

RULES AND REGULATIONS
FOR THE GOVERNMENT
OF ALL EMPLOYEES OF

The
UNION PACIFIC
COAL COMPANY

IN ACCORDANCE WITH THE PROVIS-
IONS OF THE LAWS OF THE STATE OF
WYOMING RELATING TO COAL MINES



Originally Published November 15, 1929

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I have received a copy of "Rules and Regulations
For the Government of All Employes of The Union
Pacific Coal Company" bearing number above.

I will read these rules, and I further agree to
observe same as long as I am employed in or about
the mines of The Union Pacific Coal Company,
and will return this book in the event I leave the
service of the company within one year.

(Signed) _____

(Witness) _____

(Date) _____ 19____

Employed in Mine _____ at _____

as _____ .

(This Receipt to be Filed in
Office of General Manager,
Rock Springs.)

Preserve This Book Carefully

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[This Duplicate of Receipt
To Be Left In Book]

CONTENTS

	Page
Purpose of Rules	1
Duty of Employer	2
Duty of Employes	2
Conditions of Employment	3
Rules and Regulations —	
Mine Foremen and Assistants	4
Unit Foremen	6
Gas Watchmen	8
Shot Firers	10
Shooting Wire	12
Sprinklers	13
Rope Runners	14
Motormen and Motor Brakemen	15
Timbering	17
Machine Runners and Helpers	19
Hoisting Engineers	23
Master Mechanics and Chief Electricians	24
Pump Operations	25
Mechanical Loader Face Employes.....	26
Loader End Men	28
Rules for Man Trips.....	29
Miscellaneous Regulations	30
Rules Covering Handling of Explosives.....	33

RULES AND REGULATIONS
for
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The Union Pacific Coal Co.

P R E F A C E

Purpose of These Rules

The management of The Union Pacific Coal Company has made very heavy expenditures in labor and material to further the safety and well-being of its employes. Extensive additions to the supervisory and safety staff have also been made and definite betterment in our safety record has taken place. In competition with all bituminous coal mines in the United States during the past nineteen years we have won the "Sentinels of Safety" trophy thirteen times, a record of which we are justly proud. We have also been accorded many citations by the Joseph A. Holmes Safety Association. By winning these citations, we have shown our gratitude to the man who, more than any other, in the last half-century, developed the theory of safety in mines. All we now require is more and more of the same kind.

There are certain elements of accident prevention work that rest almost wholly with the Company and its officials; such include the proper condition of equipment, an adequate timber supply, proper ventilation, rock dusting and a water supply to keep down dust and to prevent dust explosions, etc. The overwhelming majority of accidents, however, are of the class which indicates that the safety of the individual rests almost wholly with himself. No church organization is capable in itself of complete spiritual salvation; no law-making body can completely prevent crime; likewise no coal company or individual can prevent mine accidents or even keep same within limits, unless each and every man undertakes to protect his own life and limb.

The purpose of these rules is to bring out the fact that the man who is to avoid accident must exert every personal effort to do so if loss of life and human suffering is to be reduced, and to point out to all employes, and especially to those who are inexperienced, the dangers incident to mining, so far as it is possible to do so in a set of rules, and also to present the precautions to be taken by both experienced and inexperienced men, in order that they may make their work less hazardous. The instructions contained herein deal only with the dangers common to mining in this field and are not to be wholly depended upon as covering all the dangers that attach to mining in its many peculiar and ever changing phases.

The advice and instruction of the Mine Foreman or his Assistants should be sought when conditions not treated herein present themselves, or when more detailed instruction is required for the safety of the employe.

In any case, where any question of conflict arises between the following Rules and Regulations, and the Laws of the State of Wyoming governing the operation of coal mines, or the Code of Standards of The Union Pacific Coal Company, the State Laws and the Code of Standards shall govern.

DUTY OF EMPLOYER AND EMPLOYEE

DUTY OF EMPLOYER—It is the duty of the employer operating mines and employing labor to formulate and put into effect safety rules and practices for the purpose of preventing injury to all employes. It is his further duty to lessen in every way possible the hazards of mining, thereby reducing the possibility of accident to all employes, making the mines of the State a safer place in which the mine employe may work.

DUTY OF EMPLOYEE—It is the duty of every employe to familiarize himself with the Laws of the State of Wyoming pertaining to the operation of Coal Mines

and to strictly observe same. It is his duty to comply with all Rules and Regulations pertaining to safety formulated and put into effect by his employer. The failure of any single employe to abide by such safety rules and regulations thereby endangers his own person as well as the persons and lives of his fellow employes.

In case of injury to an employe, however slight, suffered in the course of his employment, it shall be the duty of the injured employe (providing the injury received does not make it impossible for him to do so), to report such injury to his employer, through his foreman, superintendent, or other designated agent of the Company, before the completion of the shift. Where serious injury prevents the employe from making a full report of injuries received, it will be the duty of the employe's immediate foreman to make such report in detail.

CONDITIONS OF EMPLOYMENT—The conditions surrounding the operation of the properties of The Union Pacific Coal Company fully justify the belief of the management—

FIRST—That the overwhelming majority of its employes believe in the observance of all Federal, State and Municipal laws, and in maintaining a general high standard of personal conduct.

SECOND—That the existence of gambling houses, illegally and improperly operated saloons or other places where intoxicating liquors are sold, or where other forms of vice are carried on or allowed, is definitely wrong, working a serious injury to those who participate in same, as well as the younger people of our communities.

THIRD—That a job that is worth having is worth keeping, and that the obligation on the part of the employe to render a conscientious, continuous service is equally binding with the obligation of the employer to pay an adequate wage, to make the work

as safe as possible, and in a general way to look after the welfare and the happiness of his employes, this without attempting in any way to interfere with their lawful privileges.

Believing, as we do, that it is only the few who do not by preference maintain a reasonable standard of sobriety, industry and morality, then it reasonably follows that this minority who prefer to go their own way should undertake to exercise the license they desire elsewhere finding residence and employment in a more congenial atmosphere.

In making this presentation it will be understood that employes occupying official positions, or in any way charged with the direction of the property or the working force, have a double responsibility in the direction of good conduct, of courtesy to other employes, and in the full observance of all lawful regulatory measures. Men who do not maintain a reasonable standard of conduct will not be continued in the service of the company.

Absenteeism on the part of employes, without due cause, contributes through the disorganization of mine forces to the number of accidents suffered. Mine employes must realize that they have a duty toward the company equal to that resting upon the mine management. Men who are given to unnecessary absenteeism from work make undesirable employes and will not be retained in the service of the Company.

RULES AND REGULATIONS

MINE FOREMEN AND ASSISTANTS

1. The Mine Foremen, and their assistants, shall familiarize themselves with the mining laws of the State of Wyoming, and the Code of Standards applying to the operation of The Union Pacific Coal Company's mines, and shall comply with every requirement thereof, discharging every duty imposed upon them by law and by the rules of the Company.

2. The Mine Foremen shall have absolute authority over all underground employes and shall see that requirements of the state law and the rules of the Company are rigidly enforced, and shall recommend suspension or discharge of anyone who refuses to abide by these rules or their instructions.

3. The Mine Foremen or their assistants shall direct the working forces of the mine, visiting each working face at least once each day, posting their initials and date at the time of their visit. They shall maintain proper discipline and take every possible precaution for the safety of the men in their employ, as well as the property of the company.

4. They shall direct the miners to securely prop their working places and shall personally see that all dangerous conditions are either removed or made safe. If, for any reason, they cannot personally supervise the work of making the place safe, the men must be removed.

5. The Mine Foremen, or their assistants, shall see that all breakthroughs are driven at the proper distances as prescribed by law, and they shall see that the ventilation of the mines is kept in good condition.

6. The Mine Foremen shall see that all machinery under their control is properly guarded so as to prevent any one from having his clothing or body caught in same. The wearing of loose clothing should be prohibited.

7. The Mine Foremen, or their assistants, shall investigate every case of personal injury and obtain all the facts in connection therewith, reporting same on the proper form within twenty-four hours, and, when an accident occurs, shall take every possible precaution to prevent a recurrence.

8. It shall be the duty of the Mine Foremen to see that all safety devices and fire-fighting apparatus are at all times kept in working order; that oily waste and other refuse shall not be allowed to accumulate in places where

same could cause fire. In all places where such material is liable to accumulate, metal cans with self-closing tops must be provided.

9. It shall be the duty of the Mine Foremen to see that all stretchers and first aid equipment are in their designated places and that first aid boxes are kept at all times well supplied and that stretchers and other equipment are in first class condition.

10. All return air courses must be traveled by the Mine Foremen or their assistants once each week and evidence of inspection shall be left at some conspicuous place, showing date and initials of the official making the inspection. There shall also be kept in each Mine Foreman's office a record book showing that this inspection has been made, by whom, the date, and the condition of the air courses in each mine.

UNIT FOREMEN

1. Unit Foremen must have Certificates of Competency as required by state law (or temporary permits) and must familiarize themselves with the Coal Mining Laws of the State of Wyoming and the Code of Standards applying to the operation of The Union Pacific Coal Company's mines.

2. Unit Foremen will be assigned specific portions of the mine by the Mine Foreman, and the Unit Foremen will be in complete charge of the sections, subject to the orders and instructions of the Mine Foreman.

3. The Unit Foremen shall see that all State Laws and Company Rules are obeyed in the sections under their jurisdiction.

4. The Unit Foremen shall keep close watch over the ventilation in their districts and shall remedy all defects as soon as discovered or reported. They shall report all unusual conditions to the Mine Foreman immediately.

5. No Unit Foreman will attempt to move any accumulation of gas, except under the personal supervision of the Mine Foreman, and after the Superintendent has been notified.

6. The Unit Foremen shall see that all men under their charge are supplied with the proper tools and equipment and will report any shortage to the Mine Foreman at the end of the shift.

7. The Unit Foremen must familiarize themselves with the proper methods of operation and maintenance of all equipment under their charge and will see that all equipment is protected with the proper safety guards and is handled in the proper manner.

8. The Unit Foreman will accept instructions from the Assistant Mine Foreman and the Chief Electrician or Master Mechanic as to methods of operation and maintenance of machinery.

9. All workmen assigned to a section temporarily, and all mechanics or others who are working in a section only part of the time, will be under the jurisdiction of the Unit Foreman in whose section they are working.

10. The Unit Foremen will see that all sights are followed as the Mining Engineer may direct, and will see that all places are driven on the proper grade and at the height and width as directed by the Mine Foreman.

11. The Unit Foremen will be held responsible for the maintenance of proper clearance along all haulage-ways in their sections and shall see that all debris and waste material is kept cleaned up and that all places are kept neat and clean and free from tramp iron and other waste material.

12. When the Unit Foremen find that the laws or the safety rules have been violated by anyone under their jurisdiction, they shall order the offending party to report to the Mine Foreman and shall make a com-

plete investigation and written report, setting forth the facts in such a way that the Mine Foreman may determine the proper disciplinary action.

13. The Unit Foremen will personally see that ventilation is properly established before machinery is allowed to operate, this particularly to apply to machinery that is being moved.

14. The Unit Foremen will see that all machines in their sections are kept in proper repair and lubricated at all times when in operation.

GAS WATCHMEN

1. It shall be the duty of the Gas Watchmen to examine carefully all working faces not more than two hours before the beginning of each shift. THEY MUST mark with chalk on face, or on nearest prop to each face examined their initials, and the date of the month. If gas is found, a danger board "GAS—KEEP OUT" shall be placed at all entrances to such place and at a safe distance from the gas, and, if the gas is found in a room, a danger board must also be placed on the entry outby, or on the intake side of such room, and the gas removed as quickly as possible.

2. After making their examination, the Gas Watchmen will notify the Mine Foremen, either personally or by phone, of the condition of the places and if any dangerous places have been found. If dangerous places have been found, in addition to placing "DANGER—KEEP OUT" boards outby the place, they will notify the Mine Foreman and the men who are usually employed in the place of the particular nature of the hazard and whether or not they may enter the place. If, in the opinion of the Gas Watchman or the Mine Foreman, the hazard is sufficiently great, the Mine Foreman will order an examination of the place before men are allowed to enter. Before the completion of

the shift, they must write a report of their findings, using red ink where gas is found.

3. If the Gas Watchmen find any accumulation of gas, they will properly block off the place as set forth above and assure themselves that no one will enter the section and then immediately notify the Mine Foreman and the District Superintendent. They will attempt to remove the gas only under the personal supervision of the Mine Foreman or Superintendent.

4. They must send out of the mine any man who has entered the mine without his identification check, or who injures or changes any brattice without reporting same, or who does any act which may endanger his own safety or the safety of his fellow employees.

5. They must examine all accessible abandoned places at least twice each week and, at the direction of the Mine Foreman, all stoppings that shut off abandoned workings, noting the same on their report books.

6. It shall be their special duty at all times to see that the air is moving in the proper volume, to look out for falls in the airways and to remove them if possible. Should the fall or falls be too large for them to remove personally, they will notify the Mine Foreman, whose duty it will be to assign a sufficient force to remove them as speedily as possible.

7. Gas Watchmen shall report to the Mine Foreman any places, either in rooms or headings, which are not properly timbered, and where there is danger to workmen from falling rock or coal while in or passing under such places. They must, when making their examinations, note all defects in ventilation apparatus, roadways, pipes, electric cables or wires, etc., also any dangerous condition of timbering, reporting all such findings to the Mine Foreman. They must see that all dangerous roof is safely propped or taken down, and that no employee is unnecessarily exposed to danger of any kind.

8. Gas Watchmen will order from the proper person all material, such as brattice cloth, lumber, timber, etc., necessary to keep all places safe.

SHOT FIRERS

1. Only authorized persons, certified by the State Inspector of Mines, shall be employed as Shot Firers. Shot Firers must be provided with flame safety lamps in good order and lighted, while on duty.

2. Shot Firers will always return to the face after firing each round of shots, and, using their safety lamps, they will examine place for fire, loose top and gas, repairing or replacing any damaged brattice or ventilation tubing.

3. In firing shots, only rubber-covered cable of a distinctive color shall be used. This cable must be kept reeled at all times, except when in actual use.

4. All shots must be tamped to the collar with clay or other incombustible tamping. Under no circumstances will coal dust or other combustible material be used. (See State law.)

5. In any place only one shot shall be fired at a time, except in top coal at Hanna where, at the discretion of the District Superintendent he may permit one bench of shots to be fired together.

6. No charge of powder in any mine will exceed the permissible limit, viz., one and one-half pounds of permissible powder, except where, by written permission of the General Manager, this limit may be increased.

7. Shot Firers will refuse to fire any shot which, in their judgment, is not properly drilled or placed in a workmanlike and practical manner. They will refuse to fire a shot until adequate timbering, wetting of bug dust, proper blocking of cars or other safety measures are performed, when such measures are, in the opinion of the

Shot Firers, necessary to the safety of life or the protection of property.

8. Nothing but a wooden tamping rod will be used in the tamping of holes.

9. Shot Firers will see that every one is in the clear before firing a shot and that a man is stationed, both inby and outby the place being shot to warn others, by crying in a loud voice, "Fire in the top entry," "Fire in 10 Room," or other suitable warning. When a breakthrough is about to be made into another room or entry by blasting, it shall be the duty of the Shot Firers to warn the workers to leave the adjoining place, and to see that the place is properly guarded until the shot has been fired.

10. No shots will be fired while there is gas present in the place.

11. In case of a missed shot, the Shot Firer will remain on shift until such time as shot has been handled as provided for in Paragraph 12 and detonator and all explosives have been recovered. He will see that no missed shots are tampered with in any way, either by attempting to remove the tamping, pulling out the wires or in any other manner.

12. In case of a missed shot, a new hole will be drilled not closer than two feet at any point to the missed hole. After the new hole has been shot, the detonator and all explosives must be recovered.

13. When electric detonators are being used and a shot fails to explode, no employe shall return to the place until sufficient time has elapsed to insure the absence of danger. This time shall never, in any case, be less than ten minutes. In case of a shot failing to explode, Shot Firers must guard against others entering the place until sufficient time has elapsed to return with safety or otherwise they must notify all employes in the vicinity, placing a warning board at all entrances to the working place.

14. In no case shall more than one kind of explosive be used in the same drill hole.

15. No hole will be tamped and shot that is not at least six inches in the clear at the back of the machine cut and twelve inches from the solid rib.

16. Shooting from the solid is positively prohibited except under permission granted by the Mine Foreman.

17. Shot Firers will report all unsafe conditions to the Mine Foreman when the ordinary measures of timbering or taking down rock are inadequate to secure the place. This applies on the entries and slopes within their districts, as well as in the rooms and crosscuts.

18. Shot Firers shall refuse to fire any shot until the bug dust has been thoroughly watered to such a consistency that it will mold in the hand.

19. Before attempting to load or tamp any hole, Shot Firers will see that all electric power has been cut off place.

20. All shots must be fired by regular shot firing magneto furnished for this purpose, and in no instance from machine or trolley wire, lamp battery, or dry cell.

21. Each Shot Firer shall report daily to Mine Foreman all defects to water lines, missed shots, with cause for failure and location of shot, and any violations of the rules set forth above.

22. The placing or firing of a "mud-cap" or "bulldozing" shot will be considered sufficient grounds for the discharge of the offending employee.

23. It shall be the duty of Shot Firers to see that all places are thoroughly wet down before any shots are fired.

SHOOTING WIRE

1. Should be No. 14 rubber covered cable, and of such type as required by the Mining Laws of Wyoming.

2. Should be of distinctive color which will unmistakably distinguish it from signal or other wires.

3. Should not be used for any other purpose but shooting.

4. Should be regularly and thoroughly examined for breaks and bare spots.

5. Should be kept reeled at all times except when strung out for use.

6. Should be so placed as not to come into contact with the following: light wiring, steel rails of track, mine cars, pipe or pan lines, or any other metal objects that would act as a conductor of an electric current.

7. Should have the two magneto ends of the wire detached from the magneto and connected together to eliminate the possibility of a stray ground or other current causing a premature explosion.

SPRINKLERS

1. It shall be the duty of all men employed as Sprinklers to keep the mine floors in their territory free from dust by sprinkling with water, and to use only so much water as is necessary to keep the places in a moist condition.

2. They will keep all pipe lines and hose in their territory in repair, and in case they are unable to make repairs promptly, they will report the fact to the Mine Foreman.

3. They will use precaution while sprinkling floors to prevent rock dust being washed from coal ribs and will see that the rock dust is kept in as dry condition as possible.

4. They will report at once to the Mine Foreman every portion of their territory which requires redusting.

5. Sprinklers must not work on partings or panel tracks while trips are in motion. Portions of haulageways

where a personal hazard exists must be moistened by some form of automatic sprinkling device.

6. All metal of whatsoever character should be picked up, preventing its being loaded out with coal.

ROPE RUNNERS

1. Rope Runners will take charge of the slope during working hours, reporting promptly to the Mine Foreman any defect in timbering, rope, tracks, rollers or signal-wires.

2. Before starting work in the morning, they must make a daily inspection of the rope, socket and rope couplings, and sign a report, on forms provided for the purpose, that this has been done.

3. Before man trips are raised or lowered, the Rope Runner shall make an examination the complete length of the man trip, assuring himself that all couplings, pins, safety cables, etc., are functioning properly.

4. They must be constantly on the alert during the day, inspecting each trip as it leaves the partings for defective hitchings. In case one is found, the car must be switched out until such time as it can be brought to the surface singly, secured by wire rope, and under no circumstances should it be brought out on a regular trip.

5. They will see that no person is allowed to interfere with the signals.

6. They will be held responsible for allowing any person, except the proper mine officials, or men engaged in repair work, to travel or be on the slopes during working hours.

7. They will permit no one to ride loaded or empty trips other than those provided especially for man trips, except as specifically ordered by the Mine Foreman.

8. In all places where, in their judgment, additional safety holes are necessary, they will report the matter at once to the Mine Foreman.

9. Trips must not be left hanging on panel or main slope ropes. Before leaving their posts at the completion of the shift, Rope Runners must disconnect ropes from trips.

10. Rope Runners will not hoist or lower more cars in any one trip than the number authorized by the Mine Foreman.

11. When hoisting or lowering heavy machinery, they must assure themselves that all hitchings and ropes are in safe condition and properly attached. In no case will they attempt to handle machinery with improvised fastenings, such as wire, old chains, etc.

MOTORMEN AND MOTOR BRAKEMEN

1. The Motormen must look carefully after locomotives in their charge and see that they are well lubricated and in good condition at all times.

2. They will work directly under the Mine Foreman and will be governed by the Mine Foreman's instructions. All mechanical or electrical defects which may develop will be reported to the Mine Foreman who may, however, instruct that defects to equipment be reported direct to Mine Electrician or Master Mechanic. Any indication of low voltage on line should be promptly reported to Mine Foreman.

3. Mine locomotives shall be operated at a reasonable speed and be kept under full control at all times.

4. Motormen shall take careful note of the condition of the haulageways over which they operate, and report any dangerous or unsafe place, defective wiring or bonding, to the Mine Foreman.

5. Whenever a motorman leaves his locomotive, he shall remove the trolley pole from the wire. In the event of derailment or other accident to locomotive operation, making it necessary for the motorman to leave his equipment to flag or seek assistance, the trolley pole

may be left on the wire to provide power for headlight, to warn other employes.

6. Motormen will see that there is a conspicuous light on each end of main line trips at all times.

7. Motormen will be required to see that there is a gong and headlight in good condition on their locomotive at all times. Headlights must be so placed that light beam is cast ahead of advancing locomotives.

8. It will be the duty of motormen to warn with their gongs upon approaching persons, animals, doors, curtains, side tracks or curves on haulageways.

9. Motormen will see that sand boxes are filled and that sand pipes are clear.

10. Motormen are positively prohibited from alighting while locomotives are in motion in order to throw switches, open doors, or for any reason, except to protect themselves from injury in case of obstruction or derailment.

11. Motormen will not allow any one to ride the locomotives or on the trips except those who are especially authorized to do so.

12. No flying switches are to be made.

13. Locomotives and all cars on trips must come to a full stop before attempting to make couplings.

14. Motormen and Brakemen are forbidden to make couplings while standing on or between the bumpers of cars or locomotives.

15. Back poling by motors will not be permitted.

16. Motormen will not attempt to reverse trolley poles while locomotives are in motion.

17. When two or more locomotives are going into or coming out of the mine, they shall be kept at least three hundred feet apart and under complete control.

18. Motor Brakemen will not be permitted to ride

front end of light motors when headed in or out of the mine.

19. Motormen and Motor Brakemen are positively prohibited from attempting to sand a rail by hand while trip or motor is in motion.

20. Motormen will not attempt to oil locomotives, open sand pipes, adjust headlights or do any other repair work on their locomotives while in motion.

21. Motormen shall see that tools, scrap metal and repair parts are taken care of, preventing same being loaded out in loose coal.

22. Motormen shall inspect daily all gear cases on their locomotives, seeing that they are in safe condition and that all bolts and nuts are tight, with the nuts held on by cotter keys in place.

TIMBERING

1. All work in mines is inherently dangerous, and care is enjoined upon every employe to guard against and avoid accidents to himself and others. Especial attention is directed to the timbering or removal of unsafe roof, or coal that has been undermined, and every employe must take especial pains to make the place at which he is at work safe from overhanging loose material, as soon as dangerous condition is observed by him or called to his attention.

2. Employes must not do any work other than to correct the unsafe conditions, until the dangerous place has been made safe. If for any reason the necessary timbers for making a place safe cannot be supplied when requested, the workmen shall vacate the place until the necessary timber is supplied, and no employe shall work in any place until he has props and timbers sufficient to make and keep his place secure.

3. The laws of this State require that this Company provide and furnish every employe a sufficient and satisfactory supply of timbers to be used in securing the roof

in his working place, and he is especially required to see that a sufficient number of props is erected in his working place.

4. If the roof in a working place is of such tender character that it cannot be made safe with props, the proper crossbars and lagging shall be used.

5. Every workman in need of props, cap pieces, or other timber, shall, in person or by written order, notify the Mine Foreman or an Assistant Foreman, or any other person designated by the Mine Foreman for this purpose, of the fact at least one day in advance, stating the number, size and length of the cap pieces, props or timbers needed, said notification to be given at such place as may be specified by the Mine Foreman to suit the conditions of each mine.

6. In case of emergency the timber may be ordered immediately upon discovery of danger, and shall be delivered as soon as possible, and the employe must remain away from place of danger until the timbers are delivered.

7. All timbers, props and cap pieces when so ordered shall be delivered by the driver or the motorman, as the case may be, to, or reasonably near, the working place of the workman who has ordered them.

8. Every employe is required to add to or renew all timbers in his room or working place whenever and wherever it may be necessary, and whenever one employe takes a room or heading, previously worked by another employe, he must carefully inspect it before proceeding to work and set or renew all timbers which may be necessary to make it safe.

9. Every employe is reminded that all overhanging strata and coal which has been mined by hand or undercut with a machine, must be watched. He is required to set sufficient blocks, sprags or timbers, when mining or cutting coal, or when working in places where coal has

been mined or cut, to protect himself from falls of coal and roof.

10. All timbering in working places shall be installed in accordance with the standards adopted by the Company. The standards call for the minimum requirements and additional timbers should be placed when necessary.

11. In all shaking conveyor places safety timber will be set on not to exceed five-foot centers in both directions ahead of the swivel and not to exceed five feet from the face.

12. When salvaging timber from worked-out or abandoned areas, a Sylvester or similar type of prop puller shall be used.

Caution for Work in Pillar Sections

Every employe engaged in this work must use extreme care to protect himself and others from the dangers incident to work of this character, and must bear in mind that the coal he removes weakens the roof and makes constant and frequent roof inspection necessary. Every employe in pillar sections must pay close attention to the condition of the roof over the breakthroughs, haulage-ways and passageways in the vicinity of such pillar work and either immediately correct any unsafe conditions, or otherwise put up the required warnings and thereafter at once notify the Mine Foreman or one of his assistants.

MACHINE RUNNERS AND HELPERS

1. It shall be the duty of Machine Runners to keep their machines in repair and well lubricated. Mechanical defects, which Machine Runners cannot themselves repair shall be reported at once to the Machine Boss or Mine Electrician.

2. It shall be the duty of Machine Runners to take every precaution to prevent injury to their machines from falls of roof or rib.

3. Machines shall be so placed for each cut that the least possible amount of coal may be left on the bottom

or floor under the cut and machine crews will sprag all coal where necessary.

4. All machine cuttings, or bug dust, shall be cleaned from beneath the cut unless otherwise instructed by the Mine Foreman.

5. All Machine Runners and Helpers are instructed to carefully inspect the roof, sides and face of each working place before beginning work, and, if any evidence of weakness is found, additional timbers must be set and replaced as the machines are moved across the face, in order to protect themselves, other employees and equipment from injury.

6. Machine Runners should avoid knocking out timbers wherever possible, but where timber must be moved, supporting timbers shall be set before any timbers are disturbed. Timbering must be left in safe condition before the machine crew leaves a place.

7. In order to prevent injury to the Machine Runners by reason of insecure position of machine jacks, the Helpers are instructed to hold the jacks in position, and Machine Runners are advised to see that the Helpers observe this precaution until Runners have moved to a position where the jacks, in falling, will not injure them. Bit clutches must be disengaged while Helpers are holding jack pipes, preparing to sump.

8. Machine Runners must see that the machine bits are at all times set to gauge. Dull bits should be changed as required.

9. If at any time the machines or machine cables require repairs by the Runners, the cables must be disconnected from the power supply until such repairs have been completed and the Machine Runners replace the connection.

10. Machine Runners and Helpers are instructed to guard against the swinging of the mining machine when

the jacks are tightening at the time the machine starts cutting.

11. Machine Runners and Helpers on track-mounted cutting and shearing machines must remain well in the clear while sumping or shearing.

12. No employee shall cross over the cutter bars of mining machines at any time, but shall pass around the rear of the machines.

13. Machine Runners shall stay at the rear of the mining machines at all times, as nearly as practicable, while they are cutting coal and must remain at the rear of the machines until they are sumped at least one foot in the coal.

14. The Helpers must be facing the cutter chains at all times when shoveling and must never attempt to shovel with their backs toward the cutter bars.

15. Before attempting to move machines upon haulage entries, machine crews must first ascertain the location of the locomotives. Machine Runners' Helpers shall travel at least fifty feet in advance of machines, when traveling on haulage entries. Track mounted machines or short-wall machines mounted on tip-turn trucks must have cutter bars secured before traveling from place to place.

16. Mining machines shall be stopped before jacks are changed.

17. Excepting in such places as determined by the Mine Foreman or his assistants where the natural moisture or water present is considered sufficient, cutting without the use of water on the cutter bar is strictly forbidden. Violation of this rule will subject the offending employee to discharge.

18. The Machine Runners will be within reach of the starting boxes at all times while the machines are running. The jacks and ropes or chains must be examined from time to time while the machines are running to keep them tight and secure. The Machine Runners will keep careful supervision over the machines, examining particu-

larly the electrical connections, oiling systems and starting boxes. Should any defects be discovered which would make the operation of the machines unsafe, work with them should be discontinued until the defects have been repaired.

19. Machine Runners must not sump the machines while in high gear.

20. The cutter-bar guards must be kept in place at all times on mining machines so equipped.

21. Machines shall not be braced with rails or other substitutes, but jacks and ropes must be used in the proper manner while cutting.

22. At all times, except when the mining machine is actually engaged in the cutting operation, the bit clutch shall be disengaged.

23. Jackpipes with broken "fishtails" will be considered defective and shall either be repaired or retired from service.

24. Machine Runners must use especial care that machine bits, tools, metal parts or scrap are kept out of coal in order to avoid loading same with the coal.

GENERAL

The majority of machine accidents are caused through the setting or moving of jack pipes. These accidents originate more from the careless and improper setting of jack pipes than from defective pipes or bad roof.

The bottom of the jack pipe should line up with the pull of the rope or feed chain and the top should be as nearly vertical over this line as practical; that is, the jack pipe should always be in the vertical plane of the rope or feed chain.

Jack pipes should be of the proper length and with the head designed to suit the roof conditions. The important thing is to see that the "hitch" at the top is deep enough and in secure roof. Any kind of jack pipe will hold if

properly set and if the top hitch is deep enough and in the right place.

Machine Runners will be held responsible for the safe operation of their machines and will assure themselves that their helpers are in a safe position at all times. Particular attention must be given that no one is in a position to be caught by cutter bars, ropes or jack pipes in case he falls, or if the machine takes an unexpected movement.

HOISTING ENGINEERS

1. Hoisting Engineers will be under the direction and supervision of the Master Mechanic or Chief Electrician as directed by the Mine Superintendent or his Assistants, and will be held responsible for the proper care of their equipment and buildings.

2. All badly worn or dangerous parts must be repaired. In cases where repairs cannot be made by the Hoisting Engineers, it shall be their duty to immediately report same to Master Mechanic or Chief Electrician, as the case may be.

3. Under no circumstances shall Engineers leave their controls while moving trips.

4. Particular care must be used in hoisting or lowering man trips, which must never be run at a speed exceeding five miles per hour.

5. It will be the duty of the Hoisting Engineer in charge when the man trips are raised or lowered to see that an assistant is present on the platform before he attempts to raise or lower the man trips. The assistant who was present will certify to the fact in the daily record book provided for in Paragraph 10.

6. In hoisting and lowering, the Engineers must in all cases be governed by the signals received, and under no circumstances shall they move their engines until signals have been received.

7. They must maintain a list of hoisting signals which

will be hung in a conspicuous place in the hoist room so that signals may be read with ease by the operator on duty.

8. Engineers will consult with Mine Foreman and Master Mechanic or Chief Electrician, as to speed trips are to be run, and must at all times use such precaution as will insure the safety of the men who are employed in moving and handling the trips.

9. Under no circumstances will anyone except those authorized by reason of their positions or duties, be allowed to enter the hoist rooms, and Engineers must not engage in conversation with anyone while running or handling their engines.

10. Hoisting Engineers must certify daily in a book provided for the purpose that they have that morning examined the hoist, rope, and other equipment and that the same is in safe condition.

MASTER MECHANICS AND CHIEF ELECTRICIANS

1. Master Mechanics and Chief Electricians will have full charge of all machinery, motors and appurtenances in their respective departments. In the operation of their departments they must retain none but competent, sober and careful men.

2. They must see that all machinery in their respective departments is kept in thorough repair.

3. In case of damage to any machinery through neglect of duty of any employe, the offending employe will be held responsible for such damage.

4. Boilers and steam gauges must be tested at least twice a year and scale or sediment must be removed from boilers when necessary. Safety valves on boilers shall be operated not less than once a week.

5. Parts of idle machinery may be removed in case of emergency, but these parts must be immediately put

on requisition and the idle machinery restored promptly to serviceable condition.

6. Orders for parts and general supplies must be made so that they may be on hand when needed. It shall be the duty of Master Mechanics and Chief Electricians to personally ascertain if a sufficient supply of necessary material is on hand, anticipating future requirements.

7. Fans must not be stopped without permission from the Mine Superintendent. If repairs are to be made to the fans or any part of their machinery whereby they must be stopped, the Mine Foreman must be given timely notice. Speed of fans must not be changed under any circumstances without permission of the Mine Superintendent and the knowledge of the Mine Foreman.

8. Fire extinguishers, fire hose, nozzles, rock dust containers or any of the connections to same, must not be removed from their places or used for any purpose except in case of fire.

9. Master Mechanics and Chief Electricians will be held responsible for compliance with the provisions of the Code of Standards of The Union Pacific Coal Company.

10. They will carefully instruct all new employes in their respective departments in their duties, pointing out the hazards of their work, and the proper manner of performing their duties safely.

11. The discipline of employes in their respective departments, and their compliance with rules and regulations promulgated for their work and safety will be functions of the Master Mechanics and Chief Electricians.

PUMP OPERATIONS

1. It shall be the duty of workmen to keep the pumps in their charge in good condition for service and to see that they perform the work required of them.

2. They shall maintain pump rooms neat and orderly, keeping both clean and oily waste in receptacles provided for the purpose.

3. Reports of insufficient power or low voltage must be made daily until remedied.

4. When pumps are run constantly, the workmen on each shift must remain at their posts until relieved.

5. All ordinary repairs to pumps and pipes must be made by the workmen.

6. Serious damage or breakage of pumps, or failure to keep the water within a safe limit, must be reported immediately to Master Mechanics and Mine Foremen.

7. The loss of a pump through roof fall or drowning out must be specially guarded against.

8. All machinery must be stopped before workmen attempt to oil or grease it.

MECHANICAL LOADER FACE EMPLOYES

1. All employees must be at their working places promptly at starting time and remain at said places until quitting time.

2. No shots shall be connected while machinery is in motion or in operation at the face.

3. Head and tail rope sheaves shall be so fenced or guarded as to preclude the possibility of accident to employees engaged in the working place.

4. Where the breaking entry is used as a traveling way, sufficient props must be set to protect employees from possibility of injury from head rope.

5. Where the tail rope is carried through breakthrough between breaking entries, this breakthrough must be fenced off and a "Danger—No Traveling" sign erected.

6. Picking or working at faces while scrapers are in motion is prohibited.

7. Timbermen, engaged in setting props while scrapers are in motion, must protect themselves by setting temporary props two feet inside the prop line (between prop line and face) and at not greater than twenty-foot intervals.

8. At every loading station safety blocks shall be set to prevent run-away cars from getting upon the main haulageways.

9. Particular care must be exercised at all times in mechanical loading faces in the handling of explosives. All charges shall be prepared at the place of storage, which must be at least fifty feet from the face and out of direct line of the blast. The placing of explosives or electric blasting caps among the props will not be tolerated.

10. When charging and tamping holes in shaking conveyor faces, all power must be cut off faces.

11. In narrow work drillers must not drill while mining machines are in operation. Where width permits, after tail jack has been moved up, drillers may drill in the space between the tail jack and the rib where the coal has been undercut.

12. No holes shall be drilled until places have been undercut.

13. Blower fans must be kept in continual operation while men are working at the face.

14. Signal wires in conveyor faces must be kept within 25 feet of the face.

15. Tubing in conveyor faces must be kept at all times within 20 feet of the face, and maintained without kinks or other obstructions to the flow of air, **THIS TO COMPLY WITH FEDERAL CODE OF STANDARDS.**

16. Every item of explosives, including permissible powder and caps, must be accounted for. The employees

who neglect to account for explosives in their care will be subjected to discipline.

17. All tools, when not in actual use, will be kept in an orderly manner, well back from the face, and in such a way that there will be no possibility of their becoming lost or loaded out with the coal.

Machine and drill cables will be neatly coiled and suspended along line of props remote from possibility of the insulation becoming damaged and where they will not present a hazard to persons traveling to or from the working face.

LOADER END MEN

1. Loader End Men will see that all machinery connected with the loader ends is kept oiled and in safe, workable condition. They will immediately notify the Unit Foreman or Machine Boss of any repairs which they cannot make themselves.

2. They will see that the loader ends are kept neat and clean and will keep tracks and traveling ways free from spillage.

3. They will see that all cars are properly loaded and loaded to capacity. Cars must be loaded so that there will be a minimum of spillage on the haulageways in transit to the tipple.

4. Loader End Men shall not attempt to make any electrical repairs or connections. This work must be done by the Mine Electrician.

5. They will see that safety blocks are in place to prevent loaded or empty cars from accidentally getting upon the main haulageways.

6. Where it is necessary to drop cars under the loader head, they must be handled by locomotive or other mechanical means or securely fastened with a snubbing rope. **ATTEMPTING TO HANDLE CARS WITH THE BRAKE ONLY IS STRICTLY FORBIDDEN.**

7. They will not leave the controls while conveyors are in motion.

8. They will immediately report any unsafe equipment or unsafe conditions to their Unit Foreman.

9. While loading is in progress, they will be especially watchful that tramp iron, rock, blocks or other waste material is not loaded with the coal.

10. While car is being loaded, Loader End Men will at all times use hooks or similar devices so that it will be unnecessary to trim the cars by putting hands on coal while the conveyor is in motion.

RULES FOR MAN TRIPS

1. WHEN MAN TRIPS ARE BEING RAISED OR LOWERED THERE MUST BE AN ASSISTANT HOISTING ENGINEER ON THE PLATFORM BEFORE THE MAN TRIP IS MOVED.

(See rule 5 page 23.)

2. All man trips shall be handled with extreme caution. No man trip shall be moved on any slope unless provided with safety ropes and attachments as stipulated in the Code of Standards. An official shall be in charge of each man trip to make certain that it is operated safely.

3. Man trips shall come to a complete stop before anyone is permitted to get on or off. Getting on or off the man trip while it is in motion will be considered sufficient cause for discipline of the offending employee.

4. Overcrowding of the man trips is strictly forbidden. All employees must be seated **INSIDE THE CAR**, and keep heads and arms inside the car.

5. All tools must be carried in the car provided for that purpose. The official in charge will see that no tools are carried in the cars in which men are riding.

6. The speed of the man trip shall be directed by the

Mine Foreman and shall at no time exceed 440 feet per minute (5 miles per hour.)

7. Men shall board and leave the man trips in an orderly manner and on the side opposite the trolley wire.

8. Men shall not run to and from the man trip. They shall **WALK**.

9. The Mine Foremen will, once each week, make a thorough inspection of the man trips and submit written reports of their findings to the Superintendent. Once each month a complete examination of the man trips shall be made by the Machine Boss. He will state on his monthly report of machines that this has been done, noting thereon any defect found and the corrective measures that were taken. The Rope Runners or Motormen handling man trips will make an inspection of the empty man trips just before coupling. If any unsafe conditions are found, repairs or corrections shall be made before the trips are used.

MISCELLANEOUS REGULATIONS

(The following general rules apply to all employees and are not included in those for the individual jobs.)

1. Employees should not, under any circumstances, take any unnecessary risks.

2. Injuries, no matter how trivial, must be reported to the Mine Foreman before the completion of the shift.

3. Employees should not enter any of the old workings, but should stay in their own working places.

4. Riding on empty or loaded trips is strictly prohibited.

5. Employees should be careful when near electric wires, as they are always dangerous.

6. Traveling on slopes or planes is forbidden. The manway should be used.

7. Except by order of the Mine Foreman, no employee shall tamper with or change any door, brattice or regu-

lator. Violation of this provision will subject guilty party to immediate discharge.

8. An empty or loaded car should never be left under a brattice.

9. Employees should not fail to report at once any defect in machinery, water pipes, wiring, roadways, ventilation apparatus, electrical equipment or track, also bad roof, or any unusual or unsafe condition in the mine.

10. Rubbish, tools or other material should not be thrown in roadways or airways.

11. Employees should not congregate in a body in or around the mine.

12. Gas should never be played with. **IT IS DANGEROUS!**

13. Men working in slopes or other places where trips are moved should get into shelter holes or other places of safety in advance of trip.

14. Each employee must see that his working place is in safe condition at all times.

15. All machinery must be stopped before attempting to oil or grease same.

16. All employees must be provided with identification checks before entering the mine. Before entering, all employees shall receive their checks from the board provided for that purpose. On leaving the mine, they shall deposit their checks in the designated receptacle. Failure to check in and out will be cause for discipline.

17. No matches, open lights, cigarettes or other smoking materials shall be permitted in the mines. Any employee who violates this rule will be subject to prosecution and discharge.

18. The use of safety clothing, such as hard hats, hard toed shoes, gloves, etc., is essential and employees must provide themselves with this safety equipment. The use of hard hats and hard toed shoes is mandatory upon all employees at all times while underground

and upon such surface employes as may be directed by the Safety Engineer.

19. Before entering the service of the Company, each person must appear for an eye examination, thereafter providing himself with the approved type of shatter-proof goggles. During working hours, goggles **MUST** be worn at all times.

20. All employes are forbidden to take visitors into the mine without permission from the Superintendent or General Manager.

21. Under no circumstances shall any employe ever attempt to move gas except under the personal supervision of the Mine Foreman.

22. Coupling moving cars is prohibited. Employes must wait until they have come to a **FULL STOP**.

23. The failure of men working at mine faces to safeguard detonating caps and permissible explosives from loss has resulted in same being loaded out on several occasions with the coal, submitting railroad coal chute and locomotive employes to serious hazard. The careless handling of explosives by an employe will, if the person responsible can be located, result in his immediate discharge.

24. Mining tools, drills, wrenches, machine bits, spikes, track bolts and scrap metal, if lost in coal, will be loaded out with the same, causing serious damage to coal crushers and locomotive stoker apparatus. This disability can and must be remedied, and foreign material left in conveyor troughs or in the coal by an employe will, on proof of negligence, result in the immediate dismissal of the employe at fault.

25. Persons removing any guards or safety devices from any mechanical equipment for any reason shall see that such guards or devices are replaced before the equipment is put into operation. If, for any reason, the guards or devices cannot be replaced immediately, a warning sign shall be put on the controller of the machine, and

such machine shall not be operated until the guards or safety devices are in place.

26. Every employe shall have a certificate from the United States Bureau of Mines showing that he has completed a course in First Aid and is proficient in administering artificial respiration and controlling bleeding. Any employe who fails, after a reasonable lapse of time, to take the necessary training to secure this certificate will be dismissed from the service of the Company.

GENERAL RULES AND PRECAUTIONS TO BE OBSERVED IN THE USE AND HANDLING OF EXPLOSIVES

1. **DO NOT** bring explosives to the working face, while cutting machines, drills, loading machines, pumps or any other power-driven device is in operation, but see, without fail, that power is cut off of all such machinery before explosives are carried past machines or to the face. A full understanding as to the bringing forward of explosives, by every member of the crew, must be had before explosives are moved.
2. **DO NOT** use more than 1½ lbs. of permissible explosives in any one hole.
3. **DO NOT** force a cartridge into a hole.
4. **DO NOT** slit the cartridge and tamp tight as this is detrimental to the cushioning effect.
5. **DO NOT** tamp with an iron tamping bar. Use wood bar only.
6. **DO NOT** hurry in seeking the cause of a missed shot.
7. **DO NOT** drill, bore or pick out a charge which has failed to explode, but drill and charge another bore-hole at a safe distance (not less than two feet) from the missed one.
8. **DO NOT** carry blasting caps in your pocket.

9. DO NOT try to withdraw the wires from an electric blasting cap.
10. DO NOT keep electric blasting caps, or blasting machines in a damp place.
11. DO NOT leave the leading wires connected to the blasting machine. Disconnect them immediately if it becomes necessary to return to the shot.
12. DO NOT untwist the lead wires on electric detonators until necessary to connect for shooting.
13. DO NOT loop or tie the wire connections. Scrape the ends of the wires clean and bright and twist them tightly together.
14. DO NOT fail to twist the bared ends of electric detonator lead wires together at the outside of the mine, and keep them so until just before firing, then untwist them and connect them to the firing lines.
15. DO NOT drag the leading wires around. Always coil them up and carry them.
16. DO NOT insert electric blasting cap in cartridge carelessly. Have closed end of the detonator pointing toward the bulk of the explosive.
17. DO NOT store or transport electric blasting caps with any explosive.
18. DO NOT use old, broken lead wires or connecting wires.
19. DO NOT operate blasting machine half-heartedly. They are built to operate with full force. They must be kept clean and dry.
20. DO NOT shoot from the trolley wire, feeder line, or lamp battery.
21. DO NOT use more than one kind of explosive in the same hole.

22. DO NOT store powder with nails, spikes, or other metallic substances.
23. DO NOT store electric blasting caps within 25 feet of powder.
24. DO NOT have more than one day's supply of powder in your working place.

REMEMBER THAT VIGILANCE AND CLEAR THINKING ARE NECESSARY TO SAFETY IN AND ABOUT A COAL MINE, AND THAT EACH MAN MUST CONTRIBUTE HIS FULL SHARE OF BOTH.