & abrasions	.08	.03	.04
Other	.09	.07	.07

Metal/Nonmetal  
1978 - 1981

Table 3. - Total Number of Reportable Eye Injuries  
by Commodity

<u>Commodity</u>	<u>Under-ground</u>	<u>Surface</u>	<u>Processing Plant</u>	<u>Total</u>	<u>Percent</u>
Limestone, lime & cement	36	383	988(1)	1407(1)	25
Copper	238	192	212	642	12
Sand & gravel	-	608(3)	-	608(3)	11
Uranium	219(2)	110(1)	90	419(3)	7
Iron	19	121	173	313	6
Alumina	-	-	261	261	5
Clay	4	45	173	222	4
Molybdenum	138	43	33	214	4
Granite	-	111(2)	52	163(2)	3
Lead/Zinc	138	11	8	157	3
Other (includes gold, silver salt, etc. each element represents one percent or less)	260(3)	332	577	1169(3)	20
<b>Total</b>	<b>1052(5)</b>	<b>1956(6)</b>	<b>2567(1)</b>	<b>5575(12)</b>	<b>100.0</b>

NOTE: Figures in parenthesis are permanent partial disability eye injuries and are included in the totals.

Metal/Nonmetal  
1978 - 1981

Table 4. - Reportable Eye Injury Incidence Rate  
by Commodity

<u>Commodity</u>	<u>Underground</u>	<u>Surface</u>	<u>Processing Plant</u>
Limestone, lime & cement	0.03	0.09	0.24
Copper	.18	.05	.05
Sand & gravel	-	.15	-
Uranium	.16	.03	.02
Iron	.01	.03	.04
Alumina	-	-	.06
Clay	- <u>1</u> /	.01	.04
Molybdenum	.10	.01	.01
Granite	-	.03	.01
Lead/zinc	.10	- <u>1</u> /	- <u>1</u> /
Other (includes gold, silver, salt, etc.)	.19	.08	.14

1/Less than .005.

### CONCLUSIONS

Information gained in this study indicates that many of the eye injuries could have been avoided if the employees had received training in recognizing the potential job hazard. This should include individual training on the use of all equipment that is provided. Management should stress the importance of wearing the correct eye protection. In many cases it appears that the operators thought the miner was wearing adequate safety glasses, however, an eye injury was sustained. It is essential that in areas subject to increased eye hazard, an eye bath be easily accessible, since the initial treatment of chemical burns to the eye is very important. Additionally, cleaning and repair stations for safety glasses should be readily available in those areas where safety glasses are required. Cleaning stations are available from commercial suppliers and repair kits are listed in the "National Safety Council" magazine or other similar publications.

Current regulations require all prescription eye glasses to be made of tempered glass, however these glasses are not safety glasses. Safety glasses can be identified by a marking on the frame and by the use of a polarizing filter.

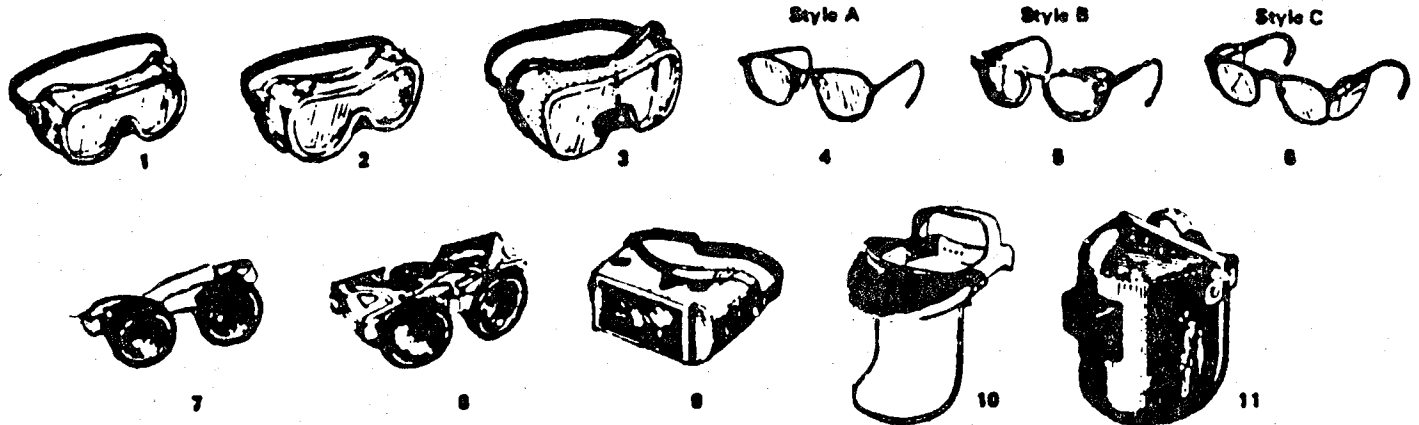
Employees should be aware that safety glasses do not provide complete protection against all eye hazards and a supplemental protection should be used in high hazard areas.

Safety equipment used for eye protection should ensure proper vision and comfort, while providing adequate protection to the employee. In general, employees will resist wearing eye protection which is uncomfortable, fits poorly, or blurs vision regardless of the hazard.

The following Appendix is taken from American National Standard ANSI Z87.1-1979 which shows a combination of eye protection applicable for various hazards. Management could use this chart as a guideline within their safety program for reducing the number of eye injuries.

**Selection Chart for Eye and Face Protectors for Use in Industry, Schools, and Colleges**

This Selection Chart offers general recommendations only. Final selection of eye and face protective devices is the responsibility of management and safety specialists. (For laser protection, refer to American National Standard for Safe Use of Lasers, ANSI Z136.1-1976.)



- 1. GOGGLES, Flexible Fitting, Regular Ventilation
- 2. GOGGLES, Flexible Fitting, Hooded Ventilation
- 3. GOGGLES, Cushioned Fitting, Rigid Body
- 4. SPECTACLES, without Sideshields
- 5. SPECTACLES, Eyecup Type Sideshields
- 6. SPECTACLES, Semi-/Flat-Fold Sideshields
- 7. WELDING GOGGLES, Eyecup Type, Tinted Lenses (Illustrated)

- 7A. CHIPPING GOGGLES, Eyecup Type, Clear Safety Lenses (Not Illustrated)
- 8. WELDING GOGGLES, Coverspec Type, Tinted Lenses (Illustrated)
- 8A. CHIPPING GOGGLES, Coverspec Type, Clear Safety Lenses (Not Illustrated)
- 9. WELDING GOGGLES, Coverspec Type, Tinted Plate Lens
- 10. FACE SHIELD, Plastic or Mesh Window (see caution note)
- 11. WELDING HELMET

\*Non-sideshield spectacles are available for limited hazard use requiring only frontal protection.

APPLICATIONS		
OPERATION	HAZARDS	PROTECTORS
ACETYLENE-BURNING ACETYLENE-CUTTING ACETYLENE-WELDING	SPARKS, HARMFUL RAYS, MOLTEN METAL, FLYING PARTICLES	7, 8, 9
CHEMICAL HANDLING	SPLASH, ACID BURNS, FUMES	2 (For severe exposure add 10)
CHIPPING	FLYING PARTICLES	1, 3, 4, 5, 6, 7A, 8A
ELECTRIC (ARC) WELDING	SPARKS, INTENSE RAYS, MOLTEN METAL	11 (In combination with 4, 5, 6, in tinted lenses, advisable)
FURNACE OPERATIONS	GLARE, HEAT, MOLTEN METAL	7, 8, 9 (For severe exposure add 10)
GRINDING-LIGHT	FLYING PARTICLES	1, 3, 5, 6 (For severe exposure add 10)
GRINDING-HEAVY	FLYING PARTICLES	1, 3, 7A, 8A (For severe exposure add 10)
LABORATORY	CHEMICAL SPLASH, GLASS BREAKAGE	2 (10 when in combination with 5, 6)
MACHINING	FLYING PARTICLES	1, 3, 5, 6 (For severe exposure add 10)
MOLTEN METALS	HEAT, GLARE, SPARKS, SPLASH	7, 8 (10 in combination with 5, 6, in tinted lenses)
SPOT WELDING	FLYING PARTICLES, SPARKS	1, 3, 4, 5, 6 (Tinted lenses advisable; for severe exposure add 10)

**CAUTION:**

- Face shields alone do not provide adequate protection.
- Plastic lenses are advised for protection against molten metal splash.
- Contact lenses, of themselves, do not provide eye protection in the industrial sense and shall not be worn in a hazardous environment without appropriate covering safety eyewear.



July 1983



HOLMES SAFETY ASSOCIATION MONTHLY SAFETY TOPIC

# FOOTNOTES

HATS OFF to the field office personnel of Coal Mine Safety and Health District 2, Kittanning, Pennsylvania, who motivated a very successful reorganization plan concerning three previously inactive councils; Clarion District Council, Grove City District Council and the Ellwood City District Council.

"A meeting was held on April 26, 1983, to consolidate the above named councils into one. The companies represented were Adobe Mining, Glacial Minerals, Colt Resources and C & K Coal Company. It was decided by the representatives to maintain the Clarion District Council charter as active and to incorporate the Ellwood City and Grove City District Council memberships into the Clarion District Council.

"An election of officers was held and an executive meeting was scheduled for July 27, 1983. The elected officials were: Wendell L. Stahlman, president; John B. Maxwell, vice president; and John J. Javorsky, secretary-treasurer.

"The secretary-treasurer plans to contact other interested companies to participate in the Clarion Council activities."

## There's a hitch in it

With the thumb, a hitchhiker says: "You furnish the gas, the car, attend to the repairs and upkeep, supply the insurance and I'll ride with you...but if you have an accident, I'll sue you for damages."

If sounds pretty one-sided, but one wonders how many hitchhikers there are in many organizations and clubs.

Many members seem to say: "You go to the meetings, serve on the board and the committees, do the paper work, study the issues and take care of things, and I'll just go along for the ride."

"If things don't suit my fancy, I'll complain, criticize and probably get out and hitchhike to another group."

Hitchhiker or driver...which kind of member are you?