



Safety Rules Effective July 30, 2007

These rules supersede all previous rules and instructions inconsistent therewith. Employees whose duties are in anyway affected must comply with and provide themselves with a copy.

PB-20369

Statement of Safety Policy

It is the policy of the Union Pacific Railroad that its operations be conducted in a safe manner. As integral parts of this policy, the management of Union Pacific Railroad believes that:

- All injuries can be prevented.
- Management and employees at all levels are responsible for maintaining safe working conditions and preventing personal injuries.
- Carrying out work functions in a safe manner is equally as important as meeting deadlines, production schedules, and other non-safety criteria.

—
—

TABLE OF CONTENTS

70.0 GENERAL SAFETY INSTRUCTIONS

70.1 Safety Responsibilities	70-1
70.2 System Safety Policies	70-1
70.3 Job Briefing	70-2
70.4 Lifting and Moving Material.....	70-2
70.4.1 Steps to Safe Lifting.....	70-2
70.4.2 Lifting with Two or More Employees	70-3
70.5 Protection of Body Parts	70-3
70.5.1 Safety Around Machines and Equipment	70-3
70.6 Door or Hatch.....	70-3
70.7 Building Safety	70-4
70.7.1 Filing Cabinets	70-4
70.7.2 Drawers	70-4
70.7.3 Paper Cutters	70-4
70.7.4 Defects	70-4
70.7.5 Cords	70-4
70.7.6 Chairs and Benches.....	70-5
70.8 When Warning Traffic at Grade Crossings.....	70-5
70.9 Removal of Unauthorized Persons.....	70-5
70.10 Criminal Activity	70-5
70.11 Housekeeping	70-6
70.12 Protruding Nails	70-6
70.13 Turning on Power.....	70-6
70.14 Warning Signs.....	70-6
70.15 Compressed Air/gas	70-7
70.16 Drop or Throw Objects	70-7
70.17 Rail Under Tension	70-7
70.18 Fusee Storage	70-7
70.19 Fusee Use	70-8
70.20 Confined Space Entry	70-8
70.21 Air Contaminants	70-8
70.21.1 Internal Combustion Engines.....	70-9
70.22 Chemical Spills	70-9
70.23 Skin Protection.....	70-10
70.24 Hazard Communication Standard	70-10

70.25 Drums and Containers.....	70-10
70.26 Working with Refrigeration Systems.....	70-11

71.0 PERSONAL PROTECTIVE EQUIPMENT

71.1 General Guidelines.....	71-1
71.1.1 Altering Personal Protective Equipment.....	71-1
71.2 Hearing Protection	71-1
71.2.1 Hearing Protection — Service, Repair and Mechanical Facilities	71-2
71.2.2 Hearing Protection — Locomotives.....	71-2
71.2.3 Hearing Protection — Retarders	71-2
71.2.4 Hearing Protection — Roadway or Work Equipment.....	71-3
71.2.5 Hearing Protection — Jet Blowers or Pile Drivers	71-3
71.2.6 Hearing Protection — Other Equipment and Tools	71-3
71.3 Gloves	71-4
71.4 Hard Hats	71-4
71.5 Eye Protection.....	71-5
71.5.1 Areas that Require Eye Protection	71-5
71.5.2 Additional Eye Protection Requirements	71-6
71.5.3 Contact Lens.....	71-7
71.5.4 Dark Lenses	71-7
71.6 Proper Attire.....	71-7
71.7 Footwear	71-8
71.7.1 Defined Heel.....	71-8
71.7.2 Covers the Ankle	71-9
71.7.3 OSHA Required Footwear	71-9
71.7.4 FRA Required Footwear	71-10
71.7.5 Visitors and Contractors.....	71-10
71.8 Respirators	71-10

72.0 FIRE PREVENTION

72.1 Sounding Alarm	72-1
72.2 Operating Fire Equipment.....	72-1
72.3 Fire Protection.....	72-1

72.4 Fire Doors and Stops.....	72-1
72.5 Fire Exits and Passageways	72-1
72.6 Questionable Fire Hazards	72-1
72.7 Fire Protection Devices.....	72-2
72.7.1 Fixed Facilities	72-2
72.7.2 Mobile Equipment.....	72-2
72.8 Fire Classifications.....	72-3
72.9 Right-of-Way Fires	72-3
72.10 Starting Fires	72-4
72.11 Open Burning Prohibited	72-4
72.12 Ignition Sources	72-4
72.13 Use and Handling of Liquefied Petroleum Gas (LPG)	72-5
72.14 Flammable and Combustible Liquids Storage	72-5
72.14.1 LPG Tanks	72-5
72.15 Handling Flammable Liquids.....	72-5
72.16 Cleaning and Polishing	72-6
72.17 Fueling Track Cars, Roadway Machines, and Automotive Units	72-6
72.17.1 Fueling Portable Power Equipment	72-7
72.17.2 Fueling LPG tanks	72-7
72.18 Buildings or Outfit Cars.....	72-7
72.19 Open Flame Starting	72-7
72.20 Exhaust System.....	72-7
72.21 Water Flash Back Protection.....	72-8

73.0 EXPLOSIVES

73.1 Authorized Personnel.....	73-1
73.2 Transporting	73-1
73.3 Caution Open Flames.....	73-1
73.4 No Smoking	73-1
73.5 No Dropping	73-2
73.6 Not Carried in Pocket.....	73-2

74.0 VEHICLES / BATTERIES

Vehicles

74.1 Vehicle Maintenance.....	74-1
74.2 Driver Requirements	74-1

74.2.1 DOT-Qualified Drivers	74-1
74.3 Driver Responsibility	74-2
74.4 Impaired Driver	74-3
74.5 Tools and Material	74-3
74.6 Clearing Obstructions	74-3
74.7 Passengers	74-3
74.8 Seat Belts	74-3
74.9 Seating, Transporting	74-4
74.10 Headlights On	74-4
74.11 Back-Up Moves	74-4
74.12 Railroad Grade Crossing	74-4
74.13 Hazardous Materials	74-5
74.14 Parked Vehicle	74-6
74.15 Trailers	74-6
74.16 Working under Vehicles/Trailers	74-6
74.17 Train Yard or Utility Type Vehicles	74-7
Batteries	
74.18 Battery Inspection	74-8
74.19 Charging Batteries	74-8
74.20 Jump Starting	74-8
75.0 MATERIAL HANDLING	
75.1 Material Storage	75-1
75.2 Pallets	75-1
75.3 Moving Materials	75-2
75.4 Other Protruding Objects	75-2
75.5 Transfer Plates and Loading Ramps	75-2
75.6 Loading and Unloading Materials	75-2
75.7 Loading and Unloading Truck Trailers	75-3
75.8 Load Binders	75-4
75.9 Drums and Barrels	75-4
75.10 Wheel Sets	75-4
75.11 Forklifts	75-4
75.11.1 Training	75-4
75.11.2 Inspection	75-4
75.11.3 Operation	75-5
75.11.4 Unattended	75-5
75.11.5 Wagon Tongue Equipment	75-6

76.0 TOOLS AND MACHINERY**General**

76.1 Use of Tools and Equipment.....	76-1
76.2 Inspection of Tools and Equipment	76-1
76.3 Safety Guards.....	76-2
76.4 Assigned Places.....	76-2
76.5 Tool Placement.....	76-2
76.6 Set Screws	76-3
76.7 Chuck Wrenches	76-3

Hand Tools

76.8 Purpose.....	76-3
76.9 Swinging Tools	76-3
76.10 Hammers	76-4
76.11 Spike Maul	76-4
76.12 Hand Adze.....	76-4
76.13 Sharp Edged Tools	76-5
76.14 Drift Pin.....	76-6
76.15 Banding Tools	76-6
76.16 Files	76-6
76.17 Carrying Tools	76-7
76.18 Bars and Levers.....	76-7
76.19 Use of Claw Bars	76-7
76.20 Lining Bars.....	76-8
76.21 Rail Turners.....	76-8
76.22 Track Jack	76-8
76.23 Jacking Equipment.....	76-9
76.24 Securing Jacked Equipment.....	76-10
76.25 Use of Wrench.....	76-10
76.26 Use of Tie or Timber Tongs.....	76-11

Portable Power Tools

76.27 Authorized Employees.....	76-12
76.28 Fueling	76-12
76.29 Securing Hose Connections	76-12
76.30 Insulation/Grounding	76-12
76.31 Laying Tools Down.....	76-12
76.32 Impact Wrenches.....	76-13

76.33 Huck Guns	76-13
76.34 Nail/Staple Guns	76-13
76.35 Powder-Actuated Tools	76-13
76.36 Chain Saw	76-13
76.37 Weed/Brush Cutting.....	76-14
76.38 Rail Saws	76-14

Fixed Machinery/Portable Equipment

76.39 Authorized Employees.....	76-15
76.40 Servicing Machines.....	76-15
76.41 Left Unattended	76-15
76.42 Band Saws.....	76-15
76.43 Woodworking Machines.....	76-16
76.44 Clamping Material	76-16
76.45 Removing Chips.....	76-16
76.46 Pedestal or Bench Mounted Abrasive Grinders....	76-17
76.46.1 Mounting.....	76-17
76.46.2 Crack Detection Test.....	76-17
76.46.3 Using Grinders	76-18
76.47 Anvils—Dies—Trip hammers	76-18

77.0 MECHANICAL LIFTING/PULLING OPERATIONS

General

77.1 Authorized Employees.....	77-1
77.2 Inspection	77-1
77.3 Safe Load	77-1
77.4 Groundman	77-1
77.5 Crane Operator.....	77-2
77.6 Signals.....	77-2
77.6.1 Crane Hand Signals.....	77-2
77.6.2 Crane Audio Signals	77-14
77.7 Emergency Stop Signals	77-14
77.8 Positioning	77-15
77.9 Raising Personnel.....	77-15
77.10 Operation with Trains Passing.....	77-16
77.11 Load Control	77-16
77.12 Avoiding Falls.....	77-16

77.13 Pulling Applications.....	77-16
Mobile Cranes	
77.14 Safe Load Placard	77-17
77.15 Boom Inspection	77-17
77.16 Handling Equipment in Work Train	77-17
Overhead Cranes/Hoists	
77.17 Test Crane/Hoist.....	77-18
77.18 Load Movement	77-18
Wire Rope	
77.19 Wire Rope	77-18
77.19.1 Wire Rope Working Loads	77-18
77.19.2 Wire Rope Inspection.....	77-18
77.19.3 Wire Rope Replacement	77-19
77.19.4 Wire Rope Handling	77-20
77.19.5 Wire Rope Maintenance.....	77-20
77.19.6 Drum Fastening.....	77-21
77.19.7 Sockets, Clamps, and Thimbles	77-21
Rigging	
77.20 Rigging.....	77-22
77.21 Fittings	77-22
77.21.1 Fitting Inspection	77-22
77.21.2 Fitting Replacement	77-23
77.21.3 Hooks and Attachments	77-23
77.22 Wire Rope Slings	77-24
77.22.1 Wire Rope Sling Inspection	77-24
77.22.2 Wire Rope Sling Replacement.....	77-24
77.23 Chain Slings and Chain.....	77-24
77.23.1 Chain Inspection/Replacement.....	77-24
77.23.2 Chain Working Loads	77-25
77.23.3 Chain Lifting Devices	77-25
77.23.4 Chain Use	77-25
77.23.5 Chain Lubrication	77-26
77.24 Synthetic Slings.....	77-26
77.24.1 Synthetic Sling Inspection	77-26
77.24.2 Synthetic Sling Replacement	77-26
77.25 Webbing and Round Slings.....	77-26

77.26 Eye Bolts and Hoist Rings	77-27
77.27 Ropes.....	77-27

78.0 ELECTRICAL

78.1 Authorized Employees.....	78-1
78.2 Electrical Cords.....	78-1
78.3 Electrical Panels.....	78-1
78.4 Voltage Rated Rubber Gloves	78-2
78.5 Shorting Electrical Circuits.....	78-2
78.6 Working Near Power Lines	78-2
78.6.1 Measuring Overhead Clearance.....	78-3
78.7 Booms Near Power Lines	78-3
78.7.1 Proper Clearances	78-3
78.7.2 Stationary Worksites.....	78-4
78.8 Power Supply Turned Off.....	78-4
78.9 Handling Electrical Wires.....	78-4
78.10 Lockout / Tagout.....	78-5

79.0 WELDING

Cutting, Welding or Heating

79.1 Authorized Employees.....	79-1
79.2 Protective Equipment.....	79-1
79.2.1 Eye Precautions.....	79-1
79.2.2 Shielding	79-2
79.2.3 Proper Clothing.....	79-2
79.2.4 Cleaning Work Area	79-3
79.3 Fire Protection.....	79-3
79.3.1 Protecting Area	79-3
79.3.2 Welding Heating or Cutting on Freight Cars..	79-3
79.3.3 Welding, Heating or Cutting on Tank Cars	79-5
79.4 Repairs or Alterations	79-6
79.5 Equipment Condition.....	79-6
79.6 Ventilation.....	79-6
79.7 Confined Spaces.....	79-7
79 7.1 Safety Precautions.....	79-7
79.8 Hot Work	79-7
79.9 Use of Oxygen	79-8
79.10 Oil and Grease.....	79-8

79.11 Hot Metal Precautions.....	79-9
79.12 Exposure to Excessive Heat.....	79-9
79.13 Cutting Under Tension.....	79-9
79.14 Cylinders	79-9
79.14.1 Storing Cylinders	79-9
79.14.2 Working with Cylinders.....	79-10
79.14.3 Transporting Cylinders	79-11
79.14.4 Empty Cylinders	79-11
79.14.5 Leaking Cylinder.....	79-11
79.14.6 Changing Cylinders.....	79-12
79.15 Regulators	79-12
79.15.1 Proper Regulator	79-12
79.15.2 Connections and Adapter	79-12
79.15.3 Connecting Regulators	79-12
79.15.4 Protecting Regulators.....	79-13
79.16 Valves.....	79-13
79.16.1 Opening Cylinder Valves.....	79-13
79.16.2 Closing Valves	79-14
79.16.3 Clogged Valves	79-14
79.16.4 Torch Valves	79-14
79.17 Hoses.....	79-14
79.17.1 Hoses and Color Codes	79-14
79.17.2 Hose Connections	79-15
79.18 Torches.....	79-15
79.18.1 Torch Precautions	79-16
79.18.2 Lighters	79-16
79.19 Use of Natural Gas	79-16

Electrical Welding

79.20 Maintenance and Repair.....	79-16
79.21 Cable Insulation	79-16
79.22 Cable Connections	79-17
79.23 Portable Welding Machines	79-17
79.24 Grounding Electrical Arc Welding	79-17
79.25 Protect from Electrical Shock and Moisture	79-18
79.26 Electrodes.....	79-19
79.27 Polarity Switch.....	79-19
79.28 Thermit Welding	79-19

80.0 WALKING / WORKING SURFACES

80.1 Avoiding Slips, Trips and Falls	80-1
80.2 Precautions Against Slips, Trips, and Falls	80-1
80.3 Stairs	80-2
80.4 Look Both Directions.....	80-2
80.5 Jumping.....	80-2
80.6 Working at Night or Low Light Level.....	80-2
80.7 Conveyors	80-2
80.8 Safe Distance from Edge	80-2
80.9 Turntables	80-2
80.10 Overhead Hazards.....	80-3

Ladders and Platforms

80.11 Approved Ladders.....	80-3
80.12 Inspection.....	80-3
80.13 Storage	80-4
80.14 Placement.....	80-4
80.15 Extension Ladders.....	80-5
80.16 Metal Ladders	80-5
80.17 Ascending or Descending	80-5
80.18 Near Doors and Aisles.....	80-5
80.19 Climbing with Tools/Material.....	80-5
80.20 Step Ladders.....	80-5
80.21 Platforms	80-6
80.22 Sectional Scaffolding.....	80-6
80.23 Fall Protection.....	80-6

81.0 WORKING AROUND TRACKS OR BEING ON EQUIPMENT

81.1 Precautions Around Tracks and Moving Equip.....	81-1
81.1.1 Walking On or Near Tracks.....	81-1
81.1.2 Precautions near Passing Trains or Equip.....	81-1
81.1.3 Signals for Movement.....	81-2
81.2 Crossing Tracks	81-2
81.2.1 Step over Rail.....	81-2
81.2.2 Sufficient Distance.....	81-2
81.3 Safety Appliances	81-3

81.4 Getting On or Off Equipment	81-3
81.4.1 Standing Equipment.....	81-3
81.4.2 Moving Equipment	81-4
81.4.3 Loading and Unloading Luggage and Materials	81-5
81.5 Crossing Through or Fouling Equipment	81-5
81.5.1 Crossing Through Standing Equipment.....	81-6
81.5.2 Stepping From One Car to Another	81-6
81.5.3 Moving Cars.....	81-6
81.5.4 Understanding Between Crew Members Before Crossing Through or Fouling Equip... ..	81-7
81.6 Placing Feet.....	81-8
81.7 Riding on Moving Equipment.....	81-8
81.7.1 Designated Riding Places.....	81-8
81.7.2 Unexpected Movement	81-9
81.7.3 Shifting Lading.....	81-9
81.7.4 Riding Flat Cars or Intermodal Cars	81-10
81.7.4.1 Riding Bulk Head Flat Cars and Centerbeam Flat Cars.....	81-10
81.7.5 Riding Tank Cars	81-11
81.7.6 Business Cars or Passenger Cars	81-11
81.7.7 Riding Locomotive Cranes and Work Equip. ..	81-11
81.8 Close Clearances	81-12
81.8.1 Avoiding Fouling Hazards	81-12
81.8.2 Maintaining Lookout.....	81-13
81.8.3 Impaired Clearances.....	81-13
81.9 Cars in Motion	81-13
81.10 Moving Equipment in Locomotive, Car, or M/W Repair Facilities	81-13
81.10.1 Using Mobile Equipment.....	81-14
81.10.2 Using Locomotive.....	81-15
81.10.3 One Person Operations.....	81-15
81.11 Hand Brake	81-17
81.11.1 Releasing Hand Brake.....	81-18
81.11.2 Difficult or Defective Hand Brake.....	81-18
81.11.3 Brake Sticks	81-18
81.12 Wheel Chocks	81-19
81.13 Coupling and Uncoupling	81-19

81.13.1 Going between Cars.....	81-20
81.13.2 Coupler and End Sill.....	81-21
81.13.3 Coupler Adjustment.....	81-21
81.13.4 Using a Knuckle-Mate.....	81-21
81.13.5 Using a Coupler Alignment Strap.....	81-22
81.13.6 Replacing Knuckles.....	81-23
81.13.7 Opening Angle Cock.....	81-24
81.13.8 Coupling and Uncoupling Hoses.....	81-24
81.14 Dump Cars.....	81-25
81.15 Car Doors.....	81-25
81.16 Load Dividers.....	81-26
81.17 Cars Being Loaded or Unloaded.....	81-26
81.18 Loading Roadway Equipment.....	81-27
81.19 Air Brake Rigging.....	81-28
81.20 Moving In and Out of Equipment or On Equip.	81-28
81.21 Locomotives, Working On or About.....	81-29
81.21.1 General Requirements.....	81-29
81.21.2 Restrictions.....	81-30
81.21.3 Locomotive Cab Floor.....	81-30
81.22 Securing Supply Apparatus.....	81-31
81.23 Lockout Protection Required.....	81-31

82.0 HANDLING SWITCHES AND DERAILS

82.1 Switches and Derails-Authority.....	82-1
82.2 Operating Switch by Hand.....	82-1
82.3 Switch Operation.....	82-1
82.4 Defective Switches.....	82-2
82.5 Spiked Switches.....	82-2
82.6 Operating High/Low-Stand Switch.....	82-3
82.7 Operating Lever Action Switches.....	82-4
82.8 Switch Point Locks.....	82-5
82.9 Spring Switch.....	82-6
82.10 Power Switch.....	82-6
82.11 Switch Heaters.....	82-6

83.0 INTERMODAL RAMP RULES

83.1 General Intermodal Ramp Rules.....	83-1
83.1.1 Reflectorized Clothing.....	83-1

83.1.2 Hearing Protection-Intermodal..... 83-1

83.1.3 Protection of Loading and Unloading
 Operations..... 83-1

83.1.4 Speed Limits in Yards..... 83-3

83.1.5 Strobe Lights..... 83-3

83.1.6 Live Equipment..... 83-3

83.1.7 Overhead Lifting..... 83-3

83.1.8 Lifting Arms..... 83-3

83.1.9 Walkways..... 83-4

83.1.10 Top Chords—Double Stack Cars..... 83-4

83.1.11 Getting On and Off Cars..... 83-4

83.1.12 Free Hands..... 83-4

83.1.13 Standing on Platform..... 83-4

83.1.14 Crossing Platforms..... 83-4

83.1.15 Staying Clear of a Suspended Load..... 83-4

83.1.16 Riding on Intermodal Equipment..... 83-5

83.2 Trailer on Flat Car..... 83-5

 83.2.1 Trailer Doors..... 83-5

 83.2.2 King Pin..... 83-5

 83.2.3 Bogies/Chassis..... 83-5

 83.2.4 Electrical Wrenches..... 83-5

 83.2.5 Hitches..... 83-6

83.3 Container on Flat Car/Double Stack—Securement 83-6

 83.3.1 Container Loading..... 83-6

 83.3.2 Chassis Stacks..... 83-7

 83.3.3 Side Spacers..... 83-7

 83.3.4 IBC Storage..... 83-8

 83.3.5 Securing Containers..... 83-8

 83.3.6 IBC Hammer..... 83-8

90.0 POLICIES AND PROGRAMS

90.1 Drug and Alcohol Policy..... 90-1

90.2 Bloodborne Pathogens Policy..... 90-4

90.3 Smoking Policy..... 90-6

GLOSSARY..... GL-1

INDEX..... INDEX-1

This page intentionally left blank.

70.0 GENERAL SAFETY INSTRUCTIONS

70.1 Safety Responsibilities

Employees must:

- be responsible for their personal safety and accountable for their behavior as a condition of employment,
- take every precaution to prevent injury to themselves, other employees, and the public,
- comply with all rules, policies, and outstanding instructions,
- report, correct, or protect any unsafe condition or practice,
- be aware of and work within the limits of their physical capabilities and not use excessive force to accomplish tasks,
- use good judgment in fulfilling job responsibilities safely.

Past practices that do not conform to the rules are unacceptable.

70.2 System Safety Policies

Several Safety Rules make reference to policies contained in company publications such as the *Safety Resource Manual and the Environmental, Law, Policies and Procedures Manual*. Other company or departmental policies are also in effect. Employees must be trained and be conversant with applicable policies and procedures related to their duties, and be governed by them. Employees will have access to this information available through their local manager.

Note: See *Rule 1.13, Reporting and Complying With Instructions*.

70.3 Job Briefing

Use the Job Briefing process:

- Before work begins, when all persons, including employees and contractors, are present.
- After work begins, if person(s) arrive who missed the original job briefing.
- When changes occur to the work plan or conditions change.
- When working in groups be aware of the work and movement of other group members and equipment.

Each work plan must consider hazards, assign specific responsibilities, and explain those assignments.

Note: See *System Special Instructions Item 17, Job Briefing*.

70.4 Lifting and Moving Material

Each person is responsible for determining their lifting limitations. Obtain additional help or mechanical assist device(s) to lift or handle heavy or awkward objects.

Observe the following principles of correct and safe lifting:

- ensure secure footing and a good grip on the materials,
- keep the object close to your body,
- keep your upper body erect,
- lift smoothly—do not use jerky motions,
- do not lift and twist at the same time.

70.4.1 Steps to Safe Lifting

Observe the following steps when lifting any items:

1. Check the load for size, weight, stability, and grip.
2. Make sure the pathway to be used is clear of obstructions, debris or other conditions which may cause loss of footing.

3. Inspect the unlift areas for a clear unlift, preferably at knuckle height, without reaching.
4. Choose the right lifting technique (e.g., squat, semi-stoop, or balanced one-hand lift).

70.4.2 Lifting with Two or More Employees

Conduct a job briefing before beginning a task and define responsibilities and techniques for the type of lift being performed. One individual will give commands for all movements (lifting, walking, lowering, or throwing). Place the individual at one end of the object being lifted. Avoid walking backward.

70.5 Protection of Body Parts

Do not place hands, fingers, feet, legs or any part of your body in a position where they might be struck, caught, pinched or crushed.

70.5.1 Safety Around Machines and Equipment

Do not enter areas where you could be caught in the operation of machinery or equipment. When tools, equipment or machinery becomes jammed or obstructed in any manner, it must be stopped and lockout / tagout procedures followed.

Note: See *Safety Resource Manual, Lockout / Tagout Policy, Section IV-H.*

70.6 Door or Hatch

When opening or closing a door or hatch, face it and use handle or grab iron. Use care and keep clear of the door side or edge.

Note: See *Rule 81.15, Car Doors and Rule 81.20, Moving In and Out of Equipment or On Equipment.*

70.7 Building Safety

The following rules apply to all buildings including offices, shops, crew rooms, towers or similar structures.

70.7.1 Filing Cabinets

The contents of filing cabinets must be arranged and distributed so as not to make the cabinet top heavy.

70.7.2 Drawers

Drawers on file cabinets, desks, tool boxes, etc., must be closed when not in use. Do not have more than one drawer open at one time.

70.7.3 Paper Cutters

Exercise caution while operating paper cutters, trimmers and power paper punches.

Keep fingers clear of the cutting blades and make sure blade guards are in position.

Paper cutter blades must be left in the closed position and secured after use.

70.7.4 Defects

Report sharp edges, splinters or defective parts on office furniture or equipment so repairs can be made. If unsafe, appropriate action must be taken.

70.7.5 Cords

Permanent installations of equipment with cords (telephone, electrical, computer, etc.) that are in walking areas must be encased. Action must be taken to protect temporary installations.

70.7.6 Chairs and Benches

Do not stand on chairs and benches. Unsafe chairs or benches must not be used.

Chairs must not be repaired or altered in any way except by an authorized repair service.

While seated in a chair, all chair legs must remain in contact with the floor.

70.8 When Warning Traffic at Grade Crossings

When required to be on a grade crossing to warn traffic of an approaching movement, the employee must be in a safe location to avoid injury if the motorist fails to heed the warning. Do not stand in traffic lanes unless traffic has come to a stop.

Do not motion vehicles to proceed over grade crossings, except as provided in Chief Engineer's Instruction Bulletins and as per Rule 74.12, Railroad Crossing.

70.9 Removal of Unauthorized Persons

Unauthorized persons or trespassers on company property must be told to leave the premises, unless confronting the person(s) would be unsafe. If the person(s) refuse to leave, or if confronting the person(s) would be unsafe, request immediate assistance from Railroad Police or local law enforcement authorities. When feasible, Railroad Police must be advised of all unauthorized persons or trespassers on company property.

70.10 Criminal Activity

Immediately contact Railroad Police or local law enforcement authorities to report any type of criminal activity or suspected criminal activity on company property.

This includes, but is not limited to, trespassing, theft, burglary, assault, vandalism, switch tampering and arson.

70.11 Housekeeping

Good housekeeping must be maintained at all times. Dispose of garbage, water bottles, used batteries, or other refuse material (such as sun flower seeds, smokeless tobacco residues, cigarette butts, etc.) in a proper manner and in appropriate disposal receptacles. Do not discard aerosol cans in containers that may be incinerated. Company refuse facilities are not to be used for personal use.

Do not place or allow tools, equipment or other materials to remain on floors, stairways, or walkways where they could cause a slip, trip or fall.

Note: See *Rule 1.24, Clean Property*.

70.12 Protruding Nails

Remove or flatten protruding nails or screws when removing boards or timbers or when you notice protruding nails or screws while performing duties.

70.13 Turning on Power

Inspect affected areas and ensure it is safe before turning on electricity, gas, steam, fuel oil, air, water or putting any machinery in operation.

70.14 Warning Signs

Label damaged or defective machines, switches, valves, or other apparatus with a danger sign, tag, or banner. Danger signs must be placed at locations where there are exposed energized circuits. Only authorized personnel may remove the sign when safe conditions are restored. Do not operate machines, switches, valves, or other apparatus with attached danger signs, tags, or banners.

70.15 Compressed Air/gas

Use of compressed air or any gas to blow dust or dirt from the body or clothing is prohibited. An air nozzle must not be placed against any portion of the body. Compressed air must not be used for cleaning purposes in shop areas, unless the hose nozzle is of the type which will reduce the pressure to 30 psi or less at the main opening when dead-ended or obstructed.

Inhaling purposely any type of compressed gas not specifically designated for inhalation is prohibited.

70.16 Drop or Throw Objects

Do not drop or throw tools, materials or other objects that might cause personal injury, fire, or equipment or property damage.

70.17 Rail Under Tension

Close observation must be made to determine whether rail is too tight to safely perform work:

- at point where there has been a derailment,
- in periods of high temperature,
- at location where rail is kinked or damaged,
- before beginning to renew rail or to remove part of fastenings from one or more rails.

70.18 Fusees Storage

Fusees must be kept away from high temperatures, fire or open flame and stored:

- in approved containers in motor vehicles and other designated equipment,
- in flagging kits or racks in engines and cabooses,
- in the original shipping container in a storage cabinet.

71.19 Fusee Use

Fusees must be:

- only used for signaling or flagging purposes,
- kept away from high temperatures, fire or open flame.

Do not place fusees where they may cause a fire.

Fusees are not to be placed in locations where they may become wet. Fusees showing evidence of having been soaked in water, oil, etc., or otherwise damaged, must not be used and must be disposed of properly.

To the extent practical, fusees must be kept where they cannot be obtained by unauthorized persons. Misuse or horseplay involving fusees is strictly prohibited.

When lighting fusees, hold the end to be lighted down and away from your body, striking away from the body to prevent burns to hands, feet or clothing.

Do not place lighted fusees on open bridge decks, trestles or approaches, or use them near flammable or combustible material.

Extinguish the fusee after giving hand signals.

70.20 Confined Space Entry

Observe applicable confined space entry procedures when going into designated confined spaces, such as, sewers, manholes, tanks, pits, etc.

Note: See *Rule 79.7, Confined Spaces and Safety Resource Manual, Confined Space Entry Program, Section IV-G.*

70.21 Air Contaminants

Take precautions to reduce exposure when working around gases, fumes, mists, vapors, or dusts emitted by equipment,

vehicles or work processes. Do not enter a suspected or confirmed contaminated area without following prescribed procedures and using required personal protective equipment.

Note: See *Safety Resource Manual, Respiratory Protection Program, Section IV.E.*

70.21.1 Internal Combustion Engines

Avoid excessive exposure to exhaust fumes from internal combustion engines. Such engines must not be allowed to run unless adequate ventilation exists. Do not expose fresh air intake systems to internal combustion engine exhaust.

70.22 Chemical Spills

Avoid contact with commodities at accident sites until the materials have been identified and safe handling procedures determined.

In the event of an oil or hazardous material spill from any source that will contaminate the ground or a waterway, if safe to do so, take steps to stop spillage.

It is the responsibility of the employee who discovers this spill to immediately notify the appropriate authority, advising:

- the location of the spill,
- material and amount spilled,
- distance to nearest public waters,
- any other information that may be pertinent.

If a fire or vapor cloud is visible from an unknown source or one known to be toxic, move yourself and others upwind to a distance of at least one half mile, further if deemed advisable, until Emergency Response personnel have advised that the area is again safe to enter.

70.23 Skin Protection

- Do not clean any part of your body with gasoline, solvents or with oily or dirty rags.
- Do not wear clothing that is contaminated with gasoline, solvents or oils.

70.24 Hazard Communication Standard

The Hazard Communication Standard (HCS), also known as Right to Know (RTK) was developed by the Occupational Safety and Health Administration (OSHA). It was designed to benefit employees and it is the responsibility of all employees to become familiar with and comply with the provisions of the HCS.

Employees must be familiar with the contents of chemical substances they work with as a preventative measure to avoid accidents and injury. Only chemicals, paints, compounds or other products approved by the company will be used. Before handling containers or using chemical substances, employees must be aware of the contents and any hazardous conditions that may exist. They must take all necessary precautions to ensure the safety of themselves and others, and must wear approved protective equipment that may be required.

Note: See *Safety Resource Manual, Hazardous Communication Program, Section IV-I.*

70.25 Drums and Containers

Label all drums, totes, tanks and containers as to contents. Drums must be kept closed, except for immediate use. When opening drums that have been exposed to heat from the sun or other sources, use proper protective equipment, stand in the clear and open slowly until the pressure is released. Do not pour contents of drums or barrels on the ground or in drains. Be certain all contents are disposed of

properly. If any doubt should arise as to proper disposal of drum or barrel contents, contact your supervisor. Drums that have bung holes that are recessed or level with the barrel rim must be positioned to the side with the barrel tipped at least one inch to prevent moisture from entering barrel.

Note: See *Environmental Laws, Policies, and Procedures Manual, Drum Storage, Reuse and Disposal*.

70.26 Working with Refrigeration Systems

Only qualified employees shall service or repair refrigeration systems and must follow manufacturer's instructions.

This page intentionally left blank.

71.0 PERSONAL PROTECTIVE EQUIPMENT

71.1 General Guidelines

Only personal protective equipment (PPE) approved by the Safety Department will be used while on duty and only for the purpose intended. PPE must be used where conditions of the job require and in accordance with rules, instructions, or directions from supervisor. Anyone entering designated areas or working near others wearing PPE must also wear the required PPE. Keep all PPE issued to you in good order, properly fitted and replace as may be required to maintain intended protection.

71.1.1 Altering Personal Protective Equipment

Do not alter or use altered PPE.

Note: See *Safety Resource Manual, Personal Protective Equipment Approval Policy, Section IV-A*.

71.2 Hearing Protection

Wear approved hearing protection devices, as specified by manufacturer, in areas designated by signs or outstanding instructions, or as specified by a supervisor. Approved hearing protection devices are stock devices defined in the Personal Protective Equipment Catalog. In some cases, wearing dual protection devices is required, which consist of ear plugs plus muffs.

71.2.1 Service, Repair and Mechanical Facilities

Hearing protection is required when working in or around the following service, repair, or mechanical areas:

1. **Car and Locomotive Shop Buildings.** When working in open-sided or enclosed car and locomotive shop buildings.

EXCEPTION: Persons in low noise areas, identified by Safety Department, are not required to wear hearing protection.

2. **Car Repair or Service Track Buildings.** When working in open-sided or enclosed areas where cars are repaired or locomotives are fueled or serviced.

EXCEPTION: When in offices with doors and windows closed, these areas do not require hearing protection.

3. **Load Testing, Sand Blasting, or Grit Blasting Areas.** When working close to or within areas where load testing, sand blasting or grit blasting equipment is in operation.

4. **Mechanical Facilities.** When working in or around mechanical facilities designated by a sign or instructions.

71.2.2 Locomotives

Employees must wear hearing protection anytime they are within a radius of 100 feet of a locomotive. However, hearing protection is not required for employees who are inside the cab with the cab doors and windows closed.

71.2.3 Near Retarders

Hearing protection is required within 150 feet of master, group, or inert retarders during humping and trimming operations. Dual hearing protection (ear plugs and muffs) is required within 10 feet of these operations.

When near operating retarders:

- Engine windows and doors must be closed when passing through operating retarders. All occupants must be inside the locomotive cab.
- Do not ride a car through operating retarders.

Exception: Hearing protection is not required when riding through or working around Dowty retarders, unless protection is needed for other purposes.

71.2.4 Roadway or Work Equipment

Hearing protection is required within 100 feet of operating roadway or work equipment.

71.2.5 Jet Blowers or Pile Drivers

Hearing protection is required within 150 feet of operating jet blowers or pile drivers.

71.2.6 Other Equipment and Tools

Hearing protection is required when operating or within 15 feet of any of the following equipment or tools in operation:

- Welding or cutting equipment (oxy-fuel, gas, or electric).
- Abrasive wheel grinder or sander (pedestal, bench, or portable).
- Air lance or nozzle (for blowing compressed air).
- Chain saw.
- Nail gun (air or powder-actuated).
- Power saw, planer, router, or joiner.
- Equipment or tools powered by:
 - Air
 - Combustion engine
 - Electricity
 - Hydraulic
 - Pneumatic
 - Steam

Note: See *Safety Resource Manual, Hearing Conservation Program, Section IV-D*.

71.3 Gloves

Use appropriate hand protection when hands are exposed to:

- skin absorption of harmful substances,
- cuts, lacerations or abrasions,
- punctures,
- chemicals,
- temperature extremes.

Note: See *Safety Resource Manual, Personal Protective Equipment Approval Policy (6.0 Hand Protection), Section IV-A*.

71.4 Hard Hats

Hard hats must be worn at all Locomotive, Car and Maintenance of Way facilities and work sites and in other designated hard hat areas as specified by department head.

Hard hat is not required in:

- office areas and lunch rooms,
- vehicles or equipment that provide overhead protection against falling objects,
- areas exempted with documentation by the appropriate department head.

Only liners that do not interfere with fit and function of the hard hat can be worn. Baseball or similar type caps must not be worn under hard hats. Altering of hard hats or hard hat suspensions is prohibited. Hard hats must not be worn backwards, unless attachments being used are designed for such use and suspension is reversed.

Bump caps will not be used to fulfill hard hat requirements.

Exceptions:

1. A track welder, wearing a Powered Air Purifying Respirator (PAPR), will not be required to wear a hard hat when working in areas where there is no potential for injury to the head from falling objects.
2. Transportation employees are not required to wear hardhats when:
 - moving locomotives to or from locomotive service areas,
 - spotting cars within car or maintenance of way repair facilities.

Note: See *Safety Resource Manual, Personal Protective Equipment Approval Policy (4.0 Head Protection), Section IV-A.*

71.5 Eye Protection

Wear company-approved eye protection in all designated areas or when specified by the appropriate department head. It is not required in:

- office areas and lunch rooms,
- enclosed vehicles (including locomotives).

71.5.1 Areas that Require Eye Protection

Safety Glasses. Wear spectacle-type, 100-percent safety glasses with side shields when on duty at locomotive or car repair and servicing facilities and maintenance -of-way work sites, shops, and facilities. Employees requiring corrective lenses must wear either company approved prescription safety glasses or coverall-type safety goggles.

Other Glasses. As designated by the department head (Vice President Transportation), train, engine, yard and all other personnel on company property and on duty must wear glasses (FDA-approved or ANSI Z87.1-approved) They must be spectacle-type glasses that cover the entire eye area (no half glasses or granny glasses).

71.5.2 Additional Eye Protection Requirements

Wear additional eye protection when performing specific work activities and follow any additional procedures specified in outstanding instructions or rules:

Task or Condition	Protection Required
Handling acids and caustics	<ul style="list-style-type: none"> • Splash goggles with face shield
Fueling locomotives	<ul style="list-style-type: none"> • Splash goggles, or • Face shield with safety glasses
Using powered chip-producing equipment (i.e., grinders, buffers, chippers, scalers, or railsaws) or chipping slag	<ul style="list-style-type: none"> • Face shield with dust goggles, or • Welding helmet with clear lens
Using or observing electric arc welding	<ul style="list-style-type: none"> • Proper helmet with proper lens shade and safety glasses
Dusty environment created by windy conditions	<ul style="list-style-type: none"> • Dust goggles as needed • Pyramex safety glasses
Removing components or working overhead when dust and debris may become loose; dust and debris, or the potential for such, in the facial area when using impact tools; sanding locomotives	<ul style="list-style-type: none"> • Dust goggles required
Using explosive charged tools	<ul style="list-style-type: none"> • Dust goggles, or • Face shield with safety glasses
Using chain saw	<ul style="list-style-type: none"> • Dust goggles, or • Face shield with safety glasses
Thermit welding and applying Cadwell bonds	<ul style="list-style-type: none"> • See Rule 79.28 (Thermit Welding)
Jump starting batteries with booster cables	<ul style="list-style-type: none"> • Safety glasses required. Face shield recommended.

Note 1: Reference Safety Resource Manual, Personal Protective Equipment Policy (Assessment of Personal Protective Equipment), Section IV-A, for application of this rule to other specific tasks.

Note 2: It is essential that a good fit between the face and the contact surfaces of goggles is maintained. Safety glasses are not required when goggles are used.

71.5.3 Contact Lenses

Do not wear contact lenses when working in areas where wind, dust, and other foreign matter constitute a hazard or when chemicals may cause a splash, mist, or vapor hazard.

71.5.4 Dark Lenses

The wearing of dark lenses under insufficient lighting conditions is prohibited, except when engaged in an operation requiring dark lenses.

Note: See *Safety Resource Manual, Personal Protective Equipment Approval Policy (2.0 Eye and Face Protection), Section IV-A.* and *Safety Resource Manual, Eye Protection Policy, Section IV-B.*

71.6 Proper Attire

Wear clothing that allows you to perform your duties efficiently and safely. Clothing must not interfere with vision, hearing and free use of hands and feet.

Do not wear loose or ragged clothing, neckties, finger rings, or other jewelry that has the possibility of being caught on something while operating or working with machinery or performing manual labor.

Hair, including beards, must be worn in a manner to permit safe performance of duties.

Wear a suitable shirt that provides protection from sun, insects, abrasions or scratches. Shirts must have at least quarter-length sleeves and cover the back, shoulders, chest and abdomen. Shirts must not be unbuttoned, torn or baggy. Anyone working around equipment or moving machinery in which a shirt might become entangled must have their shirt tails tucked into their trousers. Shirts should be loose enough to allow freedom of movement, but not too loose so that they will snag easily or catch on cars, engines, tools, machinery or other equipment.

When working outside:

- and/or around cars, engines, equipment or machinery, wear trousers which cover the legs. Short trousers (cutoffs, shorts, etc.) are prohibited and must not be worn while on duty.
- Engineering Department employees are required to wear an approved orange vest or outer wear with reflective striping.

71.7 Footwear

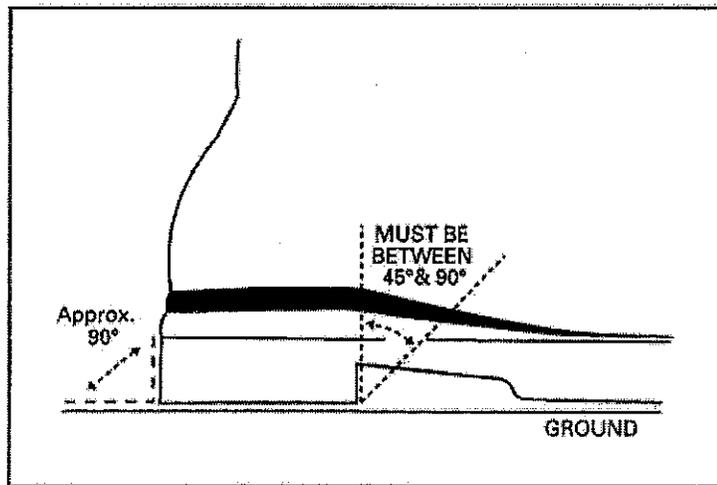
When working on uneven terrain, on or near tracks, on cars, engines or other equipment wear footwear that affords support and protection. Footwear must have soles that provide good traction and thick enough to withstand punctures.

Footwear with laces or buckles must be tied or buckled. Do not wear excessively worn footwear or footwear with loose soles or heels.

Unless you work exclusively in an office, you must not wear thin-soled or high-heeled shoes, sandals, athletic (sports) shoes or similar footwear.

71.7.1 Defined Heel

All employees, except office workers are required to wear footwear with a defined heel. A “defined heel” means that the back of the heel is at an approximate right angle from the sole of the shoe and from the ground when standing. The front of the heel must not be at an angle of less than 45 degrees from the sole of the shoe to the ground. Footwear with heels commonly called “riding heels” are not appropriate footwear and do not satisfy this requirement. However, approved snow packs are acceptable.



71.7.2 Covers the Ankle

Footwear that covers the ankle will be a boot (either slip on or lace up) of approximately 6 inches or more in height. Employees who routinely work in the field must wear footwear that covers their ankles. Lace-up boots are required for Transportation Department employees. Intermodal employees that load and unload trailers/containers are required to wear 6 inch lace-up safety toed footwear that meets OSHA requirements.

71.7.3 OSHA Required Footwear

When working in areas where there is a danger of foot injuries due to falling or rolling objects, or objects piercing the sole of the foot or electrical hazard, protective footwear as defined by the OSHA Standard 1910.136 is required. All safety toe footwear must meet ANSI Z41.1, Standard Class #75. OSHA required footwear is required for the following departments:

- Engineering
- Locomotive
- Car
- Supply
- Telecommunications
- Intermodal

71.7.4 FRA Required Footwear

Bridge workers are required to wear safety footwear that conforms to FRA footwear requirements.

71.7.5 Visitors and Contractors

Visitors and contractors must wear the same type of footwear as those with whom they are working. The individual responsible for the visitor shall ensure compliance.

Note: *See Safety Resource Manual, Personal Protective Equipment Approval Policy (5.0, Foot Protection), Section IV-A and Safety Resource Manual, Safety Shoe Policy and Guidelines, Section IV-C.*

71.8 Respirators

When conditions require use of respiratory protection, refer to the Safety Resource Manual, Section IV-E, Respiratory Protection Program. Before a UP employee is fit-tested with or issued a respirator, medical evaluation and respirator training is required. Medical re-evaluation is required every six years. Respirator training is required annually. Tight-fitting half or full face air purifying respirators require annual quantitative respirator fit-testing. Loose-fitting helmet or hood type respirators do not require fit testing, but all other requirements apply. Employees using tight-fitting half or full face air purifying respirators must not have facial hair that protrudes under the respirator seal or interferes with respirator valve functions. Employees using loose-fitting respirators must not have facial hair that interferes with respirator valve functions.

Note: *See Safety Resource Manual, Section IV-A, Personal Protective Equipment Approval Policy Paragraph 3.0 Respiratory Protection; Section IV-E, Respiratory Protection Program; and Section IV-AC, "Lead In Construction Program.*

72.0 FIRE PREVENTION

Note: See *Safety Resource Manual, Fire Protection Policy and Guidelines, Section IV-AH*.

72.1 Sounding Alarm

Sound the fire alarm and summon help, when available; attempt to control and extinguish a fire only if it can be done without personal injury.

72.2 Operating Fire Equipment

Know how to operate the fire protection equipment at the work location.

72.3 Fire Protection

Fire prevention is accomplished by maintaining good housekeeping procedures. Eliminate all rubbish, trash, oily rags and towels. Do not allow the accumulation of combustible materials and debris.

72.4 Fire Doors and Stops

Ensure that doors, shutters, and windows used as fire stops are in good condition and that no obstructions interfere with or prevent required operation.

72.5 Fire Exits and Passageways

Keep all fire escapes, ladders, stairways, doorways, passageways, roadways and approaches free from obstruction and in good repair to ensure safe exit from buildings and easy access to fire-fighting equipment.

72.6 Questionable Fire Hazards

Immediately correct and/or inform the supervisor if you question the safe condition of gas connections, motors,

wiring, gasoline or oil burning devices and vehicles or tools and equipment.

72.7 Fire Protection Devices

Fire protection devices must be provided, inspected and maintained as required by local, state and federal fire codes and regulations. Tampering with such devices is strictly prohibited.

72.7.1 Fixed Facilities

Extinguishers must be visually inspected monthly and subjected to an annual maintenance check by a qualified person. A qualified person will make a monthly inspection to determine that:

- there is no evidence of physical damage,
- the seal is not broken,
- the extinguisher is fully charged,
- the extinguisher is properly tagged with inspection date noted on tag.

Fire extinguishers in buildings must be properly marked to indicate location.

Access to fire extinguishers, alarm boxes and other fire protection devices must be kept clear.

Vehicles must not be parked or material placed or stored that block fire hydrants.

72.7.2 Mobile Equipment

Company vehicles (except automobiles), mobile shop equipment, and ride-on-track equipment must carry a properly maintained and inspected fire extinguisher of the correct class to aid in fire suppression.

72.8 Fire Classifications

The four fire classifications and the type of extinguishing medium necessary to extinguish them include:

- Class A.** Fires in ordinary combustible materials (e.g., wood, fabrics, paper, plastics, etc.). Extinguish with water, multipurpose dry chemical, or any fire extinguisher rated for Class A fires.
- Class B.** Fires in flammable and combustible liquids (e.g., gasoline, oil and grease, and gases). Extinguish with ordinary or multipurpose dry chemical, Halon 1211, or carbon dioxide, all rated for Class B fires. Sand or dirt may also be used.
- Class C.** Fires in energized electrical equipment. Use only nonconducting extinguishing agents rated as safe for Class C fires (e.g., ordinary or multipurpose dry chemical, Halon 1211, or carbon dioxide). If electrical equipment is involved in a fire, de-energize it as quickly as possible.
- Class D.** Fires in combustible metal. Use only nonconducting extinguisher agents rated as safe for Class D fires (e.g. foundry flux, lith-x powder, TMB liquid, pyromet powder, TEC powder, dry talc, dry graphite, powder, dry sand, etc.). If electrical equipment is involved in a fire de-energize it as quickly as possible.

Do not use water to extinguish Class B, C, and D fires.

Employees not experienced in handling energized electrical circuits must not attempt to extinguish fires on power line poles or directly connected equipment.

72.9 Right-of-Way Fires

Crew members must promptly report to the train dispatcher fires on or near the right-of-way unless the fire is being controlled. If the fire may spread to a bridge or other

structure, train must stop and crew members help extinguish the fire.

If employees know that a train has started a fire, they must promptly notify the train dispatcher and, if possible, the engineer. All other known fire causes should be reported to the train dispatcher.

72.10 Starting Fires

Flammable liquid must not be used to start or intensify a fire.

72.11 Open Burning Prohibited

Burning of any kind (i.e., ties, trash, for warming, etc.) is *not* allowed without written approval from the superintendent level or above. Approval will not be granted until the employee obtains the necessary environmental and fire permits from state and local authorities. Compliance with all fire permit provisions is essential. A fire permit alone will not be sufficient. A fire must be attended until it is completely out.

72.12 Ignition Sources

Do not smoke or use open fire:

- within 50 feet of areas where flammable or combustible liquids are being handled or stored,
- near oil storage tanks,
- in areas where LPG powered units are being serviced or stored,
- when working on or near storage batteries,
- in any designated non-smoking area.

When welding, heating or cutting on or near equipment with fuel tanks conduct a job briefing and ensure that appropriate fire prevention measures have been implemented.

Note: See *Rule 79.3, Fire Protection*.

72.13 Use and Handling of Liquefied Petroleum Gas (LPG)

Units powered by LPG must not be subjected to extreme heat in areas near ovens, furnaces or other sources of high temperature.

At the end of a day's operation, valves on tanks of LPG-powered equipment must be turned off to prevent leakage and potential explosion.

72.14 Flammable and Combustible Liquids Storage

Flammable liquids (including paints) and combustibles, must be stored in approved cabinets or designated areas and in approved and properly labeled containers. Store all spray cans in a cool place away from direct sunlight, radiators, stoves and other sources of heat. Do not puncture, incinerate or store above 120 degrees Fahrenheit.

72.14.1 LPG Tanks

Tanks containing LPG must be stored in an outdoor, ventilated, sheltered area, properly secured and clearly marked "No Smoking-Keep Lights and Fires Away."

72.15 Handling Flammable Liquids

Use approved containers and non-sparking tools when handling gasoline and other flammable liquids.

Label all drums, totes, tanks and containers as to contents.

Note: See *Rule 70.25, Drums and Containers*.

72.16 Cleaning and Polishing

Do not use gasoline for cleaning or polishing purposes. When using other flammable or combustible liquids for cleaning and polishing use:

- approved liquids and compounds in well ventilated areas,
- approved storage methods for cloths, waste or other materials used in cleaning operations,
- approved cleaning tanks with self-closing lids when using solvents,

72.17 Fueling Track Cars, Roadway Machines, and Automotive Units

When fueling mobile equipment, other than locomotives, employees must:

1. Move equipment out of enclosed area before fueling the vehicle. (This does not apply to equipment in the shop for repair.)
2. Stop the vehicle's engine before refueling.
3. Make sure the hose nozzle on the refueling can is always touching the side of the fill opening of a tank to prevent a hazardous static electric charge. If employees use a gasoline can, it must be equipped with a standard pouring spout.
4. Avoid spilling fuel. If fuel does spill, it must be cleaned up or allowed to dissipate before starting the engine.
5. If artificial light is necessary to fill the fuel tank, use an electric lantern or flashlight.
6. Smoking or open fires near fueling operations is prohibited.

Note: See *Environmental Laws, Policies and Procedures Manual, Spill Prevention Control and Countermeasures (SPCC)*

72.17.1 Fueling Portable Power Equipment

When fueling is necessary during use, the engine must be stopped and sufficient time allowed to cool. Tool must be removed from the immediate work area and placed where fuels cannot spill on any hot surfaces or ignition sources. Move fuel containers at least 20 feet from the work area before starting engine.

72.17.2 Fueling LPG tanks

Fueling of LPG tanks must be done outdoors at a location at least 15 feet from storage tanks at the end opposite from the relief valve. Portable tanks must be changed out-of-doors, where possible, and at least 50 feet from an open flame, except on outfit cars with kitchen facilities. When placing LPG tanks on motor vehicles, the engine must be stopped.

72.18 Buildings or Outfit Cars

Obtain authorization before installing any noncompany - furnished heating or lighting devices or appliances in company buildings or outfit cars. Do not use gasoline or alcohol stoves or lamps in company buildings or outfit cars.

72.19 Open Flame Starting

Do not use an open flame to warm cylinders, manifolds, carburetors, or other internal combustion engine parts before starting the engine.

72.20 Exhaust System

Maintain the exhaust system of internal combustion engines in a safe condition. Ensure that catalytic converters, exhaust systems and exhaust gases do not come in contact with dry grass, weeds, or flammable material.

72.21 Water Flash Back Protection

Water flash back protection device must be filled to the required level with water each week. Flash back water seals on hydraulic back pressure valves located on permanent lines through shops must be inspected at least once each week and water kept at proper level. Water seals of hydraulic back pressure valves must be tagged to show date inspected. Inspect back flow-check valve outlets at all stations on a weekly basis to determine that they will properly function.

73.0 EXPLOSIVES

73.1 Authorized Personnel

Only qualified and properly licensed personnel are permitted to use explosives. These persons must comply with the rules and regulations of the Bureau of Alcohol, Tobacco and Firearms (BATF) and the safety standards of the National Fire Protection Agency (NFPA). They must also observe all federal or state laws or city ordinances that cover handling, storing, and using explosives.

73.2 Transporting

When transporting explosives in railroad cars, trucks, automobiles, or other vehicles, use proper care and follow Department of Transportation (DOT) and BATF instructions.

Except in an emergency, do not transport explosives on track cars.

73.3 Caution Open Flames

Do not handle explosives near open flame, lights or fires. Use an electric flashlight or electric lantern if artificial light is necessary.

73.4 No Smoking

Do not smoke around explosives (smoking is prohibited on company property). The person lighting the fuse is the only one allowed to carry matches, lighters or other flame-producing devices.

73.5 No Dropping

Do not drop packages or cases of explosives or handle them roughly.

73.6 Not Carried in Pocket

Do not carry caps, electric primers, or other explosives in your pockets.

74.0 VEHICLES/BATTERIES

74.1 Vehicle Maintenance

Driver or supervisor assigned to a vehicle is responsible for lubrication and proper maintenance per vehicle maintenance or leasing company specifications. Drivers must record vehicle maintenance information and retain the maintenance record inside the vehicle.

Driver must know that the vehicle is in good working order and free of any defects. They must notify their supervisor if the vehicle becomes defective. Required repairs must be completed before the vehicle is returned to service.

74.2 Driver Requirements

Only authorized employees may operate company vehicles. All employees who drive company vehicles must:

- possess a current, valid driver's license or commercial driver's license (CDL),
- notify their supervisor and discontinue operating vehicles at any time their license or permit has expired, been suspended, revoked or restricted.

74.2.1 DOT-Qualified Drivers

Drivers of company vehicles that meet one or more of the following criteria will be required to pass a knowledge and skills (driving) test to become Department of Transportation (DOT) qualified:

- operate a vehicle with gross combination weight of 26,001 pounds or more,
- operate a vehicle designed to carry 16 or more persons, including the driver,
- operate a vehicle placarded under the hazardous materials regulations because of its hazardous cargo.

Drivers must have in their possession:

- Commercial Drivers License (CDL),
- copy of medical examiners certificate card.

Drivers of vehicles with gross vehicle weight (GVW) of more than 10,000 pounds must be qualified and familiar with Federal Motor Carriers Safety Regulations, which require that drivers have the following photocopies at company headquarters:

- Medical Examiner's Certificate,
- Road Test Certificate for DOT certified drivers who do not possess a CDL license,
- Drivers Operator's license,
- Waiver of Physical Disqualification, if applicable,
- Driver's Application for Employment, if the application included a prior driving record (If not, a new application must be completed and included in the operator's DOT file),
- Annual Review of Driving Record (required every 12 months).

74.3 Driver Responsibility

- Know and observe all local, state, and federal laws and regulations governing vehicle operation.
- Use courtesy, consideration, and common sense to prevent accidents and control situations encountered that cannot be provided for in the law.
- Obey posted speed limits. Regardless of posted speed limits, drivers must not exceed a safe and prudent speed for their vehicle when weather, traffic, road conditions, vehicle load or any other prevailing conditions necessitates operating at a lower speed.
- Ensure that required emergency equipment and tools are on the vehicle.

74.4 Impaired Driver

Do not drive when suffering fatigue, illness, lack of sleep or any other physical condition which may affect alertness and ability to operate the vehicle safely.

74.5 Tools and Material

Good housekeeping must be maintained in the vehicle at all times. Loose items must not be kept on the dash or on rear window shelf. Tools, equipment, material and freight must be properly secured. Gross Vehicle Weight (GVW) of vehicle must not be exceeded. Do not exceed load limit of trailers.

74.6 Clearing Obstructions

The driver must know the vehicle and load will clear all obstructions or close clearances. Do not park the vehicle foul of any railroad track. Do not park vehicle foul of the traveled portion of a roadway unless proper warning to approaching traffic is provided.

74.7 Passengers

Only employees or authorized passengers are permitted to ride in company vehicles.

74.8 Seat Belts

All vehicle occupants must use seat belts, where provided. This includes Company vehicles, privately-owned vehicles used on Company business, leased, rented or contract vehicles, and hi-rail vehicles on and off the rail. Driver must not move a vehicle until assured all passengers are seated and have their seat belts fastened in proper restraining position.

Seat belts will be inspected prior to use. Seat belts will not be removed from vehicles to avoid use. Missing or defective seat belts will be replaced immediately or the vehicle will be removed from service.

Seat belt use is required while operating material handling or utility type vehicles, if so equipped, i.e., forklifts, mobile cranes, mules, utility trucks, etc.

Exception: Seat belt use is not required if vehicle is not exceeding 5 mph and vehicle is used during the task of inspecting cars, coupling air hoses or changing brake shoes.

74.9 Seating, Transporting

Passengers must be seated on approved seats. Do not project body parts beyond the sides or rear of the vehicle. Passengers must not be transported in truck beds.

Getting on or off moving vehicles is prohibited.

74.10 Headlights On

Vehicle headlights will be illuminated while vehicles are in operation.

74.11 Back-Up Moves

Work must be planned to minimize backing movements.

Before driving a vehicle, drivers must walk around the vehicle (except for automobiles) and make sure it is safe to move. When backing up, drivers must look in the direction of movement.

When a driver is backing up and rear-ward vision is impaired, a second individual, when available, must be near the rear of the vehicle and guide the vehicle to protect the movement. If the person who is protecting the movement disappears from the driver's view, the driver must immediately stop the movement.

74.12 Railroad Grade Crossing

Drivers must approach railroad crossings prepared to stop. Vehicles designed to transport 16 or more passengers

including the driver or placarded vehicles must stop at all highway railroad crossings at grade. When crossing tracks in train yards and visibility is blocked by railroad cars or locomotives, the driver of the vehicle must:

- use alternate crossing or,
- stop the vehicle and verify (by either a flagman or personal observation) that there will be no movement on the tracks being crossed.

Drivers of vehicles transporting train, engine and yard (TE&Y) employees, must stop and look both ways, before proceeding over any crossing in a train yard.

74.13 Hazardous Materials

Do not place gasoline or other hazardous materials, including oxygen and fuel gas, in a bus or truck compartment occupied by the driver or other persons. This requirement does not apply to transporting railroad flagging kits. Do not transport gasoline or other flammables in an automobile trunk except in an emergency and then only in an approved container secured against movement.

When vehicles are required to transport flagging kits, a copy of the DOT Exemption 7991 must be in the vehicle.

When transporting hazardous material, the responsible employee must obtain and fill out Form 70056, "Shipping Papers for Hazardous Materials". If form is not available it can be obtained in "TCS" under: SW USE FORM70056 STUDENT. Material Safety Data Sheet (MSDS) Book must be carried in the vehicle.

74.14 Parked Vehicle

If necessary to leave the vehicle motor running, the parking brake must be firmly set and the transmission is placed in neutral (manual transmissions) or park (automatic transmissions) to prevent movement.

When vehicles are parked and left unattended, standard transmissions must be placed in low gear, automatic transmissions in park, emergency brake set and the motor stopped.

Ignition key must be removed, windows closed and doors locked. In addition, when vehicles or trailers are parked on a grade, precautions must be taken to ensure they cannot roll unexpectedly.

74.15 Trailers

Before towing trailers drivers must inspect:

- tires,
- hitches and safety chains,
- lights,
- equipment or material loaded on the trailer.

Any unusual condition noted must be corrected before towing is undertaken. If a trailer is equipped with brakes, the braking system must be operable. Safety chains, where required, must be used. Trailers must be equipped with required and operable stop, tail, directional and clearance lights. Electrical connectors on trailers and vehicles must be compatible and must be connected before towing.

74.16 Working under Vehicles/Trailers

Sitting or lying underneath vehicles or trailers is prohibited except when making inspection or repairs and then only when the brakes are set, wheels blocked and the engine stopped and keys removed. Do not position yourself under

any raised vehicle or trailer, unless proper support stands are in place.

74.17 Train Yard or Utility Type Vehicles

Only authorized drivers are permitted to operate train yard vehicles. Compliance with other vehicle rules, i.e., speed, inspection, etc. also apply to operating this type of vehicle. When rules for operation and care are furnished by the manufacturer they must be observed. Reckless or careless driving is prohibited.

Operators of vehicles must:

- maintain control at all times,
- be prepared to stop within one half their range of vision short of any person or object,
- avoid striking standing or moving equipment or being struck by moving equipment,
- maintain sufficient clearance to tracks and equipment on those tracks. (If tracks must be fouled or proper clearance cannot be maintained, movement must be protected.),
- operate only in designated areas and over designated crossings, pathways and road ways.

Riders shall not be permitted on vehicles unless provided with a seat. Riding side saddle on yard vehicles is prohibited. Vehicles designed for one person must not be occupied by more than one person. Where provided seat belts will be worn.

Do not make adjustments or disable any speed limiting device.

BATTERIES

74.18 Battery Inspection

Inspect batteries as required.

74.19 Charging Batteries

When charging batteries, keep the vent caps in place to avoid electrolyte spray. Maintain vent caps in functioning condition. If necessary to bring the liquid to the correct level, use approved water. Charger must be turned off or unplugged before connecting to or disconnecting from battery. Hook the charger to the positive post first and the negative post last. When removing the charger, disconnect the negative post first and the positive post last.

Smoking is prohibited in battery charging areas. Precautions must be taken to prevent open flames, sparks, or electric arcs in battery charging areas or around exposed batteries. The area must be adequately ventilated.

Emergency eye wash stations/showers must be located at or near permanent battery charging installations and must be inspected weekly. Plumbed systems must be flushed in conjunction with the inspection. Access must be kept clear.

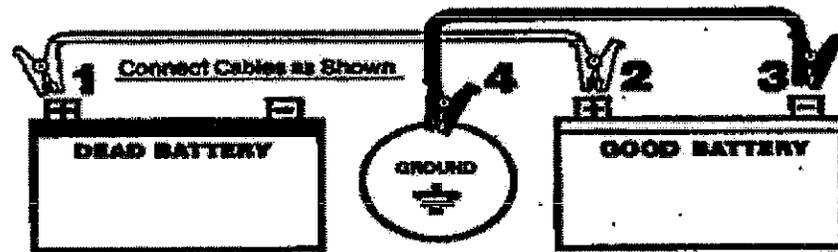
Tools and other metallic objects must be kept away from the top of uncovered batteries.

During cold weather, keep storage batteries maintained in a fully charged condition.

74.20 Jump Starting

When necessary to jump a vehicle battery, the following procedure must be followed:

1. Turn off all electrical accessories in both vehicles, including Company radio. Start the engine of the booster vehicle to keep its battery from being discharged.
2. Make sure the vehicles are not touching. If possible, boost on-track machines from a non-rail source (off-track vehicle/machine, booster pack or spare battery). If this is not possible, jump start the on-track machine from another on-track machine or vehicle using two sets of jumper cables to keep sparks away from either battery. After connecting one set of jumper cables to each battery, connect the negative ends of the jumper cables together first, followed by the positive ends. After starting machine, disconnect the positive ends first, followed by the negative ends.
3. Shift both vehicles into neutral or park and set the emergency brakes.
4. Check to be sure that both batteries are the same voltage.
5. Check to see that the fluid level is correct. If the fluid is frozen, do not attempt to start the vehicle.
6. Clamp one jumper cable to the positive (+) terminal of the dead battery (position 1 on diagram). Do not allow positive cable clamps to touch any metal other than battery terminal. Connect other end of positive (+) cable to positive (+) terminal of good battery (position 2 on diagram).
7. Connect one end of the second cable [negative (-)] to other [negative (-)] of good battery (position 3 on diagram). Make final connection on engine block of stalled engine (not to negative post) away from battery, carburetor, fuel line, any tubing or moving parts (position 4 on diagram).



8. Stand back from both vehicles. Start vehicle with good battery—then start the disabled vehicle.
9. Remove cables in reverse order of connections beginning by first removing cable from engine block or metallic ground.