Transportation Safety Rules

March 25, 2019
# TRANSPORTATION SAFETY RULES

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STATEMENT OF SAFETY POLICY

OUR COMMITMENT

Knowledge vigilance and caring are the foundation to any successful safety process. An older and wiser mentor of mine said to me many years ago;

"People don't care how much you know until they know how much you care."

At Central Maine and Québec Railway, one of our highest priorities will be to create an environment that is conducive to continuous learning and continuous improvement. It will also incorporate safety, not as a slogan or phrase on a calendar, but as essential to how we conduct our business.

Safety will be a condition of employment for all of us.

High standards and relentless follow-up are two of the key pillars of a successful safety process. Central Maine & Québec Railway will foster an environment with the highest of standards in the area of safety as well as classic railway operations.

Central Maine & Québec Railway will strive to demonstrate these high standards to our employees, customers, and the public.

Central Maine & Québec Railway emphatically believes that each injury and human factor incident can be avoided. The leadership team at Central Maine & Québec Railway will provide each member of its team with the training, tools and time necessary to complete each task safely. Our highest expectation of our entire team that we WILL complete each task safely.

Our success depends entirely on our team - as a team. The team will only attain our goals if each individual attains their goal. We are committed to creating and maintaining an environment that allows us to obtain our goals.

Please join me in this commitment.

Ryan Ratledge
President & Chief Executive Officer
JOB BRIEFING RECOMMENDED WORK GUIDELINES

Before beginning any task, be sure that a complete job briefing is conducted with all individuals involved in the task. The principles of the job briefing are as follows:

What?
A communication tool used by professionals to ensure that every team member knows what is to be done, how it is to be done safely, and is alert and focused on the job.

Who?
All members of the work group, including outside parties or contractors, are to be included and are responsible to participate in the briefing.

Why?
To ensure that the job is done right the first time: no injuries, no damage, and meeting CMQ’s standards.

When?
At the beginning of the job or at any time during the job as conditions change or new tasks are started.

Where?
Hold Job Briefings at or near the work site, in a safe location where the entire work group is together.

How?
Plan the job: Define the work to be done. How will it be done? What are the potential hazards? How will work assignments be made? What tools, equipment, and materials will be used?

Talk it through: Use “how” and “why” questions to communicate specifically who does what, when, where, why, how. What special precautions need to be taken? What if a hazard emerges?

Ask questions: All members of the work group are responsible to ask questions if they are unclear about work activities or have any safety concerns.

Make room for special conditions: If the job is complex enough, brief it in portions. What portions work best? What changes in job conditions require a re-briefing?

Do it again: If the job changes or a new task is begun, take time to make the right plan and talk it over. Whenever in doubt we are responsible to stop and conduct a job briefing.

Follow-up: We are responsible to follow the briefing plans and make sure others in our work group follow the plans.

Why Bother?
The individual who is typically alert and focused, but who is thinking of others things today, might be the same person to whom you are trusting your life.
Finding Information

This book is organized into four sections:

Section I: Core Safety Rules
These are rules that are common to all crafts. The Core Safety Rules are organized into Rights and Responsibilities; Personal Protective Equipment and Clothing, Work Environment; Working On or About Tracks; and Vehicles, Equipment, and Tools.

Section II: Craft-Specific Rules, Recommended Work Guidelines, and PPE Charts
This section establishes rules for craft-specific work activities and also provides Recommended Work Guidelines—craft-specific practices that professional railroaders have found to be safe and efficient for years. Rules must be complied with at all times. Recommended Work Guidelines should be followed unless another method is known to be as safe or safer. These practices give us freedom to decide which is the safest way for us to work. The Personal Protective Equipment charts outline requirements for the use of specific protective equipment.

Section III: Transportation Safe Job Procedures
Transportation Safe Job Procedures provide guidance to CMQ transportation employees on how to safely perform typical job duties. These rules begin with the prefix “TSP”.

Section IV: Appendix
The appendix includes a glossary of terms used in CMQ Safety Rules.

Feedback on CMQ Safety Rules and Recommended Work Guidelines

CMQ welcomes feedback and suggestions on improving any safety rule. Contact any railway manager with your suggested changes.
SECTION I: CORE SAFETY RULES

RIGHTS AND RESPONSIBILITIES

1. We have the right and the responsibility to make decisions based on experience, personal judgment, and training. We must make certain that:
   a. A copy of the CMQ Safety Rules and Recommended Work Guidelines is accessible to us while on duty.
   b. Sufficient time is allowed to perform all work safely.
   c. Job briefings are conducted prior to work and when activity changes.
   d. Co-workers are warned of known hazards.
   e. Warning signs, posted instructions, placards, or barriers marking restricted areas are displayed and complied with at all times.
   f. Our work place is drug and alcohol free.
   g. The behavior in our work place is civil and courteous.
   h. Oral and written reports of accidents and injuries are made to the supervisor or employee in charge immediately.
   i. One person does not engage in work activity that can only be done safely by two or more people.
   j. Anyone performing an unsafe act is redirected to safe work practices.

2. Only personnel with the proper authority and training will perform job tasks.

3. We must comply with all CMQ rules and policies and with local, state/provincial, and federal laws and regulations that relate to your job task(s).

CLOTHING AND PERSONAL PROTECTIVE EQUIPMENT

4. Wear approved personal protective equipment and clothing as required for your job and/or work environment.

5. Confirm that personal protective equipment is in good working condition before use. Remove from service if defective.

6. Use the approved personal protective equipment for the purpose(s) intended. Unauthorized modifications are prohibited.
WORK ENVIRONMENT

7. Keep work area and environment clean, orderly, and free from clutter, debris, and controllable hazards.

8. Handle, store, and dispose of contaminants, hazardous chemicals, and waste according to all applicable environmental regulations and CMQ policies.

WORKING ON OR ABOUT TRACKS

9. Expect the movement of trains, engines, cars, or other equipment at any time, on any track, and in any direction.

10. Do not foul or stand on the track in front of an approaching engine, car, or other moving equipment.

11. Look in both directions prior to:
   - Fouling or crossing tracks
   - Moving from under or between equipment
   - Getting on or off equipment
   - Operating a switch

VEHICLES, EQUIPMENT, AND TOOLS

12. Obey all traffic laws and regulations when operating vehicles on company business.

13. Before riding in or operating a motor vehicle, confirm that the vehicle is safe to operate. Secure tools, equipment, and materials in designated areas. Report defects. If unsafe to operate, remove from service.

14. Wear seat belt while operating or riding in motor vehicles operated off the rail.
   Exception: Seat belts are not required while traveling within a yard at speeds of 10 MPH or less.

15. While being transported in motor vehicles, only ride in seats permanently installed and approved by the manufacturer.

16. Before backing, confirm area to the rear is clear to ensure that no persons or obstructions are in the path of movement.

17. While operating company vehicles do not:
   - Leave motor running while unattended
   - Ride with the doors open or leave doors open while stopped
   - Open doors while vehicle is in motion
• Leave keys in unattended vehicles

18. Face the equipment and use three-point contact when getting on or off equipment or vehicles or when ascending or descending ladders.

19. Use the approved tool(s) for the purpose(s) intended. Unauthorized modifications are prohibited.

20. Inspect all tools, equipment, and related safety devices for unsafe conditions before use. Remove from service if defective.

21. Use safety equipment associated with all tools and equipment.

**OPENING DOORS OR WINDOWS**

22. When opening doors or windows:
   • Do not use brute force
   • Avoid placing any part of your hand or body where it can be pinched
   • Use door handles or other opening/closing devices whenever provided

**SMOKING**

23. Smoking is prohibited in all enclosed properties. Outdoor smoking should be confined to designated smoking areas and where it will not interfere with non-smokers.

   • Smoking means lighting, burning, inhaling or exhaling any substance, tobacco or vapor product including electronic cigarettes, pipes or cigars which emits either vapor or smoke.
   • Enclosed properties means all owned or leased office space or buildings, shops, automobiles, rail or work equipment vehicles, locomotives, and all other railroad rolling stock. All the federal, state, provincial and local smoking laws / prohibitions must also be complied with.
SECTION II: RULES, RECOMMENDED WORK GUIDELINES, AND PPE CHARTS

T-1 BODY MECHANICS AND LIFTING

See also TSP-40-41

**Lifting and Carrying**

a. Use the following principles of safe lifting:
   - Ensure good 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.
   - Lift with legs, not back.
   - Do not lift and twist at the same time.
   - If load slips from your grip, let it fall.

b. Obtain assistance or lighten the load if it is too heavy to lift safely by you.

c. Before lifting, carrying, or lowering objects with two or more people, confirm everyone knows movements to be made and coordinates the work.

**Recommended Work Guidelines**

Use good lifting practices and body mechanics when lifting.

Use lifting and carrying equipment to lift and move heavy loads.

Avoid tripping and slipping hazards while lifting or carrying.

Estimate weight of any object you plan to lift by test-tilting the object.

If you are unaccustomed to lifting, use extra caution and get help, or do not lift.

Use only moderate force and do not overexert when lifting, pushing, or pulling.

Stretch frequently and take short rest pauses to avoid excessive fatigue.

Schedule tasks to provide breaks from continuous work.

**Office Ergonomics**

**Recommended Work Guidelines**

Adjust the chair height so your elbows are at about desktop level and your knees are at least as high as your hips.

Adjust seat back for good support of the lower back, using a lumbar support if needed.

If your seat has a tilt feature, set this so you are comfortably supported.

If your feet don’t comfortably reach the floor or there is excessive pressure on the backs of your legs, use a footrest or lower the keyboard.

Locate your monitor so the top of the viewing area is at or below eye level.
With elbows at desk level, your wrists should be straight. Use a wrist rest if desired. If you have armrests, try to adjust them so they support your arms without being too high or low. Locate the mouse next to the keyboard so both elbows are by your sides while working. Use your mouse pad or another soft surface to pad edge of desk. Avoid pressing hands or arms against sharp edges.

Adjust screen brightness and contrast for clear, comfortable viewing. Clean the screen frequently.

**Stretches**

**Recommended Work Guidelines**

Perform stretches:

- At beginning of tour of duty.
- Prior to performing strenuous activity.
- After a period of inactivity.

Do not “bounce.” Stretch slowly and only to the point of mild tension.

Follow the guidelines on the following diagram:

**Recommended Stretches:**

- **Back Extension**: Repeat 3 times, 5 seconds each.
- **Neck Forward**: Do once for 15 seconds.
- **Neck Left & Right**: Do once for 15 seconds each side.
- **Elbow Pullover**: Repeat 3 times, 5 seconds each, both sides.
T-2 CROSSING THROUGH RAIL EQUIPMENT

a. Do not cross through moving equipment.
b. Do not cross under couplers or underneath cars unless duties require and protection against movement has been provided.
c. Do not step on the coupler or uncoupling lever.
d. Do not place hands, feet, or other parts of the body on the sliding sill or between the coupler horn and end sill of the car.

Recommended Work Guidelines
When crossing through a standing train or cut of cars, only cross through or over:

- Cars equipped with crossover platforms and hand holds.
- Empty intermodal cars or the empty stanchion ends of intermodal cars.
**T-3 Electrical Safety**

See also Electrical Safety Program – 7/1/2014

a. Do not attempt electrical work unless qualified and trained.
b. Report to the proper authority broken or sagging communication and signal wires, power lines, and guy wires. Do not touch broken or sagging wires, and protect others from them.
c. Keep the electrical cabinet doors closed and latched when the diesel engine is under load except when electrical work is being performed.
d. Always treat wires and circuits as if they were energized

**Recommended Work Guidelines**

Use only nonmetallic-cased flashlights around electrical equipment.

Do not wear metal bracelets, watches or the like when working with energized electrical equipment.

**T-4 Environmental Safety**

See also CMQ's Instructions for Handling Hazardous Materials

a. Do not clean any part of your body with gasoline, solvents, or oily or dirty rags. Use only hand creams and soaps designed for cleaning hands, arms, face, and other parts of the body.
b. Identify and label all chemical containers.

c. Recommended Work Guidelines

In the event of a chemical spill, avoid contact with materials and stay upwind of the site until the materials are identified and safe handling procedures are determined.

**T-5 Fire Safety**

a. Maintain unrestricted access to fire extinguishers, alarm boxes, exit aisles, and emergency exits.
b. Do not use gasoline or other flammable liquids to start or intensify a fire.
c. Store flammable and combustible material away from ignition sources.
d. Store flammable liquids only in approved containers.
e. Use proper grounding and bonding techniques to prevent static electricity charge when dispensing or transferring flammable liquids.
f. We may choose to fight a fire to protect life and company property, but only in those situations where we believe it is safe to do so.

c. Recommended Work Guidelines

Be familiar with the location and use of fire extinguishers, fire alarm boxes, fire exits, and evacuation plans in your work environment.
T-6 FOULING TRACK

a. Do not cross within 25 feet of the end of standing equipment, unless appropriate protection has been provided.
b. Do not enter or cross between uncoupled equipment that is separated by less than 50 feet, approximately one car length.
c. Unless duties require, do not sit or step on:
   • Rail, frogs, switches, switch machines or connecting rods
   • Derails
   • Retarders
   • Any part of a defect detector
d. Do not walk between the rails of, or foul the track except when duties require.
e. Do not position yourself between any structure and standing or moving equipment without sufficient clearance to avoid injury.
f. Do not occupy the top of railcars unless duties require.
g. Do not sit or lie underneath standing equipment unless duties require and proper protection has been provided.
h. Do not stand or sit on engine or caboose handrails.
i. Do not sit on steps of engines or cabooses.

T-7 FUSEES

See also TSP-31

a. Store fusees in approved racks or containers in locomotives or cabooses. Keep them away from high temperatures, open flames, and locations where they may become wet.
   a. Strike fusees away from the body when lighting.
   b. Do not use fusees that have been soaked in liquid (such as water or oil) or are otherwise damaged.
   c. Dispose of fusees appropriately.
   d. Do not place a fusee where the fire may spread to platforms, bridges, buildings, or combustible materials.

T-8 GETTING ON AND OFF EQUIPMENT

a. Maintain 3-point contact, face the equipment and use side ladders, sill steps, and grab irons provided when getting on or off equipment.
b. Do not board cars or engines that bear “bad order” cards without first knowing the nature of the defect so the defect can be avoided.
c. Do not get on or off moving cars or engines except in cases of emergency.
d. When employee operating an engine knows the ground man is preparing to get on or off, the movement must be stopped and the slack controlled.
e. When getting on or off moving equipment in an emergency:
• Look where you are going to place your feet to avoid hazards.
• Face the equipment.
• Get on or off with your trailing foot in the direction of movement.
f. Do not get on or off equipment under the following conditions:
   • When carrying any items that would prevent a secure handhold or proper balance.
   • In areas of bad footing or close clearances.
g. When riding any type of car and before coupling to equipment, employees must stop the movement and dismount prior to making coupling

**Recommended Work Practice**

Use smooth motions and do not overexert yourself as you climb.

**T-9 2-Step Protection**

**Locomotive Attached**

1. Two Step Protection is required when entering the RED ZONE on equipment coupled to an operator controlled locomotive:

   The RED ZONE is defined as:
   • Breaking the side plane of a car with one foot
   • Occupying the space within 25 feet of the end of a railcar

   For the purposes of:
   • Coupling air connections
   • Opening or closing angle cocks
   • Applying or releasing handbrakes
   • Inspecting or repairing equipment
   • Installing or removing markers
   • Adjusting mismatched couplers
   • Opening knuckles

a. When necessary to enter the RED ZONE an employee must request 2 Step Protection from the engineer by stating “Stepping in”.
   • The engineer MUST provide Two-Step Protection as follows:
     1. Fully apply the independent brake and, if necessary, apply the automatic brake.
     2. Center the reverser.
     3. Confirm with the employee that steps 1 and 2 have been completed by responding “Set and centered”.

   NOTE: If request for 2-Step Protection is given by radio, respond by radio.
If request for 2-Step Protection zone is given by hand signal, respond with hand signal or one short blast of whistle. Hand signals for 2-step protection will be determined by a Job Briefing prior to beginning switching operations.

- After the engineer confirms that 2-Step Protection is applied the employee may enter the RED ZONE.
- The engineer must not leave the locomotive unattended while 2-Step Protection is being provided.

b. Watch for slack adjustment if hand brakes are being released.
c. Do not go between uncoupled locomotives or cars when clearance between them is less than 50 feet, approximately one car length.
d. Utility Employees not attached to a crew must establish Blue Signal Protection when it is necessary to go on, under or between standing equipment.

2. Releasing 2-Step Protection:

- The engineer must not move or change the controls of the locomotive until 2-Step Protection has been canceled and the employee(s) has reported clear of the Red Zone.
- The Employee requesting 2-Step Protection will be responsible for maintaining that protection until all employees are in the clear.
- Release 2 Step Protection when clear of the Red Zone
- The engineer must acknowledge release of 2-Step Protection

NOTE: For purposes of this rule, the “engineer” is defined as the employee operating the controls of the locomotive.

| Action 1 - Conductor radios to engineer “Stepping IN” |
| Action 2 – Engineer centers reverser and applies air brakes |
| Action 3 – Engineer radios to conductor “Set and centered” |
| Action 4 – The conductor may enter the RED ZONE to perform duties |

LOCOMOTIVE NOT ATTACHED
Crew member(s) must notify all other members of the crew that they will be entering the RED ZONE of equipment.

The RED ZONE is defined as:

- Breaking the side plane of a car with one foot
- Occupying the space within 25 feet of the end of a railcar

For the purposes of:

- Coupling air connections
- Opening or closing angle cocks
- Applying or releasing handbrakes
- Inspecting or repairing equipment
- Installing or removing markers
- Adjusting mismatched couplers
- Opening knuckles
Crew members notified must acknowledge by radio that they understand a crew member will be entering the RED ZONE. If working in a yard where more than one crew is working, members of the other crew must acknowledge the employee being in the RED ZONE.

**T-10 HAND BRAKES**

*See also TSP-32*

a. Do not operate hand brakes on moving cars, except in an emergency.
b. Do not use your feet to operate the hand brake, except to manipulate the pawl on horizontal wheel (staff) brakes.

**T-11 INSTALLING OR REMOVING MARKER / ETD**

a. Before installing or removing a marker, ETD, confirm with the employee in charge of track(s) or other crews that may use the track that equipment is secure against movement.
b. If an occupied locomotive is attached to the cars from which the marker/ETD is being removed or installed, Two Step Protection must be obtained.
c. After operation is complete, advise affected employees.

**T-12 CLOSE CLEARANCES**

*See also TSP-28 & CROR Rule D*

a. Stop movement and dismount before passing close clearance areas or other side obstructions.
b. When close clearances are present and the track cannot be clearly seen due to obstruction or debris, stay ahead of the movement.

**T-13 MOVING LOCOMOTIVES IN OR AROUND MAINTENANCE FACILITIES OR CUSTOMER FACILITIES**

a. Keep others clear of and do not step over steel cables used to move engines, cars, or other equipment.
b. Ring engine bell:
   - When an engine is about to move.
   - While closely approaching or moving within maintenance facilities.
c. Confirm that all employees are clear of moving parts before starting the engine.

**T-14 CELL PHONE AND RADIO USE**

*SEE ALSO GSI TO CROR A xiii*

a. Do not use cell phones or radios when doing so would interfere with the safe performance of duties.

**Recommended Work Guidelines**

- When operating a motor vehicle, pull over and park before using cell phone or other electronic device.
- Use hands-free cell phone while driving when necessary to use cell phone.

**T-15 ON TRACK MACHINES AND VEHICLES**

a. Ride only if authorized by the employee in charge and the operator.

b. Sit or stand where the operator indicates. Hold on firmly at all times.

c. Do not get on or off track machines or vehicles while they are moving, except in emergencies.

**Recommended Work Guidelines**

- Watch for obstructions, close clearances and face direction of movement.

**T-16 PERSONAL PROTECTIVE EQUIPMENT AND CLOTHING**

*SEE ALSO TRANSPORTATION GENERAL REQUIREMENTS CHART*

**Clothing**

a. Wear clothing appropriate for your specific duties to perform work safely.

b. Always wear a waist-length shirt with sleeves and ankle-length pants.

c. Wear Company approved highly reflective vests or work wear when on duty.

Exception: when in office-type environments, parking lots, passenger rail cars, vehicles or within locomotive cabs.

**Eye and Face Protection**

*SEE ALSO TRANSPORTATION GENERAL REQUIREMENTS CHART*

a. Wear safety glasses with side shields approved by the company or goggles when on duty.

Exception: when in office-type environments, parking lots, passenger rail cars, vehicles or locomotives with windows closed.
b. Follow additional requirements as designated in the Transportation General Requirements chart.

**Footwear**

a. Wear footwear that conforms to the following criteria, except while working in office-type environments, parking lots, or passenger rail cars:
   - Lace-up work boot
   - Six-inches high (minimum)
   - Safety toe
   - Near-90º heel
   - Leather or leather-like uppers

**Recommended Work Guidelines**

Wear slip-retardant footwear or shoe accessories when icy conditions exist.
Do not wear shoe chains or metal studded footwear when walking on concrete, steel surfaces or indoors.

**Gloves**

**SEE ALSO TRANSPORTATION GENERAL REQUIREMENTS CHART**

a. Follow requirements as designated in the Transportation General Requirements chart.

**Hair**

a. Secure hair when working around machines or equipment in which hair could become tangled.

**Head Protection**

a. Wear a hard hat furnished or approved by CMQ when outside of locomotive on a work train, where posted or within industries that require them.

**Hearing Protection**

**SEE ALSO TRANSPORTATION GENERAL REQUIREMENTS CHART**

a. Company furnished hearing protection must be used when:
   - Within 100 feet of a locomotive operating in a throttle position other than idle.
   - When opening the door to or inside an engine room with the engine running.
   - When in front of a locomotive at a crossing being protected.
   - Within 100 feet of:
     - Working roadway maintenance equipment
     - Power operated tools (i.e. chain saws, brush cutting equipment, etc…)
   - Where posted.
   - When you have to raise your voice to clearly communicate with a person who is located next to you.
Exception: when in office-type environments, parking lots, passenger rail cars, vehicles or locomotives with windows closed.

b. Follow additional requirements as designated in the Transportation General Requirements chart.

**Portable Radios**

When using portable radios during switching operations:

a. Use a company approved chest pack holder
   or
b. Use a radio with an attached lapel microphone

**Dust Masks and Respirators**

Wear a company approved dust mask or respirator when unloading ballast or during other dusty conditions.

**Jewelry**

a. Remove loose or dangling jewelry when working in non-office environments.
b. Remove finger rings when working in non-office environments.
T-17 PERSONAL PROTECTIVE EQUIPMENT CHARTS

The following is the craft-specific General Requirements chart for Transportation that outlines requirements for protective equipment. The chart is designed to work in conjunction with the rules and Recommended Work Guidelines under T-16 Personal Protective Equipment and Clothing. Employees are encouraged to use Personal Protective Equipment at any time they feel their personal safety would be enhanced.

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Comments: See Hearing Protection rule on page 21 for exceptions and additional guidance.

T-18 RIDING IN OR ON MOVING EQUIPMENT

a. Do not ride:
   - On the end ladder or crossover platform of any car except to ride the trailing end of rear car provided the employee can ride outside the gauge of the rail.
     **EXCEPTION:** Employees may ride the end of cars equipped with a platform and a safety rail positioned between the platform and the end of the equipment.
   - On any part of the coupler apparatus, center sill, end sill, or framework.
   - Inside a car between a load of lumber, pipe, or other shiftable load and the end of the car. When a flat carload of this type is involved, do not ride between the end of the adjacent car and the load.
   - On the side of the flat car unless the car is equipped with hand holds high enough to allow for a firm handhold and erect body position.
   - Or walk between trailers or containers loaded on flat cars.

b. When riding equipment:
   - Face the direction of movement.
   - Maintain a three-point contact with the equipment at all times.
   - Protect against slack action.
   - Do not step or jump from one car to another.
   - Do not hold on to the end post, or sit or stand near the end door of a gondola equipped with drop ends.
• Never step on the sliding center sill or cushion underframe device of any car. Keep off couplers and their components.
• When practical, do not ride the bottom step when going over a crossing at grade.
• When other duties permit, remain seated while riding in locomotives and cabooses.
• Employees must not ride the side of rail cars equipped with a single vertical handhold until they have ensured that:
  a. Speed is not greater than 10 MPH.
  b. Three-point contact is maintained.
  c. A job briefing has been held and the engineer is aware that an employee is riding such car. The engineer must control slack accordingly.
• Employees must not ride on the deck of a flat car except for the purpose of protecting a shoving move. Employees who must ride on the deck of a flat car must ensure that:
  a. Speed is not greater than 10 MPH.
  b. Three-point contact is maintained. If the flat car is not equipped with a waist high handhold, the employee must ride in the center of the car in a “one knee” kneeling position.
  c. A job briefing has been held and the engineer is aware that an employee is riding a flat car. The engineer must control slack accordingly. Only ride on the deck of an empty flat car, or on a TOFC/COFC flat car with an empty stanchion or table, if you can:
    • Kneel or sit near the center of the car or the empty space.
    • Kneel or sit before the equipment moves and until the equipment stops and the slack is adjusted.

**Tank Cars**

Ride on the platform in a position where:
  a. Both feet are positioned on the outermost area of the platform outside the rail and pointing to the inside.
  b. One arm is firmly wrapped around the handrail pulling your body tightly up against it.

In all other cases, the other hand must be used to grip the handrail when not required to operate a belt pack, communicate on the radio, or give hand signals.

Employees MUST NOT:
  a. Ride the end of the platform with their feet pointing other than toward the inside.
  b. Ride any farther away from the edge of the platform other than what is required to maintain a firm footing and in no case where your feet are positioned over or inside the rail.
  c. Cross over the end platform unless the movement is stopped and will remain stopped.

**Recommended Work Guidelines**

Watch for obstructions and close clearance.
T-19 TOOLS

Recommended Work Guidelines
Use tools defensively so that if they slip or move unexpectedly, you will not lose your balance or risk injury.
Direct the cutting edge of sharp tools such as knives, chisels, and screwdrivers away from your body and hands.

T-20 WORK ENVIRONMENT

a. Arrange office equipment and work areas to keep aisles, emergency exits, and access to fire extinguishers clear.
b. Arrange contents of filing cabinets to balance the cabinet. Keep cabinet and desk drawers closed while unattended.
c. Keep body parts clear when using paper cutters. Close the cutting blade after use.
d. In walking areas, encase telephone or electrical cords in floor molding or properly secure them.
e. Use ladder to reach overhead objects. Do not use other objects, such as a chair, desk, or box.

Recommended Work Guidelines
Be prepared for hazardous footing conditions in your work environment.
Use hand holds where provided.
Inspect chairs and other office equipment for defects, removing from service if defective.
Use handrails when ascending or descending stairs or ramps.
Know the location of emergency exits and fire extinguishers.
Store frequently handled or heavy objects between mid-thigh and shoulder height.
When working on office machines (copiers, faxes, printers) use caution around sharp edges and parts with excessive heat.
Before placing equipment on a desk or table, check to be sure it is stable and can support the weight of the equipment.
Store sharp and pointed objects safely. Do not reach for them without looking.
Report any malfunctioning electrical equipment or other types of hazards to your supervisor. Do not wait for someone else to make the workplace safe.

T-21 WORKING ON OR NEAR TRACKS, LOCOMOTIVES, & RAIL CARS

See also 2-STEP PROTECTION RULE T-9
a. Do not give the signal to move locomotives, cars, or other equipment until all persons and equipment are clear of the movement and the route to be used is properly lined.
b. Only the craft of employee who applies a lock and tag may remove them. Other employees must not remove locks and tags or try to engage equipment that is locked out.
c. When chocking cars, use only a sound wooden chock or an approved chocking device.
d. If draw bar cannot be adjusted by pushing using moderate force, obtain help.
e. Do not open the angle cock on the leading end of a moving car or engine to control or stop movement.
f. Before attempting to operate switches or derrails, visually inspect them to make sure they are not:
   • Damaged.
   • Locked.
   • Spiked.
   • Fouled by ballast, ice, snow or other debris. Remove from service if defective, tag switch if practical and notify the proper authority.

T-22 COUPLING / UNCOUPLING RAIL EQUIPMENT

SEE ALSO TRANSPORTATION SAFETY PROCEDURES

a. Only use your hand to operate uncoupling lever
b. Do not adjust the coupler or knuckle of an approaching engine or car.
c. When connecting air hoses, keep one foot outside the rail.
d. Keep feet clear of area under coupler.

T-23 VISITORS AND CONTRACTORS

While on CMQ property, visitors and contractors must:
   • Comply with all CMQ safety rules and policies.
   • Wear personal protective equipment as instructed by CMQ personnel.
   • Participate in job briefings.

T-24 AVOIDING HUMAN REMAINS, BLOOD OR OTHER FLUIDS

After any accident or incident where human remains, blood or other fluid are observed on company equipment or property:
   • Only qualified persons may remove or clean this matter.
   • Promptly notify the RTC or supervisor so that appropriate action can be taken to perform any necessary cleaning of the equipment as soon as possible.

If employees come in contact with human remains, blood or other fluids, immediately wash the contact area then notify a supervisor.
TRANSPORTATION SAFE JOB PROCEDURES
INTRODUCTION

The purpose of this section is to provide guidance to CMQ transportation employees on how to safely perform typical job duties. By adhering to the safe job procedures contained in this section, staying alert, and empowering yourself to take the safe course, you will enhance your own safety and that of co-workers.

If information in this rule book is not clear or if it does not provide enough information to make a sound decision, you should contact a co-worker or a supervisor for additional help. Use these Safety Procedures in coordination with all other Safety rules contained in this book. The Transportation - Safety Procedures section is designed to help you work your railroad career without personal injury or damage to equipment.

These procedures will help you continue to raise your own safety standards and those of co-workers.
**TSP-25 ADJUSTING MISMATCHED COUPLERS**

To adjust a mismatched coupler:

1. Stop the movement and comply with 2 Step Protection requirements before proceeding.
2. Wait for slack to adjust and settle. Do not overlook unexpected movements from liquids sloshing in tank cars.
3. Allow at least 50 feet or approximately one car length of working room between the equipment.
4. Check for other equipment movements on the same track.
5. Adjust the coupler as follows:
   a. Establish good footing and handholds to avoid falling.
   b. Keep fingers and hands clear of pinch points.
   c. Listen to what is going on around you. If you hear any equipment move, step clear immediately.
   d. Make sure the knuckle is secured. Keep your feet clear of the area beneath the knuckle unless the knuckle is secured.
   e. To move the coupler, stand to the side and face either toward or away from the coupler. Establish secure footing, with one foot against the rail if desired. Smoothly push the coupler to the desired position. If you cannot adjust the coupler by using moderate force, obtain help. Do not overexert.
   f. Do not adjust the coupler by kicking or pushing it with your foot

**TSP-26 AIR HOSES**

**Air Hoses**

If yard air hoses are coupled to cars, disconnect yard air before coupling to the cars. Before fouling track, comply with 2-Step Protection requirements.

Connect the air hose glad hands as follows:

1. Assume a firm stance that will enable you to step clear quickly in the event of an unexpected movement. When possible, keep one foot outside the rail.
2. Firmly grasp the air hose nearest you behind the glad hand and bend it upward. Use both hands if necessary.
3. Pull the hose farthest away toward the bent hose. Check to see that both have gaskets that are in good condition. If gasket is damaged or missing, replace it before coupling the air hose.
4. Match the glad hands into opposite contoured slots and push them downward. Be sure the glad hands are seated.
When the air hoses are properly coupled, cut the air in as follows:

♦ If the air is coming to you through the train line, located on the side of the equipment where you are standing, use the following procedure:
  a. Open the angle cock on the opposite side first.
  b. Watch where you place your hand and body to avoid any pinch points should any unexpected movement occur.
  c. When opening the angle cock located on the side where you are standing, assume a secure stance with one foot outside the rail. Slowly open the angle cock.

♦ If the air is coming toward you through the train line located on the opposite side of the equipment from where you are standing, use the following procedure:
  d. Close both angle cocks.
  e. Open the angle cock on the opposite side first. This fills air hoses with air.
  f. Slowly open the angle cock on the side you are standing on.

Do not kick or strike air hose(s) to try and stop a leak. Do not make any adjustments to air hoses without first closing both angle cocks.

Turn your head away from the coupling to protect your eyes from dirt and debris disturbed by air venting from the air hose when uncoupling cars and when uncoupling air hoses by hand.

To uncouple air hoses by hand:
  1. Close both angle cocks.
  2. To release air pressure on the hoses, firmly grip the center of the air hose glad hands with both hands and lift upwards, using leg muscles.
  3. Raise the joint until it separates.

**TSP-27 Chocking Cars and Engines**

When chocking cars and engines:
  1. Confirm that movement has stopped.
  2. Work only from the side of the equipment.
  3. Keep fingers and hands clear of the wheel tread, flange and top of rail.
  4. Use only wood or an approved chocking device. Do not use a track spike or other pieces of metal to chock wheels.
  5. The chock length must not exceed 24 inches to avoid injury should the chock be forced upward when the wheel moves against or onto the chock.

When it is necessary to remove the chock by hand:
  1. Work only from the side of the equipment.
2. Keep hands and feet clear of the wheel tread, flange and top of rail.
3. Signal the employee at the controls of the engine to move the car or engine off the chock if necessary.
4. Remove the chock and place it where it will not present a tripping hazard.

**TSP-28 CLOSE CLEARANCES**

“Close clearance,” means any obstruction (structure, object or condition) adjacent to, overhead, or converging with a track that will not permit the normal and clear passage of train movements on the track, including anyone riding on such movements. When riding inside engines, cabooses, or other equipment, keep alert at all times for close clearances. Do not lean beyond the side of the equipment until movement has passed the close clearance. When practical, move away from the side of an engine or caboose that is adjacent to a main track or siding on which other equipment is passing or being passed. There are two basic types of close clearances: permanent structures and temporary or unexpected obstructions.

**Permanent Structures**
Permanent structures include platforms, buildings, ramps, conveyors, loading and unloading pipes, wire and power lines, servicing facilities, and numerous other fixtures. While you are expected to know where these danger points are located, the only sure ways to avoid accidents from this source is to face the direction of the movement when riding on equipment and plan to have dismounted before reaching the danger point. Industries may place signs to warn train crews of permanent structure close clearance situations, but stay alert for any new close clearance situations that may arise.

**Temporary or Unexpected Obstructions**
Because conditions change from day to day and even from hour to hour, you should always watch for temporary or unexpected obstructions near the track. Such temporary or unexpected obstructions include, but are not limited to the following:
- Machines and material left too close to the track.
- Automobiles and trucks parked too close to the track.
- Objects left in the doorway of cars or lying on platforms too close to the track.
- Sagging overhead wires.

When wide loads, shifted lading, open car doors and cars or engines are fouling track it is essential that you face the direction of the movement when riding on equipment and dismount before reaching the danger point.

**TSP-29 GRIP (LUGGAGE) SAFETY**

Load grips and other equipment on locomotives using proper exertion and lifting principles. Do not attempt to bring grips that are too heavy to safely handle. The preferred method of loading grips is for both crewmembers to work together, with one person on the ground handing grips one at a time up to co-worker kneeling on the deck level next to the stairs.
If you are tall enough to do so without excessive reaching, place grips one at a time up on the locomotive deck from a standing position on the ground. If grips aren’t excessively heavy and are equipped with shoulder straps, you can climb up on the locomotive while wearing one grip at a time on your shoulder, being careful to maintain 3 point contact and center of balance to prevent falling backward.

**TSP-30 Adjusting Locomotive Cab Seats**

Cab seats that do not have spring-assisted seat height adjustment mechanisms can be difficult for one person to adjust. Larger armrest-equipped cab seats with pin-and-hole manual height adjustment should be adjusted with both crewmembers working together. To adjust this type of seat, have one person lift from a standing position, while the other person works under the seat to help lift, pull the pin, align holes at new height, and reinsert the pin. One person may be able to adjust the smaller and lighter cab seats.

**TSP-31 Fusees**

*See also T-7*

Fusees must not be handled or used except when required by operating conditions and permitted by applicable rules.

To light a fusee:

1. Grasp the fusee near its base.
2. Pull the tape over the top of the cap to expose the scratch surface.
3. Twist the cap away from the head of the fusee.
4. Hold the fusee in one hand and the cap with the exposed scratch surface in the other hand.
5. Place the igniter button on the scratch surface of the cap. Use a striking motion in a direction away from the body. Turn your face away when igniting the fusee.
6. The igniter end of the fusee sometimes smolders and does not appear to be burning. Pause momentarily before attempting to re-strike the fusee. Keep the fusee pointed away from your face and body to avoid possible injury from a sudden flare-up of the fusee.

To extinguish a fusee:

Gently strike the burning end over the edge of a rail or similar object three or four times to separate the burning compound from the rest of the fusee.

or

Bury the burning end in sand or dirt. (Note: Fusee may continue to burn if placed in water.)

Caution: The fusee ignition button contains phosphorous and can not be extinguished.

When handling a burning fusee:
If you must drop an ignited fusee from a moving train, hold the fusee at arm's length from the body for at least five seconds, but no more than 10 seconds, after igniting. This time allows the igniter to burn down inside the fusee. If dropped too soon, the igniter may be extinguished and the fusee will not remain lit.

When holding a fusee use care to prevent molten ash from falling onto clothing or the body. The fusee should be purged of molten ash frequently by a quick shake of the burning fusee in a downward motion near the ground.

When a fusee is used to give hand signals:
- Point the burning end down and away from yourself and others.
- Never hold a fusee near the flame.
- Avoid breathing the smoke produced by the burning fusee.
- Do not look directly at the flame.
- The signals should be given using smooth motions to avoid disturbing the burning material at the end of the fusee.

**TSP-32 Handbrakes**

**See Also T-10**
If an attended locomotive is attached, comply with 2 step protection requirements before entering the Red Zone.

If hand brake is defective or damaged such that it does not function properly, *never* attempt to operate it. Report the defective brake to proper authority.

Never apply or release a hand brake located at the end of a car while standing on the ground unless it is specifically designed at the edge of the end of the car for ground operation. When releasing this type of brake keep your body clear of the car and expect sudden movement.

If hand brake does not release using moderate force, charge air brake system and apply emergency brake application to relieve tension. If use of moderate force is still not successful in releasing the hand brake, report the defective brake to the proper authority.

**Getting to Hand Brake**

When getting to the hand brake:
1. Check the track looking both ways for any movement.
2. Listen to what is going on around you. If you hear any equipment move, do not attempt to mount.
3. Use side ladder to the level of the brake platform.
4. Move from the side ladder to the end ladder by securely holding handholds and carefully placing right foot on the brake platform while the left is on the end ladder tread. Never use the brake wheel as a handhold since the wheel can move.
**Vertical Wheel Hand Brake**

When operating a vertical wheel hand brake:

1. Observe type and condition of the hand brake, including brake wheel or lever and chains, before attempting to operate.
2. Take the correct position:
   a. Place right foot on brake platform.
   b. Place left foot on the end ladder tread.
   c. Hold firmly to grab iron or ladder rung with left hand.
3. To apply hand brake:
   a. Place the release lever or pawl (if so equipped) in the ON position by reaching with right hand **behind brake wheel**, not through wheel spokes.
   b. Turn the brake wheel clockwise with your right hand to take up slack in the brake chain.
   c. After slack in the chain is taken up, place your right hand at about the seven o'clock position on rim of wheel and apply lifting pressure toward you in short pulls.
   d. Keep your back straight and use leg muscles to apply pressure as you pull upward on brake wheel with your right hand. Use only moderate force.
   e. **Never** use both hands to operate vertical hand brake wheel.
4. When releasing a hand brake equipped with a release lever:
   a. Assume the same firm stance you would when applying the hand brake.
   b. Use only your right hand on the release lever or pawl (if so equipped).
   c. Be sure to keep your body parts and clothing clear of the brake wheel. Some types of hand brake wheels will spin when the release lever is tripped to the OFF position.
5. When releasing a hand brake **not** equipped with release lever:
   a. Assume the same firm stance you would when applying the hand brake.
   b. Grasp the rim of the wheel at about the one o'clock position with the right hand, keeping hand on the outside of the rim. Use only moderate force.
   c. Turn the wheel counterclockwise until the brake is completely released.

**Horizontal Wheel (Staff) Hand Brake**

The horizontal wheel (staff) hand brake is designed to be operated with both hands. Some of these brakes have a drop-shaft movement that permits the brake wheel to be dropped flush with the car floor. The brake wheel and shaft must be in the fully raised position to be operated or moved in a train. A hand brake with a drop-shaft must not be operated when the car is moving.

When operating this type hand brake:
1. Mount the car, using the sill step on the side of the car, and position yourself on the car to operate the handbrake. Stay clear of any existing loads on the car.

2. Position both feet securely on the car.

3. If wheel and staff are in the lowered position, lift the brake wheel using both hands. Raise it until the shaft support moves into place (under end of shaft), locking the hand wheel shaft in the raised position. Be alert in the event the wheel and shaft should suddenly become stuck or come out of the shaft support when raised.

4. To apply the hand brake:
   a. Observe whether the hand brake has a pawl weight. If so, engage the pawl in the ratchet (ON position) with foot.
   b. Position both feet securely on car.
   c. Grasp brake wheel rim with both hands, keeping thumbs on outside and turn wheel clockwise as necessary. Use only moderate force.
   d. If the hand brake has a foot-operated pawl, use foot to engage pawl into ratchet. Holding tension by hand on a moving car without the use of the pawl is prohibited.

5. To release the hand brake:
   a. Assume the same safe operating position, with both feet securely on the car.
   b. Grasp the brake wheel rim (never spokes) using both hands and keeping thumbs on outside.
   c. Turn brake wheel clockwise sufficiently to remove tension from pawl. Use only moderate force.
   d. Disengage pawl with foot while simultaneously releasing your grip on hand brake wheel. The wheel will spin counterclockwise, so keep your hands, body and clothing clear. If brake staff is not equipped with a pawl, turn brake wheel counterclockwise until brake is fully released.

6. To lower hand brake wheel staff:
   a. Step around the end of the car on the ground.
   b. With one hand, lift the hand brake wheel shaft enough to take the weight of the shaft off the shaft support.
   c. While holding the hand brake wheel shaft in this position with one hand, move the shaft support from under the end of the shaft with the other hand.
   d. Use both hands to slowly lower the hand brake wheel shaft, being careful to avoid pinch points when releasing shaft support and lowering wheel and shaft.

**Lever (Ratchet) Hand Brakes**
Lever handbrakes are found in a variety of locations on cars and locomotives. Some require operation from the ground while others require mounting the car or locomotive. In either case, use proper procedures for lifting, pulling and pushing to prevent injury and/or overexertion.
To operate lever (ratchet) hand brakes:

1. Inspect the lever stop on the hand brake housing before attempting to apply or release the hand brake. If the lever stop is missing, do not operate brake; report the defect to the proper authority.
2. Place release lever or pawl weight in ON position before applying the hand brake.
3. Maintain secure footing and a firm grip.
4. Apply the brake with vertical pumping action of the brake lever. Use only moderate force. Maintain firm grip on brake lever, until lever is in lowered position.
5. When releasing the hand brake, keep body parts and clothing clear of the operating lever. Trip the release lever or pawl.

**TSP-33 RESERVED**

**TSP-34 OPENING ANGLE COCKS ON UNCOUPLED AIR HOSES**

When opening angle cocks on uncoupled air hoses, obtain 2-Step protection if required and follow this procedure:

1. Maintain secure footing.
2. Grasp the air hose firmly with your left hand behind the glad hand.
3. Hold the glad hand firmly against your thigh with the opening directed away from your body.
4. Turn your head away from the hose.
5. Open the angle cock with your right hand.

**TSP-35 SWITCH AND DERAILE OPERATION**

Employees experiencing difficulty when operating switches and derails should promptly report it to the proper authority.

**Before operating a switch:**

1. Look in both directions for moving equipment on adjacent tracks and keep clear of the moving equipment.
2. Check to be sure that no obstructions will interfere with operating the switch. Hands and feet must not be used to clear obstructions on switches.
3. Remove the lock, including switchpoint lock if present.

**To operate a ground throw or “flop over” switch:**
1. Face the switch squarely; establish secure footing with feet about shoulder width apart. Watch for ground conditions that may interfere with secure footing.

2. Keeping head and body clear of handle motion, release the foot latch, if present. CAUTION: If the switch is under pressure, the handle may “fly up” when released from the latch or keeper.

3. Keeping your spine in the neutral position (without rounding out the back) lift the lever without overexerting to about midway in its travel. Reposition body as needed to keep handle between your shoulders, with no twisting or excessive reaching. Be prepared for sudden changes in handle resistance as you move it.

4. Shift the position of your feet and move with the switch so that your body is over the lever on its downward movement.

5. Push the lever handle to the latched position as follows:
   a. Keep your back in a neutral position and don’t round out the back. Use your body weight over the handle to assist pushing it down, using slow, even pressure. Be prepared for sudden changes in handle resistance.
   b. Use only moderate force and do not overexert. Never attempt to operate an excessively stiff switch.

6. If desired, you may complete the last six inches of movement by carefully placing one foot on the handle near the end of the lever and stepping down using your bodyweight until the lever arm is latched. Only use this method when dry, secure footing is available.

To operate a high stand switch:

1. Establish a firm stance and watch for conditions that could interfere with footing.

2. Lift up on the switch handle, keeping your body clear of the handle movement. CAUTION: The handle could be under pressure and may swing up or around when released from the keeper slot.

3. Reposition your feet and use progressive short pulls to move the switch handle. Move along with the switch to avoid twisted or unstable body positions. Do not round out the back while pulling. Use leg power as much as possible.

4. Be prepared for changes in resistance to switch handle. Do not jerk the handle. Use only moderate force and do not overexert.

5. When the switch is in the desired position, fully seat the handle in the keeper slot. Do not use your feet to operate the switch or secure the handle.

To operate a flop-over type derail:

1. Keep feet clear.

2. Keep hands positioned to avoid pinch points.

3. Use arm and leg muscles, not back muscles, to operate the derail. Use only moderate force and do not overexert.
TSP-36 TOOLS

Use hammers and chisels defensively, so that slipping, unexpected movement, or a glancing blow will not cause overbalance or injury.

When using a wrench:
1. Place wrench so the turn will be toward the open end of the jaws.
2. Pull on the handle. If necessary to push, use open palm.
3. Brace body to avoid overbalancing in the event that wrench slips or wrench, bolt, nut, or other object fails.
4. Gradually increase force until air hose, nut, bolt, pipe or other object turns. Use only moderate force and do not overexert.
5. Confine stroke to space available in order to prevent fingers, hands, or any part of body from striking against object or from being pinched.

TSP-37 TRACK SKATE HANDLING

When handling track skates:
1. Before placing or removing track skates, look in both directions and listen for moving equipment on or around tracks. Keep to a minimum the time you are fouling the track.
2. Always use skate handle when moving/lifting the track skate.
3. Position feet outside the rail.
4. Place track skate on the rail with the long end facing the direction from which the car will be coming.
5. Do not move the track skate with your foot.
6. If necessary to back a car off the track skate, wait until all movement has stopped and the slack has adjusted before attempting to move the track skate.
7. Place the removed track skate in its proper holder or parallel and adjacent to and against the rail to avoid creating a tripping hazard.

TSP-38 REPLACING KNUCKLES

When replacing a coupler knuckle:
1. Stop the movement and obtain 2-Step protection before proceeding.
2. Wait for slack to adjust and settle. Do not overlook unexpected movements from liquids sloshing in tank cars.
3. Allow at least 50 feet or approximately one car length of working room between the equipment.
4. Remove cotter key from knuckle pin, if equipped, remove knuckle pin and set it within easy reach.

5. Keeping feet clear of the area under the knuckle, operate the uncoupling lever allowing the old knuckle to fall to the ground.

6. Using proper lifting and carrying techniques, dispose of it where it will not become a tripping hazard.

7. Holding the uncoupling lever up, move the knuckle thrower (hook) as far to the left as possible into the coupler recess. If this process does not keep lock block raised sufficiently, use strap or block to support uncoupling lever in fully raised position.

8. Obtain the correct knuckle type.

9. Carefully lift the knuckle using proper lifting techniques and place it into the coupler pocket.

10. Insert the knuckle pin into the pin hole, close the knuckle, and remove any strap or block.

11. Close knuckle by hand to make sure it closes, and lock block drops into locking position.

**TSP-39 COUPLING /UNCOUPLING RAIL EQUIPMENT**

**When opening knuckles:**

1. Keep feet clear of the area under the coupler.

2. Check for broken or missing knuckle pins to prevent the knuckle from falling to the ground when it is opened.

3. If you remove the knuckle pin, replace it or provide a safeguard to prevent injury to others. Report condition if cotter key is not replaced in knuckle pin on equipment with rotary couplers (coal train equipment).

**TSP-40 PRINCIPLES OF SAFE EXERTION**

1. Stretch and warm up prior to performing physical work activities. The stretches in the CMQ Safety Rules and Recommended Work Guidelines book and on the bulletin boards throughout the CMQ system are safe and effective in helping prevent injury.

2. Keep loads and objects close to the body.

3. Avoid twisting and excessive reaching during exertions, whether lifting tools or applying physical effort to move a switch.

4. Frequently reposition the body while working to maintain the best leverage.

5. Use the largest muscles available for the task being performed, and keep body parts in line with joints during exertions. When joints are twisted they are not as stable and are more prone to injury.

6. Use hamstring power (often-called leg power) when exerting forces.
7. Don’t “round out” the back when lifting. Keep the spine in a neutral position and tighten trunk (abdominal) muscles to help protect your back during exertions.

8. Use only moderate force during exertion — you have the strength to damage soft tissues and joints if you use maximum physical effort. Keep your head up as much as possible when handling loads.

9. Excessive fatigue increases injury risks during exertions. Judgment, coordination, accuracy, balance, and strength may be impaired when we work to the point of exhaustion. Take frequent short breaks, pace yourself, use moderate forces, and alternate between tasks, when possible, to avoid fatigue.

**TSP-41 LIFTING**

Use the principles of safe exertion and think before you lift. Consider the following points:

1. Break the lifting task into steps and focus on safely performing each step.

2. Plan the lift and look for ways to make it easier – check to see if the load can be split into smaller pieces or if mechanical assistance is available.

3. Identify a clear path for moving the load, and make sure you have a good place to put the load down before you pick it up.

4. Conduct a job briefing before performing team lifting.

5. Test the weight of unfamiliar objects before lifting and never jerk on loads to move them.

**TSP-42 MAINTAINING BALANCE AND STABILITY**

Maintaining balance and body stability requires awareness and caution while positioning the body, exerting forces, walking, and climbing. Maintaining balance means keeping your center of gravity (the balance point of your body) over your base of support (usually feet, sometimes hands or other body parts). Keeping a wide base of support, and keeping your center of balance within that base are the keys to maintaining stability.

**TSP-43 WALKING SAFELY**

Staying safely on your feet while walking requires maintaining close vigilance of the walking surface and your surroundings.

As walking conditions change, so should your walking style. Walk more slowly using smaller steps keeping hands out of your pockets if the walking surface includes debris, is unstable, slippery, or is not well lighted.
Climbing and Descending Safely

1. Climb using three-point contact, taking time to securely make each hand and foot placement. Check grab irons, rungs, and steps, and be prepared for sudden loss of support while climbing. Be watchful for grease or ice on handrails and footholds. Use arms for stability, not to pull yourself up on a ladder.
2. Keep your hands free while climbing. Use radio holsters, microphone clips, and pockets for carrying small items you need while working.
3. When getting off equipment, use leg power to smoothly absorb energy and reduce impacts as you touch the ground. Look at your touchdown point, watching for debris and loose material. Do not release handhold until at least one foot is securely placed on the ground.

TSP-44 Slip, Trip and Fall Prevention

1. Keep walking surfaces clear of obstructions and debris wherever possible. Avoid walking backwards, even during team lifting – walk sideways instead. Avoid, but if necessary step over obstacles, not on them.
2. When walking on ballast, slow down and use smaller steps. On ballast slopes, try to walk along the top or bottom of the slope, and walk directly up or down slopes instead of at an angle. This keeps ankles, knees, and upper thigh/groin muscles oriented for best stability and safety.
3. Wear high-top boots laced up all the way to reduce the risk of falls. Replace boots when the heels start to become rounded. Rounded heels increase your risk of slipping.
4. Use a light when walking in dark areas.
5. During icy conditions, use anti-slip footwear, but use caution when wearing anti-slip footwear where icy conditions don’t exist as slipping may occur. Be alert for grease, oil, or ice on handrails, decking, and floors. Also be alert for standing water on deck or floor.
6. Do not litter the walking area with tripping hazards such as plastic water bottles. Clean up or protect and report slippery areas – don’t leave a “trap” for the next person.
SECTION IV: APPENDIX

GLOSSARY

Authorized
Given the right to act.

Gravity Switch Move
Cars moving under their own momentum with movement not initiated by locomotive.

Job Briefing
A communication tool used by professionals to make sure that everyone involved in a task knows what is to be done, how the task is to be accomplished, and how to mentally prepare to accomplish it. If an employee is to perform a task alone, a mental assessment of the task must be conducted.

Mechanized Equipment
Equipment without rubber tires, including but not limited to track equipment and steel-wheel equipment.

Motor Vehicles
Motor vehicles include:
- All rubber-tired equipment on or off the rail.
- Privately owned vehicles used on company business.
- Rented, leased, or hired vehicles.

Personal Protective Equipment (PPE)
Any material or device worn to protect a person from exposure to or contact with any harmful substance or force.

Qualified
A status attained by an employee who has:
- Successfully completed any required training.
  or
- Demonstrated proficiency in the duties of a particular position or function and has been authorized by CMQ management to perform those duties.

Restricted Area
A designated space (often marked with warning signs, posted instructions, or placards) requiring compliance with special safety requirements or briefings due to unique situations with potential hazard(s).

Three-Point Contact
Three-point contact consists of two hands and one foot or two feet and one hand.
Trained
Participation in learning event(s) appropriate to the topic. Learning events include but are not limited to, the following: one-on-one coaching on the job, job briefings, and formal programs.

Work Environment
The physical location, equipment, materials processed or used, and the kinds of operations performed in the course of an individual’s work, whether on or off CMQ premises.