

Employee Safety Rules

For All Amtrak Employees



Employee Safety Rules

Our highest priority is the safety and well-being of our employees, customers, and guests. Thus, we intend to operate at the highest level of safety, exceeding regulatory requirements which define minimum standards. These Employee Safety Rules are one of many tools that employees have to achieve this level of safety in the work place. Employees are responsible for reviewing, understanding, and applying the rules that relate to their duties and work environment.

Employees must take ownership of their personal safety as well as the safety of coworkers and customers. It is possible that an employee may encounter a situation for which rules or instructions are not provided in this or other Amtrak policies, procedures, or documents. Therefore, employees are empowered to take the safe course in such situations including stopping an operation if an unsafe condition exists.

Employees are encouraged to raise safety questions and concerns to their immediate supervisor or an Amtrak manager. Additionally, employees may contact System Safety with comments on the Employee Safety Rules at: systemsafety@amtrak.com.

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Employee Safety Rules

Effective September 1, 2020

These Employee Safety Rules apply to all employees of the National Railroad Passenger Corporation, herein referred to as Amtrak. These rules supersede the following safety publications previously issued by Amtrak:

- AMT-5 Safety Instructions for Transportation Employees on or About Locomotives, Cars, or Equipment
- NRPC 1905 Guide to Safety Performance for Mechanical Employees
- NRPC 1906 Amtrak On-Board and Station Services Safety Rules
- NRPC 1907 Materials Management Safety Rules and Instructions
- NRPC 1908 Maintenance of Way Employees Safety Rules and Instructions
- NRPC 2163 Office Employees Safety Rules
- Service Standards Manual Chapter 1 Safety Instructions Rules 2000 through 2244 inclusive.

Further rules or revisions may be issued by the Chief Safety Officer or their designee.

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These rules apply to ALL Amtrak employees unless explicitly noted. Exceptions are noted directly following the rule they apply to. Employees must have this publication accessible while on-duty.

1.0 General Safety Rules

- **1.1** Employee conduct and any instructions issued must comply with company safety rules, policies, procedures, programs as well as posted instructions, placards, and verbal warnings.
- **1.2** Do not disable, tamper with, or otherwise make unauthorized modifications to any safety or control device.
- **1.3** Movement of equipment may occur on any track, at any time, at any speed, and in any direction. Maintain lookout in both directions when near tracks or equipment.
- **1.4** Job Briefings must be conducted at the start of each job, when conditions change, or when new tasks are started. Conduct briefings in accordance with operating rules, system special instructions, or company forms as applicable.
- **1.5** Wear the required personal protective equipment (PPE) for the task being performed and for the hazards within the work area.
- **1.6** When performing maintenance or repair on equipment, protect against an unexpected startup or release of energy by following requirements of Amtrak's Control of Hazardous Energy (Lockout/Tagout) Program.
- 1.7 Lockout/tagout devices, "Do Not Operate" tags, or any other such blocking or warning device must only be removed by the employee that placed them except as authorized in the Control of Hazardous Energy Program and Procedures.
- **1.8** Operate equipment, machinery, vehicles, and power tools only when qualified and authorized or in the process of qualifying under the direct supervision of a qualified employee.
- **1.9** Inspect vehicles, equipment, tools, and furniture for hazardous defects or unauthorized alterations before and during use. Safety devices, guards, or limit switches must be operable at all times when equipment is in use. Ensure that defective items are immediately removed from service and marked as defective.
- **1.10** Employees must not make any substitution in or alteration to parts, materials, workmanship, or operating condition on equipment, machinery,

vehicles, or tools unless authorized by the manufacturer or proper design owner authority.

- **1.11** Keep walkways, pathways, and platforms free of tools, equipment, material, scrap, and debris which could constitute a tripping or slipping hazard.
- **1.12** Sharp edged tools must be stored in a manner that protects other people from inadvertent contact.
- **1.13** Before operating any equipment ensure that all persons are in the clear.
- **1.14** Before operating an internal combustion engine in a building or in any other confined place, make provisions for the exhaust gases to be expelled outside.
- **1.15** When an employee is responsible for non-Amtrak personnel, the employee must assure that the non-Amtrak personnel receive a job briefing and site-specific orientation, wear appropriate PPE and, abide by Amtrak requirements.
- **1.16** Amtrak provided and personal electronic devices may only be used in accordance with:
 - a) Amtrak's electronic device policy.

AND

b) Applicable operating rules for employees so governed



2.0 Injuries, Incidents, and other Unsafe Conditions

- **2.1** If an injury occurs, emergency medical assistance must be called if it is necessary or requested by the injured party without delay.
- 2.2 If an employee sustains an on-duty injury or occupational illness, they must report it to their immediate supervisor at the time of occurrence unless notification will delay access to necessary medical attention. If notification is delayed by medical attention, it must be made as soon as possible.
- 2.3 If as a result of an on-duty injury or occupational injury/illness an employee obtains medical attention at any time or marks off, they must immediately notify their supervisor.
- 2.4 If an employee has knowledge of or information related to an injury or accident involving them, another employee, or a non-employee (e.g. customer, contractor, or trespasser), they must immediately report the information to their supervisor so that the appropriate medical attention can be provided.
- **2.5** Employees must report injuries sustained offduty that will in any way affect performance of their duties to their supervisor prior to reporting for duty.
- **2.6** Employees must immediately report incidents involving loss or damage to Amtrak property to their supervisor.
- 2.7 Derailments, collisions, washouts, high water, fires, obstructions to tracks, broken tracks, and any other condition which could result in death, injury, damage to property, or disruption of railroad operations must be immediately reported to the Dispatcher, Railroad Police, or other Appropriate Authority by the quickest available means of communication.

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3.0 <u>Working On or About Trains and On-Track</u> Equipment

General Requirements

- **3.1** Keep clear of track between converging equipment and of equipment blocking crossings.
- **3.2** Keep clear of all equipment, and at least 25 feet from the ends of standing equipment, unless performing maintenance or repair of equipment while under applicable protection (e.g. Blue Signal, RWP, or Three Point Protection).

EXCEPTION to 3.2: Engineering employees engaged in right of way construction or maintenance using the associated equipment whose duties require them to work in close proximity to the equipment.

- **3.3** Riding on the side of equipment in a close clearance area is prohibited.
- **3.4** When in or on locomotives, rolling stock, or equipment, be prepared for unexpected movements or sudden stop at any time. When moving about, observe overhead clearance and side clearance. Maintain three points of contact, keeping secure hand holds and footing. Use grab irons, handrails, seatbacks, luggage racks, or any other available bracing point.
- **3.5** Employees must keep their head, arms, and other parts of their body inside moving equipment at all times.

EXCEPTION to 3.5: Transportation employees monitoring arrival or departure of train from station platform.

- **3.6** Keep both feet on or within one piece of equipment unless transitioning.
- **3.7** Step from one unit of train, equipment, or machinery to another or to an adjacent platform only when provision has been made for doing it safely.
- **3.8** Ride equipment only in locations designed and authorized for such purpose that permit maintaining firm footing and a secure handhold. Riding on a locomotive leading platform when crossing a street or highway, or on front/rear platforms of equipment not equipped with railings is prohibited.
- **3.9** Keep walkways, ladder rungs, footboards, running boards, steps, end sills or other safety appliances clear at all times.

- **3.10** Close and properly secure locomotive doors when not in use.
- **3.11** Bags, backpacks, grips and other similar accessories may be struck or otherwise caught or snagged by moving equipment. The carrying of these items must only be to transport that item to or from a specific location. Items of this nature are not permitted to be carried or worn while performing other work duties.
- **3.12** Open umbrellas are prohibited on or about trains, the right of way, shops, storerooms, or yards. Umbrellas may only be used in publicly accessible areas of stations in a manner that does not pose a hazard to the user or surrounding persons.

Three Point Protection

- **3.13** Before fouling or going under or between standing equipment for any purpose that is not otherwise governed by blue signal protection rules or the Roadway Worker Protection Manual obtain assurance that the equipment will not move by requesting three-point protection. Confirmation that engineer has provided three-point protection must be obtained prior to starting work.
- **3.14** When three point protection is requested, the engineer must perform the following:
 - a) Apply the train and engine brakes.
 - b) Place the throttle/controller in the idle or off position, and then place the reverser in the neutral position.
 - c) Shut down and isolate HEP from the providing locomotive if applicable AND place the generator field switch/breaker in the off/down position.
- **3.15** Three point protection must be maintained, and the locomotive must not be left unattended, until the engineer is notified by the employee who requested protection that it is no longer needed.
- **3.16** Requests to apply or release three point protection must be made over the radio or by face-to-face verbal communication.

Getting On or Off Equipment

3.17 Do not get on or off any moving train, vehicle, or equipment, except in an emergency.

EXCEPTION to 3.17: Engineering employees, designated by a foreman, may get on or off a

work train moving at a speed not exceeding 4 MPH.

- 3.18 When getting on or off standing equipment:
 - a) Mount and dismount equipment away from ground hazards (e.g. live track, close clearances, or third rail) and keep all parts of body clear of pinch points. Face equipment during such movements.

EXCEPTION to 3.18a): Employees are not required to face the equipment when exiting passenger cars at:

- High level platforms
 OR
- Low level platforms where the distance from the equipment to the platform or properly positioned step-box is a normal step or less
- b) Maintain three points of contact and use only stairs, side ladders, or sill steps in serviceable condition. Stop at the bottom step or ladder rung and check for solid footing before dismounting.
- c) Place items on the equipment platform or hand them to another employee before ascending or descending equipment.

In Service Passenger Cars

- **3.19** When in-service passenger cars are to be separated:
 - a) Announcement must be made throughout the train that the train will be separated.
 - b) Retract the curtains and secure end gates between cars.
 - c) If not performing the separation, wait until the separation has been made before descending to the platform or ground.
- **3.20** When handling a trap door:
 - a) Keep clear of latch or other pinch points, use handle when equipped.
 - b) Release latch with one foot, use other foot to prevent the door from suddenly springing up.
 - c) Never open or close trap door while standing on the ground.
 - d) Wait until train comes to a complete stop before descending stairs.

3.21 Keep vestibule doors, trap doors, and windows closed and latched at all times unless the car is standing at a station platform.

EXCEPTION to 3.21: Transportation employees may open door or window for the purpose of monitoring arrival or departure of train from station platform.

- **3.22** When handling a step box, place securely on the ground with the longest side parallel to the train. Ensure step box is stable and level prior to use.
- **3.23** With the exception of the first and last occupied passenger cars in the consist, the end doors of all cars must be unlocked while the train is in motion.
- **3.24** End doors at the front and rear of passenger trains must be closed and locked to prevent accidental exit and injury to passengers. When cars are not equipped with these doors other provided barriers such as chains, bars, or gates must be secured.

Adjusting Couplers

- **3.25** When necessary to make adjustments to knuckles or drawbars, equipment must be separated by at least 50 feet. Keep all parts of body clear of pinch points. Kicking or otherwise placing foot on the component to be adjusted is prohibited.
- 3.26 To open a knuckle on standing equipment:
 - a) Stand clear at the side of the equipment.
 - b) Grip the extreme end of the handle of the cutting lever at arm's length.
 - c) Slowly lift the cutting lever handle until the knuckle is open. A click will be heard when the anti-creep slack is taken up.
- **3.27** If the knuckle does not open after taking the actions in rule 3.26:
 - a) Position self such that body will be clear of the knuckle in the event it falls to the ground or unexpected movement from compressed friction draft gear.
 - b) Check for knuckle pin in the knuckle.
 - c) Operate the cutting lever, and then open the knuckle with one or both hands. Avoid pinch points and burrs.
- **3.28** Do not use finger to adjust lock pin assembly at the bottom of the coupler.

Air Hose and Brake Pipe Operation from the Ground

- **3.29** When uncoupling equipment which has air hoses coupled, take a position far enough away from uncoupling to avoid being struck by parting air hoses and turn head away from uncoupling to avoid flying particles caused by release of air.
- **3.30** When manually coupling, uncoupling, or adjusting air hoses on rolling stock, employees must:
 - a) Keep one foot outside the gauge of the track at all times.
 - b) Close ALL angle cocks to isolate sources of air to ALL air hoses between the equipment being worked on.
 - c) Handle all coupled air hoses in a manner that allows full control of each hose section until it is confirmed air has been exhausted. Isolated air hose sections may be under pressure.
- **3.31** To exhaust air from an isolated hose section:
 - a) Apply all requirements of rule 3.30 when exhausting air.
 - b) Start with air hose (brake pipe or main res.) that if moved will not cause other hose to uncouple.
 - c) Secure and maintain a strong grip on both ends of the hose to be exhausted near the bottom joint.
 - d) Slowly raise the hose joint until air pressure is heard escaping, STOP raising hose at this point.
 - e) Wait until air is depleted, then return to lowered position. Exhaust second hose if using same procedure.
- **3.32** To manually uncouple air hoses
 - a) Apply all requirements of rule 3.30 when manually uncoupling hoses.
 - b) Start with air hose (brake pipe or main res.) that if moved will not cause other hose to uncouple.
 - c) Secure and maintain a strong grip on both ends of the hose to be uncoupled near the bottom joint.
 - d) Slowly raise the hose joint until air pressure is heard escaping, STOP raising hose at this point.
 - e) Wait until air is depleted, then continue raising the joint until it separates.
 - Return the hose to lowermost position by hand instead of allowing it to drop. Uncouple second hose using same procedure.

- **3.33** To couple air hoses:
 - a) Apply all requirements of rule 3.30 when coupling hoses.
 - b) Determine that air hose gaskets are in suitable condition.
 - c) Grasp the closest air hose firmly behind its head and bend it upward.
 - d) Pull the hose farthest away toward the bent hose.
 - e) Match the heads into opposite contoured slots, push them downward, and be sure that heads are seated.
- **3.34** Before using an angle cock to reduce brake pipe pressure on standing equipment:
 - a) Grasp the air hose firmly with left hand behind the hose head to protect against movement. Maintain grip on hose until pressure reduction is completed.
 - b) Point the hose head toward the ground.
 - c) Face away from the hose.
 - d) SLOWLY open the angle cock with right hand.

Operating Hand Brakes

- **3.35** When operating hand brake, protect against spinning or sudden movement. Ensure handhold and footing is adequate for maintaining balance should sudden movement occur.
- **3.36** When operating wheel type hand brakes, grip rim of wheel near the pull side of a spoke. If operating a horizontal type wheel brake exert pressure toward the equipment. If operating a vertical type wheel brake, exert pressure upward.
- 3.37 To operate pump handle type brakes:
 - a) The handle stop must be present and in serviceable condition.
 - b) To APPLY pump handle brake:
 - (1) Place release lever or pawl weight in ON position.
 - (2) Apply vertical pumping action to the brake handle using proper lifting techniques.
 - (3) When brake is set, return pump handle to DOWN Position.

- c) To RELEASE pump handle brake:
 - (1) Verify the brake handle is in the DOWN position.
 - (2) Place release lever or pawl weight in OFF position and apply pressure UPWARD.
 - (3) Retain grip on the release lever until brake releases.
 - (4) If brake does not release, leave brake handle in DOWN position, and re-engage release lever or pawl weight in ON position.
- **3.38** To release vertical geared brake which does not release by placing lever in "OFF" position:
 - a) Apply stress on the wheel rim until pawl releases then immediately let go.
 - b) Keep all parts of body and clothing clear of the wheel.
- **3.39** Climb side ladder to a point level with brake platform on cars equipped with end and side ladders. Move from side ladder to end ladder and then to brake platform and vice versa. Stepping directly from side ladder to brake platform is prohibited.
- **3.40** When operating hand brake on equipment, place one foot on brake platform, keep one foot on end ladder, and maintain firm grip on grab iron, handhold, or ladder rung.

Chocking Equipment

- **3.41** Use only a chock that is designed for chocking locomotive, rolling stock, or on-track equipment.
- **3.42** When placing chock, stand to side of the equipment clear of pinch points and wait until movement stops and slack adjusts. Except in an emergency, do not chock moving equipment.
- **3.43** Unused chocks must be stored clear of the track and in designated receptacles.
- **3.44** Damaged chocks must not be used and must be disposed of.

Servicing Locomotives and Other On-Track Equipment

3.45 If work has been performed on equipment, make thorough inspection and be sure that all tools, material or other items are clear of electrical apparatus, moving parts, overhead areas, walkway, or working/platform area or step.

- **3.46** When maintenance or inspection is being performed, notify all employees in the immediate area and be sure that they are in the clear before operating air brake components, air compressor, fan or shutter and any apparatus, such as main reservoir drain valves, which could discharge or move in a way that may be hazardous to others.
- **3.47** Wear gloves and use a suitable towel or cloth when wiping hot oil from bayonet type gauge stick.
- **3.48** Use long handled tongs or other approved means to guide center pin when placing car or locomotive body on truck.
- **3.49** Before working on brake rigging or adjusting piston travel:
 - a) Ensure equipment is secured to prevent movement. Use handbrake and/or chocks.
 - b) Close the applicable brake cylinders (truck) cut-out cock or completely bleed the air brake system.
 - c) Apply "DO NOT OPERATE" tag to any control components.

Working on or About 480 Volt Head End Power or Power Supply

- **3.50** Only qualified employees may perform work on locomotives and/or cars equipped with 480 volt Head End Power (H.E.P.) or power supply.
- **3.51** When a 480 volt ground power circuit trips or faults in any manner, resetting breaker must be done only by qualified electrician after the cause of the fault is determined.
- **3.52** When not in use, place all cables in proper holders provided or store in such a manner as to be protected and not create slipping/tripping hazards.
- **3.53** Before starting work between or under locomotives or rolling stock, 480 volt H.E.P. or power supply must be shut down, de-energized AND isolated. All employees involved must have complete understanding of the type of work to be performed.
- **3.54** Before starting/energizing 480 volt H.E.P. or power supply on locomotives or rolling stock, employees must be made aware that power will be energized and must stand clear of all electrical cables.

- **3.55** When inserting/removing 480 volt H.E.P. cables:
 - a) Inspect cable head and receptacle housing for any obstruction which would prevent proper connection or otherwise cause damage or excessive wear.
 - b) Protect against sudden stop or binding of the cable head in the receptacle. If cable will not apply properly with normal pressure, remove and check for possible cause.
 - c) Use only tools designed and authorized for use with cables.
- **3.56** Do not connect any 480 volt consist to two different power supplies simultaneously (e.g. power car/locomotive, standby power, second power car/locomotive).

Riding or Working on Work Train Equipment

- 3.57 Drop-end gondola car safety rules:
 - a) Keep clear of all end gate movement. Raised end gate must be secured by effective latches before workers may be anywhere within its swing.
 - b) Latch or jamb must not be used as a handhold.
 - c) To open end gate, stand outside and take hold of the grab iron then unlatch and push the end gate down.
 - d) To close end gate, use device designed and approved for the purpose. If necessary to close the end gate manually, place block at least 8-10 inches thick under it as soon as it is raised high enough to do so, then continue raising and latching door.
- 3.58 Drop bottom car safety rules:
 - a) Keep hand or fingers clear of moving parts and pinch points (e.g. jamb, frame, or door) of car. Use suitable tool or item to remove material from hopper opening. Using drop bottom door as a means of entry or egress to the car is prohibited.
 - b) Before opening or closing drop bottom door ensure all workers are clear of the door.
 - c) Knock or pry pawl from ratchet of door winding mechanism with suitable tool, and if necessary, unwind it with approved ratchet or self-adjusting car wrench.
 - d) Close door with approved closing device if provided. Otherwise, place pawl in holding position and wind with only approved ratchet or self-adjusting car wrench. Closing the door manually from under the car is prohibited.

- **3.59** When necessary to work inside an empty hopper car that is not equipped with cross members, inside stirrups or other means for assistance, use suitable rope knotted every 24 inches and secured outside the end of the car to assist in moving up or down on slope sheet.
- **3.60** Approved closing devices must be used if provided. Otherwise use method listed below when closing hopper car door equipped with latch:
 - a) Drop Latch:
 - (1) Push door to first notch with bar used as pry against the bottom of the door. When impossible to use bar as pry, grasp side angle to maintain stability and push door to first notch with foot.
 - (2) Securely place suitable bar in loop provided.
 - (3) Pull steadily on bar until door latches.
 - b) Latch Bar:
 - (1) Securely place suitable bar in loop provided.
 - (2) Pull steadily on bar until latch bar properly engages hook.
- **3.61** Wire train tower car safety rules:
 - a) Workers must only ride on top of car when authorized by foreman and duties so require.
 Face direction of movement when in motion.
 - b) Occupy portable ladder resting on tower car only after foreman or Class A employee in charge has notified all employees that it is safe to do so.
 - c) When the outrigger of tower car, rope, ground stick or scaffolding of any kind extends over the adjoining track, maintain proper clearance from the top of the rail to the bottom of the out-rigger or other obstruction. Allow for sagging due to weight being imposed on the outrigger in its extended position.

Rolling Stock with Sliding Plug-Type Doors

- **3.62** Before operating a sliding or plug-type car door, determine if it is properly tracked. If it is not properly tracked, keep clear of the door until suitable repairs can be made.
- **3.63** When opening or closing sliding or plug-type car doors, use the handhold provided, keep all fingers clear of jambs, travel rail, and other pinch points, and stay clear of the door opening. Look

through any available windows to identify shifted lading and if it is safe to open the door. If car is not equipped with windows, open door slowly to allow identification of shifted lading.

3.64 When performing repairs on defective side door, block or brace it before attaching hoisting equipment to remove it. After hoisting equipment is securely attached and slack is taken up, remove the securing arrangement and move clear. When unnecessary to remove a defective door to repair it, block or otherwise secure it before starting to repair it.

On-Track Equipment and Vehicles other than Trains

- **3.65** Disengage clutch or gears and set brakes to hold while workers are between, or are getting on or off self-propelled equipment, machinery, push truck, or cart.
- 3.66 When operating self-propelled equipment, machinery, or vehicle, test the brakes immediately after starting. Maintain constant lookout in the direction of movement for obstruction or other unsafe condition. Whenever possible, the operator cab must face in the direction of movement. Warning should be provided to other workers riding equipment, if practicable, before brakes are applied. Interfering with or otherwise distracting the operator is prohibited.

Sleeping Cars

- **3.67** When lowering or raising sleeping car berths, stand clear of upper birth and keep an arm or hand on the bed when lowering it. When closing, make sure upper and lower berths are secured, and attach safety latch.
- **3.68** Use a work ladder or Amtrak approved berth stool when making beds. Work or berth ladders must be kept clear of aisles. When not in use work or berth ladders must be secured in the proper storage area.

Dining Car/Kitchen Safety

- **3.69** The safety bar or safety gate on the side of the car must be kept secured. The side door must be closed and secured while the train is in motion.
- **3.70** Place a wet rag under a meat board or other unstable item to ensure stability.

- 3.71 When handling knives and cutlery:
 - a) Employees must cut away from themselves while using a knife to carve, slice, trim or bone and keep fingers away from path of blade.
 - b) Make sure frozen food is thoroughly thawed before cutting it with a knife.
 - c) Return any sharp, edged, or pointed knife or tool to its designated place in a drawer, rack, shelf, or any other proper storage place when not in use. It must not be left exposed or covered with a towel, utensil, or other item.
 - d) Utensils must be clean when stored.
- **3.72** When handling pots and pans:
 - a) Use a dry, protective cloth or something similar, such as an oven mitt, while handling. Never use a wet rag.
 - b) Keep the handle and spout clear of the edge of the range, table, or aisle.
 - c) Fill a pan or other container with grease or liquid to not more than three-fourths of its capacity.
 - d) Food must be placed gently, not dropped, into hot grease or liquid. When turning meat or other food in hot grease, employees must turn it away from them to prevent splattering.
 - e) When removing a lid from a kettle, pot, or other container that contains hot food or liquid, employees must "crack" the lid at the point farthest from them to permit steam to escape slowly.
 - f) Pots and pans must be empty and clean when stored.
- **3.73** Food trays must only be loaded in a fashion that can be safely carried by the employee with pitcher spouts turned to the center of the tray. Employees carrying loaded food trays must be given the right of way.

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4.0 Working On or About Tracks

General Requirements

- **4.1** Stay clear of tracks except when necessary in the performance of duty.
- **4.2** Except for crossing track as allowed by this section, when fouling any main track, protection in accordance with Operating or Roadway Worker Protection Rules is required.
- **4.3** Railroad tracks are not designed as walking or working surfaces and contain components that move resulting in pinch points. Unless operating such components in performance of duty or when necessary while performing authorized Engineering department work, keep clear of:
 - a) Rail
 - b) Derail
 - c) Frog
 - d) Switch
 - e) Guard rail
 - f) Interlocking machinery/apparatus/connection

Engineering employees servicing movable components of the track structure must lock or establish blocking to prevent movement prior to starting work.

- **4.4** Third rail protection boards are not designed to insulate or otherwise make the third rail safe for employee contact. Employees must keep clear of third rail unless protection is obtained from an authorized Electric Traction employee.
- **4.5** Bridge and tunnel clearing bays/safety platforms and tunnel bench walls must be kept clear.
- **4.6** Keep all material, tools, and equipment at a safe distance (minimum of 4 feet) from the edge of a platform or track. On bridges and in tunnels, any items closer than 15 feet to main track must be properly secured.
- **4.7** When clearing track move all tools, material, equipment, or any other objects to a location where it cannot be struck by trains or other on-track equipment. Remaining ballast must be below top of rail.
- **4.8** Upon the approach of a train on a track equipped with a dragging equipment detector or ice deflector, take a position either on the side of detector/deflector from which the train is approaching, or at least 100 feet from the detector/deflector in the opposite direction.

Crossing Tracks

- **4.9** Prior to crossing tracks, look in both directions for approaching equipment. Cross only if there is a sufficient distance to allow clearing the associated track 15 seconds in advance of any train or equipment operating on the track. When crossing tracks:
 - a) Use approved walkways or crossings when available.
 - b) Cross at a 90-degree angle to maximize field of vision while crossing.
 - c) Move directly and promptly across the tracks.
 - d) If crossing multiple tracks, stop and look before crossing each track if track spacing allows stopping outside the fouling space of surrounding tracks (greater than 4 feet from the field side of each running rail).

NOTE: Roadway workers crossing tracks with tools or material that restricts motion or impairs sight or hearing are subject to requirements of the Amtrak Roadway Worker Protection Manual.

Operating Hand Throw Switches and Derails

- **4.10** Visually inspect all moving components for obstructions and verify that personnel are clear before operating a switch or derail. If a switch is spiked, clamped, or tagged, do not operate it without permission from the proper authority.
- **4.11** Whenever switch handle/lever design allows, check for resistance prior to releasing from its latch or keeper. Be prepared for sudden movement of the operating handle or lever when it is unlatched/released due to possible compression or tension in switch components.
- **4.12** When operating any switch or derail, keep clear of pinch points. Use foot to release switch point lock, if so equipped, otherwise using feet to move the operating mechanism/lever is prohibited. Bend knees to lift/move the operating mechanism if it cannot be reached from a standing position. Walk the lever or handle through its range of motion without twisting or bending torso. Gradually adjust force applied to the lever or handle if movement becomes easier or more difficult throughout the range of motion.
- **4.13** Verify all switch or derail components are in the required position and have the proper fit before authorizing movement over the device.

5.0 Attire of Employees

General Requirements

- **5.1** Employees must wear clothing that is appropriate for their specific duties, provides ample body protection, and is in good condition such that it does not pose a tripping or entanglement hazard. Clothing must be free of grease, oil, or other flammable substances.
- **5.2** When performing duty on or about trains, the right of way, shops, storerooms, or yards, wear a waist-length shirt with sleeves and ankle length pants. Sleeveless shirts and shorts are prohibited.

EXCEPTION to 5.2: Uniformed employees may wear Amtrak issued or authorized uniform.

5.3 Head and ear coverings that interfere with vision or hearing are prohibited on or about trains, the right of way, shops, storerooms, or yards.

EXCEPTION to 5.3: Amtrak approved PPE must be worn where required.

Footwear

- **5.4** Traversing the workplace without proper footwear is prohibited.
- **5.5** Employees must wear safety toe shoes or additional protection when required by department or task specific PPE requirements.
- **5.6** Removable ice cleats must not be worn indoors or on surfaces where ice/snow are not present.
- **5.7** Footwear worn by Amtrak employees must be completely laced, buckled, zipped, or otherwise fastened. The following types of footwear are prohibited from being worn anywhere on Amtrak property or while otherwise on duty:
 - a) Footwear that has metal plates or cleats that are integral to the sole or heel of the shoe.
 - b) Footwear that has a heel of any kind greater than three inches in height.
 - c) Flip-flops or sandals that cannot be fastened.
- **5.8** Any employee working on/around trains, the right of way, moving equipment, operating machinery, or in storerooms/shops/yards must wear:
 - a) Footwear that complies with all provisions of rule 5.7.

- b) Closed toe shoes with a defined heel. The defined heel must have a near 90-degree notch with a minimum height of 3/8 inch and a maximum height of 2 inches.
- c) Shoes in good condition. Sole must not be loose, thin, cracked, rippled, or wedge type.
- **5.9** Transportation Department Locomotive Engineers, Conductors, and Assistant Conductors performing duty on or about trains, the right of way, shops, and yards or any employees riding in a locomotive cab must wear boots meeting the following requirements:
 - a) Complies with all provisions of rules 5.7 and 5.8.
 - b) Has leather or leather-like upper.
 - c) Provides ankle support with a minimum height sufficient to cover the ankle.
 - d) Sturdy non-leather sole that will resist puncture.
- **5.10** Engineering department employees performing duties other than administrative work in an office environment must wear boots meeting the following requirements:
 - a) Complies with all provisions of rules 5.7 and 5.8.
 - b) Has leather or leather-like upper.
 - c) Provides ankle support with a minimum height sufficient to cover the ankle.
 - d) Sturdy non-leather sole that will resist puncture.
 - e) Has safety toe meeting current ASTM F-2413 requirements.

Jewelry and Grooming

- **5.11** Secure hair when working around machines or equipment in which hair could become entangled or in situations where it could obscure vision.
- **5.12** Finger rings, earrings, loose/dangling jewelry, or any other articles of adornment may be snagged when handling material or working around machinery, rolling stock, or other equipment. Remove these items prior to performing such duties.
- **5.13** Fingernail length must not exceed 1/4 inch in length beyond tip of finger.
- **5.14** Due to shock hazard, wearing jewelry or any other metal items when repairing/maintaining electrical equipment is prohibited.

6.0 Personal Protective Equipment (PPE)

General Requirements

- **6.1** Wear only PPE approved and issued by Amtrak. Alteration of PPE is prohibited.
- **6.2** Employees are responsible for maintaining PPE issued to them in good order, identifying when it needs to be replaced, and ensuring that it fits properly and is available for use when needed.
- **6.3** When at an Amtrak worksite other than assigned designated reporting location, employees must wear the PPE required for that area.
- **6.4** Designated pathways for the purposes of transiting the site may be established by site management on which alternate PPE requirements may be prescribed. Such plans must be reviewed by System Safety.
- **6.5** Refer to Appendix A for task-specific PPE requirements in addition to the requirements in this section.

Eye and Face Protection

- 6.6 Eye protection must be worn while:
 - a) In or about shops, storerooms, and yards.
 - b) On or about the right of way.
 - c) In the cabs of locomotives, cab/control cars, and on-track equipment.
 - d) Anywhere on a locomotive outside of the operating cab.
 - e) In baggage cars.
 - f) Spotting trains for stops or departing station while door or window is open.
 - g) When performing sanitation work onboard trains.
 - h) Performing any task identified as requiring eye protection in Appendix A.

EXCEPTION to 6.6c): Eye protection is not required when in the operating compartment of a locomotive or cab/control car if:

- No maintenance or servicing work is being performed within. AND
- One of the following is met:
 - All windows and doors are closed OR
 - \circ The train is not in motion.

- **6.7** Remove eye protection while in work areas only if necessary to de-fog, clean, or otherwise change.
- **6.8** Unless required by the specific work being performed (e.g. welding), do not wear shaded/tinted eye protection in low light conditions or in tunnels.
- **6.9** While performing operations that require a face shield or welding shield, safety glasses or goggles must also be worn.

Foot Guards and Shin Protectors

- **6.10** Wear foot guards when operating adzer, concrete breaker/drill, hand held spiking hammer, or hand-held compactor.
- **6.11** Wear approved shin protectors when operating adzer or cribbing machine.

Hand Protection

- **6.12** Needle stick resistant gloves must be worn or tools (e.g. tongs) must be used when picking up or otherwise handling trash in stations, on board trains, or about the right of way.
- **6.13** When handling chemical products or solvents wear hand protection prescribed by the product's Safety Data Sheets (section 8) or otherwise in manufacturer's instructions.

NOTE: Refer to section 8.0 for rules on electric protective gloves.

Head Protection

6.14 Head protection must be worn while on duty to protect employees from overhead hazards. Hard hats must be properly fitted and worn with brim forward. All maintenance of the right of way, servicing of equipment, and work in shops and storerooms requires the use of Amtrak approved hard hats.

EXCEPTIONS to 6.14:

- Hard hats are not required in vehicles, enclosed cabs of equipment, office-type environments, or parking lots.
- Transportation or On-Board Services employees are not required to wear hard hats while aboard trains.
- Hard hats are not required when specifically stipulated by department or individual facility policies.

6.15 Do not wear caps or hoods under hard hat suspension or store material between the suspension and the hard hat shell at any time. Only manufacturer authorized inserts may be worn when required for cold weather protection.

Hearing Protection

- **6.16** Hearing protection must be worn whenever required by Amtrak's Hearing Conservation Program or otherwise when:
 - a) In any area, engaged in any activities, or working with/near tools or equipment designated by signs or instructions as requiring hearing protection.
 - b) In the engine/machine room of any enclosed car body type locomotive.

Respiratory Protection

- **6.17** Respirators must be worn when required by and used/stored in accordance with Amtrak's Respiratory Protection Program.
- **6.18** Tight fitting respirators must not be worn or fit tested with facial hair that interferes with the respirator seal including but not limited to:
 - a) Beards of any kind.
 - b) Mustaches that extend beyond the lip line.
 - c) Long side burns.

Reflective / High Visibility Clothing

- **6.19** Any employee working on or about the railroad right-of-way or active highway must wear approved high visibility safety vests or other garments that meet the following requirements:
 - a) Meets or exceeds ANSI Class 2 requirements.
 - b) Vests must be of breakaway type design.
- **6.20** High visibility garments must be the outer most layer of clothing.

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7.0 Motor and other Self-Propelled Vehicle Safety

General Requirements

- 7.1 Vehicles must be operated only on designated crossings, pathways, and roadways. Vehicles must be operated in accordance with posted speed limits and other signs. If visibility is impaired or driving surface conditions so require, speed must be reduced below the speed limit to permit stopping short of any hazard.
- **7.2** All occupants must wear seatbelts when the vehicle is equipped with them. Driver must not move vehicle until all occupants are wearing their seatbelt.
- **7.3** Keep all stopped, standing, or parked vehicles of any type at least four (4) feet away from the field side of the running rail of any track.
- 7.4 Driver must stop clear of fouling tracks and determine that it is safe to cross railroad tracks even though position of crossing gates or signal may indicate that it is safe to do so. When crossing multiple tracks, stop and look before crossing each track ONLY if track spacing allows stopping the vehicle completely outside the fouling space of surrounding tracks (greater than 4 feet from the field side of each running rail).
- **7.5** Ride only in areas designed for passenger seating. If passenger seating is not equipped with seatbelts, passengers must be seated and maintain a secure handhold. If separated from the diver's compartment, passenger seating areas must have a means of communication between the seating area and the driver.
- **7.6** Occupants/riders must keep their body within the limits of the vehicle at all times. Do not attempt to propel any wheeled vehicle with foot while sitting or standing on it.
- 7.7 Vehicles must be stopped before getting on or off. Use handrail or handholds if vehicle is so equipped. When on public highway or road, enter or exit vehicle away from traffic, if practical.
- **7.8** When transporting tools, material, machinery, supplies or other such items on or in vehicle they must be properly arranged and secured in a manner that they do not project over sides or ends of vehicle. All items must be placed such that operating controls, moving parts, occupant seating or standing areas, handrails, and handholds are kept clear. Specially designed supports or restraints must be used if provided.

- **7.9** Specified weight capacity of a vehicle must not be exceeded.
- **7.10** When backing up a vehicle, the driver must look in direction of the movement. A second person, when available, must be outside near the rear of the vehicle or equipment to guide and protect the movement. If the person protecting the movement disappears from the driver's view, the driver must immediately stop the movement.
- **7.11** Do not make adjustment to or disable any speed limiting device.
- **7.12** When loading or unloading self-propelled truck, trailer, or other wheeled equipment at a loading dock:
 - a) Ensure equipment is properly positioned for transfer of material.
 - b) Apply vehicle restraints if loading dock is so equipped.
 - c) If loading dock is not equipped with vehicle restrains, apply chocks to both rear wheels. Only use chocks designed for that purpose. Receiving personnel are responsible for ensuring chocks are properly applied. Use of lumber, concrete blocks, chunks of asphalt, or other similarly improvised chocks is prohibited.
- **7.13** Place the vehicle in park/neutral and set the emergency or hand brake if driver position will be unoccupied.
- **7.14** Keep clear of pinch points when coupling or uncoupling tractors, trucks, trailers, or other equipment.
- **7.15** Be sure that mechanical equipment and all trucks or trailers attached thereto are stopped before operating in reverse direction.
- **7.16** Service or repair of vehicles must only be performed by personnel qualified and authorized to do so. Keep clear of any raised vehicle unless it is properly supported on stands.
- **7.17** Apply chains or non-skid devices to both single traction wheels. Apply chains only to the outside wheel of dual wheels.

Powered Industrial Trucks, Utility Vehicles and Golf Carts

7.18 Only employees who are trained and qualified may operate a powered industrial truck.

- **7.19** Prior to operating such equipment, inspect equipment for proper operating condition and hazardous defects. Test or otherwise inspect the following if the vehicle so equipped:
 - a) Service and parking brake
 - b) Operating controls
 - c) Tires
 - d) Horn
 - e) Backup warning
 - f) Coupling devices
 - g) Steering
 - h) Seat belts
 - i) Lights and reflectors
 - j) Windshield wipers
 - k) Any other system or component required for safe operation of the vehicle
- 7.20 When operating such equipment:
 - a) All general requirements of section 0 apply.
 - b) Secure such equipment when not in use.
 - c) Keep to the right and maintain a constant lookout in the direction in which moving. Yield to pedestrians and emergency traffic.
 - d) Regulate speed such that not less than 10 feet will be maintained between equipment moving in the same direction.
 - e) Exercise caution when passing another vehicle. Passing in areas with limited visibility and high traffic is prohibited.
 - f) Sound alarm where view is obstructed and to warn other persons of approach of the moving equipment.
 - g) Start and stop gradually. Slow down for a turn and avoid turns on uneven ground. Never turn the steering wheel sharply.
 - h) When traveling on uneven surfaces, maintain hold on steering wheel and reduce speed.
 - i) When operating on an inclined surface, travel straight up or down. Turn only when the equipment is on a level surface.
 - j) Ensure trucks, trailers, or railcars are secured before operating into them and dock boards are secured properly prior to use.
- 7.21 When moving a wheeled, roller-borne or manually handled material or object, move only in a controlled fashion and keep clear of person or obstruction. Keep feet and hands clear of wheels/rollers, use sledge or other suitable means to shift rollers.
- **7.22** Couple or uncouple self-propelled or mechanical equipment only when it is stopped. All workers and the operator must have a complete understanding of protection provided against

movement. Keep all parts of body clear of pinch points.

- **7.23** Perform safety stop not less than 3 feet from an elevator and move onto or off of the elevator only when the elevator floor is stopped even with the adjoining floor level.
- **7.24** When operating mechanical equipment that has spring type power release seat or pedal, make sure that hands and feet are clear before depressing seat or pedal.
- **7.25** Utility vehicles, carts, self-propelled platform trucks, or similar equipment with controls at both ends must be operated from forward end, unless:
 - a) Going down incline.
 - b) Entering elevator.
 - c) Necessary to move in both directions in order to get load in position to move forward.
 - d) Moving heavy or unwieldy object necessitating backward move.
 - e) Placing the equipment close to wall or other obstruction.
- **7.26** When self-propelled equipment, machinery, or vehicle will be left unattended, stop engine or motor and remove key. Engage clutch/gears and apply brake when so equipped. Lock and/or otherwise secure such equipment. Unattended equipment must be kept clear of incline, track, driveway, walkway, tunnel and egress paths.
- **7.27** Mobile conveyor must be stable prior to use. Support at each end and at a sufficient number of intermediate points.
- **7.28** When operating fork lift truck, trans stacker, or order picker:
 - a) Space forks so as to completely support the object or load being handled. Secure the load or object to the forks if necessary. When inserting forks into a pallet, adjust them so they are level, high enough to go into the pallet, and as wide and far apart as possible. Keep the combined weight of the equipment and its load centered. When traveling, maintain load within six inches of the ground. Point forks downhill when traveling without a load, and uphill with a load.
 - b) The operator must stop if a person is or otherwise passes between the truck and a wall or other fixed object. Personnel stepping under the forks, even if there is no load being carried at the time, is prohibited.

- c) Stop vehicle and apply brakes before raising or lowering forks.
- d) If the load restricts the operator's forward visibility, the load must be divided between multiple vehicles or multiple trips. If the load cannot be separated, the truck must be moved in the reverse direction except on a ramp or incline.
- e) Do not push a load with the forks or move materials with rope, cable, or chain wound around the forks.
- f) If leaving equipment unattended, lower forks to the ground or floor.

Non-Self Propelled Trailers and Floats

- **7.29** When necessary to stand on a float to handle materials, checked baggage, or express:
 - a) Inspect the float platform prior to using.
 - b) Apply brake if equipped and secure the float with chocks. Do not angle float against train.
 - c) Maintain firm footing and hold the hand grip when mounting or dismounting. Using the wheel or axle for mounting or dismounting is prohibited.
 - d) Standing on baggage or other material while on the float is prohibited.
 - e) Wear hard hat and safety glasses while working on a float.
- 7.30 When opening or closing a trailer door:
 - a) Keep hands clear of pinch points and edges.
 - b) Secure safety chains until one door hasp has been released.
 - c) Release chains gently, do not drop.
 - d) Secure door in fully open position.
 - e) Replace safety chains as soon as door is closed.
- **7.31** Safety chains must be used when pulling floats or trailers when the trailer, tucks, or tractor is so equipped.
- **7.32** When floats are not in use, the wheels must be chocked and the tongs must be secured in the upright position.
- 7.33 If necessary to manually position a float or trailer:
 - a) Position vehicle to be coupled to as close as practical.
 - b) If high resistance is encountered, obtain assistance with the movement.

8.0 Electrical Safety

8.1 Keep at least 15 feet away from downed/dangling wire or any foreign objects that may be hanging from or may be in contact with power transmission, catenary system, electric wire, or third rail. These objects are to be considered as energized and dangerous to life. Report condition to proper authority by quickest available means of communication.

EXCEPTION to 8.1: Class A employees as governed by AMT-2.

- 8.2 Before working on electrical line, apparatus or equipment that is not otherwise governed by AMT-2 procedures, controls in accordance with the Control of Hazardous Energy Program (Lockout/Tagout) are required.
- 8.3 Electric wires or plugs must be used in manufacturer designed configuration. Plug extenders or power strips must be equipped with surge protection. Removing the ground wire or grounding prong from any electric plug or wire or tampering with surge protection is prohibited.
- 8.4 When placing or moving electrical cords keep cords clear of sharp edges. Cords must not be placed under carpets or mats. When removing electrical cord from outlet or receptacle, grasp plug. Pulling on cord to release plug from outlet is prohibited.
- **8.5** Blown fuses must be replaced with the fuse type and rating specified by the equipment manufacturer. Using any other object in place of a fuse is strictly prohibited.
- **8.6** Use only approved non-metallic cased flashlights around electrical equipment..
- 8.7 Keep electrical cabinet doors/covers closed and secured except when work must be performed in the cabinet. Remove all items from inside or top of electrical cabinet when work is complete unless the item and cabinet are designed for such storage.
- **8.8** Work on or about electrical circuit, apparatus or equipment only if trained and qualified to do so. Workers must have full knowledge of operating voltage and service handled. Ensure that no unauthorized workers are present within flash boundary.

- 8.9 Unless protected by approved barrier, or otherwise specified in accordance with AMT-2, the following minimum approach distances apply to electrical circuit, apparatus or equipment:
 - a) 175 to 2,500 (exclusive) volts: 6 inches
 - b) 2,500 (inclusive) to 50,000 (exclusive) volts: 3 feet
 - c) 50,000 or more volts: 8 feet

EXCEPTIONS to 8.9: When removing or replacing fuses, operating disconnect switches, or working on circuit energized at 175 to 480 volts while wearing PPE and/or while using tools as prescribed by separate rule or instruction.

- **8.10** When removing or replacing fuses on energized circuit, insulated tongs must be used. For circuits energized to 175 volts or greater, approved electric rated gloves are required.
- **8.11** Employees whose duties require wearing electrical protective gloves must be trained and qualified in their use.
- **8.12** Electric protective gloves must be used, maintained, and inspected in accordance with manufacturer's instructions.
- 8.13 Operate hook stick type high tension disconnecting switch only while wearing approved electric rated gloves and using approved insulated pole provided for that purpose.
- 8.14 Conductive material, unless specifically designed and approved for such purpose, must not be used around energized wire, apparatus or equipment.
- **8.15** Enter electrical substation or power plant enclosure/building only if authorized to do so.
- **8.16** Before drilling wall or partition, locate hole position so as to avoid contact with wire or electrical equipment.
- **8.17** Conductive tools must not be used to loosen dirt in the vicinity of underground electrical components.
- **8.18** Hold switch pole so that the maximum length of the pole is between the circuit and the hands.
- **8.19** Circuit breaker not equipped with platform must not be operated by hand when the operating lever travels beyond reach of the employee.

- **8.20** Remove detachable handle for hand operation of electrically operated oil or air circuit breaker as soon as hand operation is completed.
- **8.21** Disconnect switch associated with circuit breaker must not be opened or closed before circuit breaker has been opened.

EXCEPTION to 8.21: Disconnecting switch may be closed while circuit breaker of non-trip-free type is closed.

- 8.22 Use non-metallic barricade type tape or rope to indicate the limits within which clearance protection has been provided for safely working on circuit, apparatus or equipment on the ground or floor of substation and also on the structure when practical.
- **8.23** Before working on broken conductor normally energized at 480 or more volts place grounding devices on both sides of break.
- **8.24** Before working on catenary section break, place grounding devices on both sides of break.
- **8.25** Apply grounds to wire being strung near high voltage circuit.
- **8.26** Work on aerial wire circuit normally energized at 480 or more volts only when it has been de-energized and grounded on each side of point of work.
- 8.27 Before working on insulated power cable normally energized at 2,500 or more volts, de-energize the circuit and then ground it by switches or other approved method at nearest terminal on each side of the work. Before starting work, use detecting device at point where work is to be done to ensure that the de-energized cable has been selected.
- **8.28** Before performing work on any transformer, workers must have instruction applicable to the specific transformer and permission to commence work from proper authority.
- **8.29** Before working on power transformer separated from bus by a horn gap switch, open control cut-out switch at horn gap switch mechanism.
- **8.30** When de-energizing power transformer, open circuit breaker before opening horn gap switch.
- **8.31** When energizing power transformer, close horn gap switch before closing circuit breaker.

- **8.32** Before working on static condenser or lightning arrestor, be sure that it is discharged. Stop work on lightning arrestor when weather conditions exist such that the arrestor may become energized.
- **8.33** If necessary to remove objects or otherwise perform work on power supply/third rail to electric cranes, remove circuit from service in accordance with the Control of Hazardous Energy program.
- **8.34** Before working on any electric, diesel electric, or power car with a DC link, verify that the capacitors are fully discharged before work is done on or near DC link. Follow all safety procedures and ensure that any interlocks identified by the locomotive OEM are functional and are used correctly.
- **8.35** When working outside territory where AMT-2 rules apply, maintain a minimum of 6 inches clearance to any third rail systems.



9.0 Fire Safety and Prevention

Fire Safety Equipment

- **9.1** Tampering with fire protection or safety devices is strictly prohibited.
- **9.2** Keep access to fire alarm device, fire extinguisher, water hydrant, or other firefighting apparatus clear to accommodate equipment, vehicles, or persons that require access to such devices. Maintain path to these devices at least two feet wide. Keep vehicles and other material at least 15 feet clear of fire hydrants.
- **9.3** Doors, shutters, or windows used as fire stops and egress routes (e.g. fire escapes, ladders, stairways, doors, and roads) must be maintained in good condition and free from obstructions that could interfere with required operation.
- **9.4** Use fire suppression equipment only if rated for the specific fire, and use will not impede escape. The use of water on energized electrical equipment, except for <u>Class-C</u> rated extinguishers, is prohibited.

NOTE: Additional rules for fire extinguisher/suppression equipment use in Electrified Territory can be found in AMT-2.

Smoking and Open Flames

- **9.5** Smoking or using an open flame is permitted only in authorized areas. Smoking or open flame is prohibited:
 - a) Within 50 feet of areas where explosives, flammable liquids/chemicals/gasses, or fuel dispensing equipment are handled or stored.
 - b) While working on or near a storage battery or in its charging area.
 - c) In a manhole or confined space.
- **9.6** Use of an open flame to thaw frozen liquid in carburetor, fuel line or radiator is prohibited.
- **9.7** Open flame light must be secured to prevent falling or upsetting.
- **9.8** Burning of any kind, such as trash, ties, etc., for warming, is prohibited.

Use and Storage of Flammable or Explosive Materials

9.9 Gasoline and other flammable liquids must be in properly labeled Underwriters Laboratories (UL)

- or Factory Mutual (FM) approved safety cans. Cans must be stored in UL/FM listed properly vented flammable storage cabinets in accordance with applicable OSHA Standards and local codes. Storage must be in designated areas away from any sources of heat and in compliance with instructions provided by the supplier of the flammable liquid as well as all applicable fire codes for the work site.
- **9.10** Flammable liquids and gasses must be returned to the approved storage location when they are not in immediate and direct use.
- **9.11** Do not use flammable liquids to start or stimulate fires.
- **9.12** The use or storage of propane gas tank, torch, furnace or similar equipment must be in accordance with applicable fire codes. Do not store such equipment in basement, tunnel, manhole or other closely confined place.
- **9.13** Fill container equipped with pressure control vent, safety valve or other pressure release feature with gas, air, liquid or other substance only when sure that the safety feature is effective. Tampering with vent, valve or other safety feature on tank or container is prohibited.
- **9.14** Dispose of exhausted pressure container in accordance with manufacturer's instructions and applicable fire codes for the work location.
- **9.15** Use non-sparking tools when handling or working in the vicinity of gasoline or other flammable liquids.
- 9.16 Place gasoline cans on the ground when filling.
- **9.17** Transport gasoline or other flammable liquids outside of the closed compartments of passenger vehicles.
- **9.18** Use approved flammable or combustible liquids for cleaning and polishing only in well ventilated areas. Use approved storage methods for clothes, waste, and other material used in the cleaning process. Use approved cleaning tanks with self-closing lids when using solvents. The use of gasoline for cleaning or polishing purposes is prohibited.
- **9.19** Use only approved solvents and other chemicals for the purposes for which they are intended. Proper respiratory, body and fire protection must be utilized when using any chemical product.

- **9.20** Any equipment used to pump flammable liquid from a container must be designed and approved for such use. Do not use air pressure or iron/steel pipe to force flammable liquid from its container.
- **9.21** Dispense flammable liquid with brass, copper, or non-metallic flexible tubing. Tubing must be approved for use with the liquid.
- **9.22** When transferring flammable liquids, maintain metal contact between nozzle, pipe, flexible hose, or other attachment and container to which the liquid is being transferred. If equipped, ground wire must be used.
- **9.23** Do not remove flame arrester screen or barrier in storage can at any time unless necessary for cleaning, and then only when open flame or excessive heat is not present. Replace screen or barrier immediately.
- **9.24** When fueling equipment other than diesel locomotives:
 - a) Move equipment out of enclosed area before fueling, except when equipment is in a shop for repair where adequate ventilation is provided.
 - b) Stop the equipment's engine before refueling. Allow gasoline powered tools to cool prior to refueling since hot engine parts may ignite fuel.
 - c) Fill nozzle must touch side of fill opening to prevent static discharge. Cans must be equipped with a standard pouring spout. Ground wires must be used if provided.
 - d) If tank level is visible, stop filling within 1 inch of the top of the tank to prevent overflow.
 - e) Do not start the engine of equipment in the vicinity of spilled gasoline.
 - f) Clean up or contain gasoline spills, when safe to do so, with approved spill kits and report spills to proper authority.
- **9.25** Use soft cloth instead of steel wool or steel brush to clean around engine, tank or other place where flammable fumes may be present.
- **9.26** Dispose of paper, rags, waste, or other material saturated with flammable liquid in the appropriate manner. Do not place in pocket, refuse container, locker, or other confined area. Keep such material clear of stove, furnace, radiator, or other source of heat.

Fire Safety On Board Trains

- **9.27** No modifications, substitutions, or additions to rolling stock or the equipment/objects carried thereon may be made without approval of Amtrak's Rolling Stock Engineering Department.
- **9.28** Keep aisles and all exits clear. Relocate any items placed in these areas.
- **9.29** The following areas must not be used for storage:
 - a) Electrical lockers
 - b) Mechanical closets
 - c) PA cabinets
 - d) Areas otherwise marked as prohibiting use for storage
- **9.30** Keep all items clear of heating elements and components, including heating vents or contact with floor level heat sources.
- **9.31** Report heating elements that are hotter than normal or show signs of singeing or charring.



10.0 Use of Tools and Equipment

General Requirements

- 10.1 Read and follow the manufacturer's specifications or instructions before using tools or equipment. Use tools and equipment only for their intended purpose. Service tool, machine, or equipment only in accordance with manufacturer specified maintenance procedures. Unauthorized modifications tools or to equipment or the control mechanisms thereof are strictly prohibited.
- **10.2** Tag and remove defective tools from service.
- **10.3** Keep hands and all parts of the body clear of moving parts and pinch points. Operate machinery, equipment or appliance with guard secured in protecting position.
- **10.4** Store and transport all tools in a secure and protected manner. Heavy tools are to be placed on the floor. Sharp or edged tools are to be placed in a suitable box, bin or rack, or protected with suitable sheath or wrapping. Have tools at such a height that they can be safely placed or removed while standing on the floor.
- **10.5** Employees must make sure material being handled or otherwise worked on is properly secure and will not shift.
- **10.6** Employees must provide a means to protect self and others from release of flying solid material or sparks when performing tasks that may create such hazards.
- **10.7** Compressed air, gas or other such means must not be directed toward any person. When using compressed air, safety air nozzle must be used which will not exceed 30 psi when deadheaded, has effective chip guarding, and meets all other applicable OSHA requirements.

Cutting Tools

- **10.8** Cutting tools must be issued and approved by Amtrak. Use of a knife, box cutter, any other cutting implement that is not issued by Amtrak is strictly prohibited.
- **10.9** When using sharp or pointed tool, turn edge or point away from the body.
- **10.10** When cutting with impact tool, provision must be made for protection against flying debris.

- **10.11** When using hand adze:
 - a) Secure object to be adzed. Using foot to secure is prohibited.
 - b) Remove nails, dirt, stones or other obstructions from object.
 - c) Straddle object when possible and work adze between legs.
 - d) Cut with grain when practical, notching and chipping out pieces if considerable amount is to be cut out.
 - e) Use short stroke, keep adze free of chip. Use caution to prevent adze blade from glancing when cutting cross grained lumber or knot.

Jacks

- **10.12** Jacking rolling stock, hoisting equipment, motor vehicle or other such equipment must be performed in accordance with company and/or department specific instructions/procedures.
- **10.13** Jacks must be designed for and have sufficient lifting capacity for the application in which they are used.
- **10.14** Keep clear of load supported by jack unless load has been adequately supported with blocks or other approved means.
- **10.15** Before lowering jack under load, warn other employees in the work area and be sure that they are in a safe position.
- **10.16** Jack under load must not be tripped without use of jack handle.

Track Jacks

- **10.17** Use jack between rails (in gauge) only when necessitated by platform, girder or other such obstruction.
- **10.18** Place jack straight and in solid contact on base and with item to be lifted. Insert a piece of sound wood that is at least 1/2-inch-thick and larger than the jack head between jack head and load when jacking against metal, unless lining track with jack.

EXCEPTION to 10.18: Jacks used to line track when designed for that purpose may be used in accordance with manufacturer's instructions.

Grinding Machines/Wheels and Wire Brush Wheels

- **10.19** Grinding equipment must be inspected and used in accordance with manufacturer's instructions. Ring test (or other manufacturer specified test) must be performed before mounting grinding wheel.
- **10.20** Protect grinding wheels from oil, grease, water or other liquids and from freezing temperatures or conditions that cause surface condensation.

Pneumatic or Electric Powered Tools

- **10.21** Power tools must be shut down and in a safe state before being left unattended.
- **10.22** When using pneumatic tools:
 - a) Never kink air hose to control air.
 - b) Close air supply and release or bleed air pressure before connecting tool.
 - c) When blowing down or cleaning air hose, remove tool then connect one end of hose to air source and secure other end to prevent whipping. Ensure that all persons are in the clear prior to blowing down or otherwise cleaning hose.
- **10.23** To remove chip, cutting, scale or other item from power drill, press or other such machine, shut the machine down and use brush or other suitable item.
- **10.24** Keep tools, material or other items not in use clear of moving parts of power operated equipment or machinery.



11.0 Handling Material

General Requirements

- **11.1** Do not lift anything greater than 50 lbs. without assistance.
- **11.2** Remove or otherwise flatten sharp/protruding objects from lumber or other material to be reclaimed.
- **11.3** Cut resistant gloves and eye protection is required when handling broken glass.
- **11.4** Leave material, equipment, or objects in a stable position when handling is completed. Secure when its shape or position is likely to result in its shifting or falling.
- **11.5** When loading or hauling material on truck or trailer:
 - a) Ensure material is properly secured.
 - b) Place red flag on end of material extending beyond the rear of such equipment.
- **11.6** A wheeled container, hand truck, or trailer must be loaded in such a manner that maintains a clear view for the handler in all necessary directions of movement.
- **11.7** Ride or otherwise sit/stand on transporting equipment only in locations designed for such use.
- **11.8** When stacking or storing materials:
 - a) Ensure stacks are stable.
 - b) Store heavier, bulkier materials at a height between the shoulders and mid-thigh to minimize lifting effort from bending or reaching too high.
 - c) Place stacks only in locations where they will not pose tripping hazards or otherwise obstruct access to fire extinguishers, electrical panels, emergency eye washes, showers or exits.
 - d) Keep a safe distance from the edge of pits, ledges and platforms.
- **11.9** When handling drums or barrels, use approved drum handling equipment. Assure sufficient clearance before pulling drum over on side.
- **11.10** When unreeling wire or cable, tend reel from opposite side from which wire is pulled.

- **11.11** When handling transfer plates associated with baggage or material:
 - a) Protection against movement must be arranged with the train crew before placing transfer plate in a consist coupled to a locomotive.
 - b) Protection against movement must be arranged with the driver before placing transfer plate in a trailer coupled to a tractor.
 - c) Place or remove the plate with a hand truck or other suitable equipment. If necessary to lift by hand, obtain a secure handhold and hold it away from self.
 - d) Plates that are not equipped with permanent hold devices must be secured when placed for use.
 - e) Plates must be stored in a flat position with the slanted ends down when not in use. Keep them clear of tracks, driveways, trucking areas, walkways, or edges of platforms unless there is a designated safe place for storage.

Handling of Baggage or Parcels

11.12 Baggage in passenger cars must be stored in designated baggage storage areas. Egress routes (e.g. aisle, hallway, vestibule, passage between cars) must be kept clear.

Handling of Food Carts and Modules

- **11.13** Doors of food carts and modules must be closed and secured at all times unless opened to load or remove food.
- **11.14** Carts and modules must only be stowed in locations specifically designed or designated for such use.
- **11.15** Lift/handle only one cart or module at a time.
- **11.16** Food service cart must not be left unattended unless secured in designated location.

Handling of Train Wheels

- **11.17** Use wheel cart, fork lift truck or crane to move wheels wherever possible.
- **11.18** Wear cut resistant or leather gloves when handling wheels.
- **11.19** Keep clear of mounted or unmounted rolling wheels.

- **11.20** Stop mounted wheels by exerting pull on the axle from behind with respect to the direction of travel. Do not stop movement of mounted wheels by holding the flange.
- **11.21** Secure mounted or unmounted wheels before leaving unattended.
- **11.22** Store all wheelsets and traction motor combos in a single level. Wheelsets and traction motor combos must not be stacked at any time.
- **11.23** Only approved traction motor combo moving and loading devices may be used for lifting or repositioning a loaded traction motor combo or wheelset.
- **11.24** Only use wheel storage fixtures specifically designated for use with equipment being stored.

Handling of Engineering Department Material

- **11.25** Transport large or heavy reel, or other unwieldy material only when it is adequately lashed, braced, blocked or otherwise secured. Take a position on the ground, car, truck, trailer or elsewhere that will prevent any part of the body from being caught between any object that is likely to shift.
- **11.26** Unload tool, material or other object from train, self-propelled or other equipment, only when it is standing.

EXCEPTION to 11.26: Unloading from moving equipment may be performed when moving less than 5 miles per hour and when the employee in charge, the operator, and all workers have been briefed on such activity. The operator of the equipment must control it in such a manner to prevent sudden changes in speed.

11.27 Ensure tongs have a secure grip on material. Tie tong grip must be 8 or more inches from end of and below center of tie, timber or other such object.

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12.0 Hoisting Equipment and Operations

NOTE: When operating in territory equipped with overhead catenary, AMT-2 instructions govern minimum approach distances to the catenary system.

General Requirements

- **12.1** Only employees who are trained, qualified, and authorized are permitted to operate cranes, hoists, and mechanical lifting/pulling devices.
- **12.2** Hoisting equipment and rigging must be used and maintained in accordance with manufacturer's instructions.
- **12.3** Keep clear of suspended load, hoisting equipment boom, swing of the cab, or pinch points on lift path.
- **12.4** A job safety briefing must be conducted including the operator and all other workers involved in the lift prior to any hoisting operation. Communications must be established between all parties involved in the lift and a means established to keep others clear of the lift.
- **12.5** Stand clear of cable, rope, wire rope, or chain that is either under tension or will be imminently loaded. Ensure position is clear of line of fire if such item under tension were to fail.
- **12.6** Loads must not be suspended from booms unless the work requires. In such cases, keep the load secured and as close to the ground as possible. Side-loading or dragging a load with hoisting equipment is prohibited.
- 12.7 Use tag lines to control the suspended load. If it is not possible to use tag line, use hooked or pronged pole or hand line. Applying hand or other part of body directly to a load is prohibited.
- **12.8** Persons must only occupy locations on hoisting equipment designed to be working platforms. Riding on loads or rigging is prohibited.
- **12.9** When using gin pole, it must be securely set and guyed and employees must not be on it while lift is being made.

Rigging

12.10 Only approved and rated slings and chains in manufacturer designed/intended configuration are permitted to be used. Slings and chains must have legible identification tags affixed indicating their capacity and inspection date. Rigging must

be of proper size, capacity, and design for the load to be lifted. Damaged, or defective rigging must be immediately removed from service. Alteration or modification of rigging components is prohibited.

- **12.11** Use spreader bar between chains when lifting sheet steel, bar, pipe, rod, or other such items with double hook-up sling.
- **12.12** If an empty chain or cable sling is hanging from hoisting equipment, place the end of the sling into the ring attachment or the block hook before hoisting is started.
- **12.13** Place strap, belt, rope or other such tackle where it will not contact sharp edged tool or material.

Operator Responsibilities

- **12.14** When starting to lift, test brakes when load is a few inches from floor or ground. Check, or ensure that the designated signaler has checked that the sling is even, the chain hoisting accessory is straight, and the load rides level before any further lifting or movement.
- 12.15 Operators are responsible for the safety of the hoisting equipment under their control and the safety of the employees working in the vicinity. Operators must ensure that loads are never moved over people, occupied equipment, or gas cutting/welding equipment. Additionally, operators must:
 - a) Know the safe hoisting capacities of the equipment and ensure that capacity is not exceeded.
 - b) Stop load, hook, or boom short of any obstruction and maintain required minimum approach distances from energized wires.
 - c) Use audible signal to warn persons of approaching load.
 - d) Operate equipment only when load is not rotating or swaying.
 - e) Stay at the controls when a load is suspended.

Signaling for Hoisting Operations

- **12.16** One person must be designated to give signals at the job safety briefing. As part of establishing communication, all persons involved in the operation must know who has been designated.
- **12.17** When two cranes or derricks are lifting the same load, one qualified person must be designated to direct movements of both.

- **12.18** If the hoisting equipment operator loses visual contact with the designated signaler, movement must be stopped.
- **12.19** Give signals for operation of hoisting equipment only when qualified and designated to do so.

EXCEPTION to 12.19: An emergency stop signal may be given by anyone in the vicinity of hoisting operations.

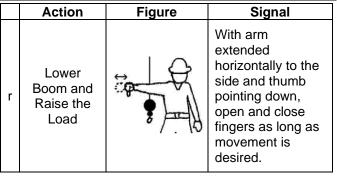
- **12.20** The designated signaler and any other employee escorting the movement of a suspended load or hook must ensure that the load, cab, or boom does not contact wires, structures, any other objects, or people.
- **12.21** Use standard hand signals shown to govern movements of hoisting equipment.

| | Action | Figure | Signal |
|---|-------------------|--------|--|
| а | Raise Load | 2 Def | With forearm extended to the side, index finger pointing straight up, move hand and finger in small horizontal circle. |
| b | Lower Load | | With arm and index finger pointing down, move hand and finger in small horizontal circle. |
| с | Stop | | With arm extended horizontally to the side, palm down, arm is swung back and forth horizontally. |
| d | Emergency Stop | | With both arms extended horizontally to the side, palms down, arms are swung back and forth horizontally. |
| | | | |

| | _ | Action | Figure | Signal |
|---|---|--|--------|---|
| | е | Swing | • | With arm extended horizontally, index finger points in direction that boom is to swing. |
| | f | Travel (Tower) | | With all fingers pointing up, arm is extended horizontally out and back to make a pushing motion in direction of travel. |
| | g | Travel, Both Tracks (Crawler Crane) | | Rotate fists around each other in front of body; direction of motion away from body indicates travel forward, towards body indicates travel backward. |
| | h | Travel, One Track (Crawler Crane) | A A | Indicate track to be locked by raising fist on that side. Rotate other fist in front of body in direction that the other track is to travel. |
| | i | Raise Boom | A A | With arm extended horizontally to the side, thumb points up with other fingers closed. |
| | j | Lower Boom | P. P. | With arm extended horizontally to the side, thumb points down with other fingers closed. |
| | k | Use Main Hoist | | First, tap fist on head. Then a regular signal is given to indicate desired action. |
| I | | | | |

Employee Safety Rules

| | Employee | | | | |
|----------|--|--------|---|--|--|
| <u> </u> | Action | Figure | Signal | | |
| I | Use Auxiliary Hoist | | First, with arm bent at elbow and forearm vertical, elbow is tapped with other hand. Then a regular signal is given to indicate desired action. | | |
| m | Move Slowly | | Use one hand to give any motion signal. Other hand is placed motionless in front of hand giving the motion signal. (Raise load slowly shown.) | | |
| n | Dog Everything | | Hands held together at waist level. | | |
| 0 | Retract Telescoping Boom | | With hands to the front at waist level, make fists with thumbs pointed at each other. | | |
| р | Extend Telescoping Boom | | With hands to the front at waist level, make fists with thumbs pointing outward. | | |
| q | Raise Boom and Lower the Load | | With arm extended horizontally to the side and thumb pointing up, open and close fingers as long as movement is desired. | | |



Operation of Rail Bound and other MOW Hoisting Equipment

- **12.22** Operator permission is required before boarding hoisting equipment or associated cars. Any persons riding MOW hoisting equipment and associated cars must be in a location visible to the operator at all times, designed for personnel to ride in, and is otherwise compliant with Amtrak's Roadway Worker Protection Manual.
- **12.23** Protection against movement or operation is required before performing maintenance or repair work on such equipment or associated cars. Equipment must not be moved or operated until protection is released and all employees are clear of the equipment.
- **12.24** Rail tongs or other such device must be attached from the opposite side from which direction that load will be moved whenever possible.
- **12.25** Handle tie, timber, or similar object between jaws of hoisting equipment bucket only when the bucket is equipped with teeth. Use only grapples or other devices designed for this purpose.



13.0 Hot Work and Gas Cylinders

General Requirements

- **13.1** Only employees trained and qualified may perform hot work or associated fire watch duties.
- **13.2** All hot work must be performed, and PPE worn in accordance with applicable department rules, instructions or procedures, manufacturer's instructions, and NRPC 1909 *Instructions for the Safe Handling and Care of Oxygen, Acetylene or Other Gas Cylinders and Associated Equipment.*
- **13.3** Do not heat a cylinder to raise gas pressure.
- **13.4** Hot work must be performed at least 20 feet from trucks and cylinders unless shielding is provided to protect against sparks.
- **13.5** Use proper screens when performing welding or cutting where employees, the public, or property may be exposed.
- **13.6** Ensure that any areas where sparks may enter, including under temporary walls, are free of combustible or flammable materials.
- **13.7** Keep at least 15 feet from thermite, electrical welding or cutting operations unless directly performing, assisting, or supervising the cutting or welding activity.
- **13.8** Wear approved eye protection when duties require facing cutting or welding operations.
- **13.9** When cutting on twisted rail or other steel parts that are under tension, take precautions to keep people from being struck. Avoid cutting in the kinked or bent areas. Clean, support, or block the parts not being cut on both sides of the cut line. Notify everyone in the area before cutting. Provide a lookout to prevent people from moving into the work area during the cutting operation.
- **13.10** While cutting rail, it must be stabilized or otherwise balanced. Standing on the rail or using a bar in a bolt hole for stability/balance is prohibited. Manually lifting and dropping the rail to complete the break is prohibited.

Storage and Handling Compressed Gas Cylinders

13.11 Acetylene gas or other such cylinders must be secured by a specially designed and approved cradle when lifted by hoisting equipment. Keep gas cylinders under complete control while handling using block or handles.

- **13.12** Acetylene or other such gas cylinders must be handled with care. Throwing, dropping, rolling, or otherwise rough handling is prohibited.
- **13.13** Keep gas cylinder away from furnace, steam pipe, or other source of heat.
- **13.14** Fuel gas and oxygen cylinder storage must be separated by at least 20 feet or otherwise by fire barrier designed in compliance with OSHA regulations.
- **13.15** Gas cylinders must be stored and transported in a secured upright position unless otherwise in a manufacturer approved storage facility.
- **13.16** Cylinder valves must be fully closed with protective caps in place.
- **13.17** Remove regulator from cylinder during transport unless securely attached to a cart or transport device designed and approved specifically for this function.
- **13.18** Separate empty and full cylinders, mark cylinders that are empty.
- **13.19** Keep live electrical cables clear cylinders.
- **13.20** Oil must not be applied to an oxygen cylinder or regulator components.
- **13.21** Keep vents on storage container clear of dirt and debris to allow for proper air flow and ventilation.
- **13.22** Gauges and hose connections must be leak checked prior to use. Calibration of gauges must be current.
- **13.23** Oxygen, acetylene and other welding gauges must be inspected and tested every 12 months with dates clearly marked on each gauge.



14.0 Working at Heights Greater than Four Feet

- **14.1** Follow applicable system and department/local fall protection programs and procedures.
- **14.2** Fall protection PPE must only be used by trained and qualified employees in accordance with manufacturer's instructions and limitations.
- **14.3** Fall protection PPE, and other equipment used for working at heights, such as ladders, must be inspected prior to use and determined to be in good working order in accordance with applicable system and department/local fall protection programs and procedures. Ensure that defective items are immediately removed from service and marked as defective.
- **14.4** Ladders must be used only for the purpose for which they are designed in accordance with manufacturer's instructions and limitations, and Amtrak's fall protection programs and procedures. Modifications to ladders are prohibited.
- **14.5** Trestle or "A" ladders must be used in a fully open and locked position. These ladders must not be used as a step or straight ladder.
- **14.6** Only Amtrak approved portable ladders may be used. Do not use metal ladders or scaffolds when working on or near energized wires or other electrical hazards.
- **14.7** Protect all ladders and other elevated working platform structures from collisions and from persons passing underneath work being performed by surrounding area at least 5 feet from the platform with a suitable guard that is properly marked and illuminated if necessary or assigning an employee equipped with appropriate warning devices.
- **14.8** Precautions against falling objects must been taken if workers are required to move under an elevated working platform.
- **14.9** Ladders must only be occupied by one person at a time.

EXCEPTION to 14.9: ET Personnel working in accordance with ET Department Standard Operating Instructions.

- **14.10** Ladders must be stable and stationary when occupied.
- **14.11** Observe the ground, floor or pavement conditions and avoid obstruction, hole, slipping

or other hazards when getting off ladder, step or stirrup.

- **14.12** Conditions such as high wind, condensation, snow, ice and rain can significantly increase risk while working at heights. These conditions must be evaluated by the supervisor and/or foreman in conjunction with the work crew prior to work commencement.
- **14.13** All scaffolds must be constructed in accordance with applicable OSHA Regulations and other local codes.
- **14.14** Work only on elevated structures that are stable and in a suitable condition to support work. Keep clear of and report to proper authority roof, platform or other elevated part of structure that is not properly secured or is deteriorated, rotted or otherwise of questionable stability.
- **14.15** Use hand line or suitable container to transport tool, material, or other object to a work location on a pole, scaffold, or other elevated place. Throwing or dropping of such objects from an elevated place is prohibited.
- **14.16** Only use material designed or otherwise approved for use in handrails, platform, scaffold, or other such facility.
- **14.17** Scaffold or platform must be secure against tipping, falling or moving prior to use.
- **14.18** When work is being performed where there is danger of falling into more than 4 feet of water, a boat, continuously attended, must be kept at the most advantageous point.

EXCEPTION to 14.18: A boat is NOT required when a worker is prevented from falling into water by any ONE of the following:

- By wearing work positioning/fall arrest equipment. OR
- By safety nets. OR
- By walkways provisioned with handrails.
 OR
- By performing minor work exclusively between the rails.

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15.0 Confined Spaces and Excavations

- **15.1** Follow applicable confined space entry programs and procedures when entering designated confined spaces. Only employees trained and qualified in confined space entry may enter a designated confined space.
- **15.2** Keep a safe distance from edge of inspection, turntable or other pit or trench, unless necessary for the purpose of construction, inspection, maintenance or use.
- **15.3** Keep clear of turntable or other pit containing machinery unless necessary to enter in the performance of duty. Controls in accordance with the Control of Hazardous Energy program are required for entry.
- **15.4** Before operations disturbing the ground (e.g. digging, excavating), the person in charge must determine if there is any underground wire, cable, electrical apparatus, equipment or pipe in the vicinity, and if so arrange for full protection.
- **15.5** Excavations four feet in depth or greater require an established safe means of egress, such as ladders or stairs.
- **15.6** Excavations five feet in depth or greater must be safely shored or sloped.
- **15.7** Keep excavated soil and other materials at least 2 feet from trench edges.
- **15.8** Suitably safeguard and, if necessary, illuminate or mark with lights excavations about track or other place where person is likely to walk.

EXCEPTION to 15.8: Does not apply to turntable or inspection pits or edges of high level platforms used to access passenger areas of rolling stock equipment.

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16.0 Chemical and Hazardous Material Safety

General Requirements

- **16.1** All chemicals used must be approved by Amtrak's Chemical Review Task Force. Chemicals may only be used for the intended purpose as approved by the Task Force.
- **16.2** All chemicals must be used and stored in accordance with manufacturer's specifications, instructions and regulations applicable to the work location.
- **16.3** Smoking, eating, drinking, application of cosmetics, and the storage of food, smoking material or cosmetics is strictly prohibited in any area designated for chemical or hazardous material use, cleaning or storage.
- **16.4** Any specific requirements related to spill containment and clean up must be fully understood prior to commencing work and a spill response must be discussed at the pre-job briefing. All spills must be reported immediately to proper authority.
- **16.5** Materials contaminated with hazardous substances must be discarded in designated containers/locations.

Working With and About Material Contaminated with PCBs

NOTE: Polychlorinated Biphenyls (PCBs) may be present in the soil and ballast in and around Amtrak track areas, particularly where rolling stock may have been stored, staged, serviced, or otherwise regularly stopped prior to 2000.

- **16.6** Contact Environmental personnel prior to performing work in an area that is potentially contaminated with PCB's. Sampling for PCB concentration may be required to determine required PPE and work practices.
- **16.7** When necessary to handle material contaminated with PCBs, PPE and other control measures prescribed in Appendix A must be worn and/or applied.
- **16.8** Materials contaminated with PCBs must be handled only by qualified personnel and discarded in a PCB contaminant container.
- **16.9** Tools, equipment, and materials exposed to PCBs must be properly stored and marked.

- **16.10** Contaminated PCB articles, tools, containers, and parts that are to be reused must be properly cleaned with an approved solvent before reuse.
- **16.11** PPE must be disposed of properly for work performed in soil or ballast with 50 ppm or greater average PCB concentration. Contact Environmental for disposal assistance.
- **16.12** Smoking, eating, drinking, application of cosmetics, and the storage of food, smoking material or cosmetics is strictly prohibited in any area known to contain or be contaminated with PCBs.
- **16.13** When an employee working with material known to be contaminated with PCBs must remove their personal protective equipment, their face and hands must be washed with warm water and soap before going to another job, eating, drinking, smoking, or using toilet facilities. Before resuming PCB work, new or properly cleaned protective equipment must be worn.



17.0 Battery Safety

General Requirements

- **17.1** Battery charger must be turned off or unplugged before connecting to or disconnecting from a battery.
- **17.2** Wear proper eye protection before connecting batteries.
- **17.3** Plumbed or self-contained emergency eye wash station must be located within a 10 second walk of where batteries are serviced and must be inspected monthly. Access to eye wash stations must be kept clear.

NOTE: Portable eye wash bottles do not meet the requirement of having a plumbed or self-contained eye wash.

- **17.4** Tools and other metallic objects must be stored away from the top of uncovered batteries.
- **17.5** Battery vent caps must be maintained in functioning condition at all times. Vent caps must be installed when charging batteries.
- **17.6** Hydrogen gas may be released and accumulate during battery charging. Keep open flames and tools/equipment that may produce sparks or electric arcs clear of battery charging areas or exposed batteries.

Connecting Live and Discharged Batteries / Jumper Cable Use

- **17.7** Connecting batteries or battery systems of different voltage ratings or ground terminal types (positive vs. negative) is prohibited.
- **17.8** Keep cable clamps from touching each other or the equipment when performing jump starting.

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18.0 Power Plant / Stationary Boiler Work

- **18.1** Shut off forced draft before inspecting or clearing fire. Secure latch on observation door after each inspection of fire in stationary boiler.
- **18.2** Close top and bottom gauge valves and open the gauge glass blowdown valve before wiping or cleaning the gauge glass.
- **18.3** Close and lock crown valve, blow-off valve, and feed water heater valve in accordance with the Control of Hazardous Energy Program before entering stationary boiler drum.
- **18.4** Enter combustion or soot chamber of stationary boiler to remove soot only after boiler has been thoroughly cooled and soot saturated with water. Follow Confined Space program requirements for entry.
- **18.5** When working on or examining the inside cylinder on any moving part of air compressor, hydraulic pump, or stationary engine, block the flywheel or crosshead and open the cylinder at both ends.
- **18.6** When starting steam driven stationary engine, close throttle valve, open cylinder cocks, and use lever provided for the purpose to turn the engine at least once manually before turning on the steam. Attempting to start steam driven stationary engine which is on center by turning on steam and rocking it off center with hands or feet is prohibited.
- **18.7** Repair or tighten tubes, flues, fire box sheets, washout plugs, or boiler fittings while boiler is not under steam pressure. Follow Confined Space program requirements for entry.
- **18.8** Manually check water levels in boilers at the beginning of each shift.

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19.0 Cutting and Trimming Trees or Brush

- **19.1** When cutting or trimming a tree or brush:
 - a) Use suitable wedges in the provided cut, and if necessary, rope or other suitable means to insure that tree being cut falls in the desired direction.
 - b) Cut a sufficient thickness of the wood on opposite side of tree or underside of limb from which it is being cut through to prevent its splitting or falling in an undesired direction.
 - c) Keep self and others away from direction tree will fall or from under limb being cut
 - d) Use ladder or approved tree climbers to get into or out of tree.
 - e) Use saw, trimmer or other suitable tool, instead of axe or hatchet while in a tree.
 - f) Use rope to lower large or heavy limb.
 - g) Take appropriate precautions if any portion of tree is in contact with or in close proximity to power line.
 - h) Keep clear at least 10 feet from operating rotary brush cutter.
- **19.2** If operating portable power device designed to be operated without guard protection to cut brush, grass, or weeds:
 - a) Ensure all persons are clear of potential flying debris.
 - b) Eye and leg protection is required.
 - c) Use safety devices designed to keep the blade and moving parts away from body.
- **19.3** Operate on or off-track power operated rotary brush cutter only when qualified and while operating:
 - a) Maintain lookout for employees, other persons, or animals that are likely to be struck by cutter or flying debris.
 - b) Operator cab must be protected by either a window barrier or metal guard.
 - c) Stop engine or motor and wait until cutting head ceases to rotate before leaving the controls.
- **19.4** Only employees trained and qualified may use chainsaw. Foot and leg protection approved for use with chainsaw must be worn.
- **19.5** Pointed edges of sharp tool must be protected when transported on equipment, machinery or vehicle.

20.0 Safe Movement and Behavior Workplace

General Requirements

- 20.1 When transiting through the workplace use designated routes or paths when provided. Designated tracks, pathways, platforms, floors, stairways, hallways, or other such places must be maintained free of obstructions and tripping hazards.
- **20.2** Maintain a constant view in direction of movement while walking. Stop when not looking in the direction of movement or if view in walking direction otherwise becomes obscured. The use of electronic devices while walking is prohibited.
- **20.3** Give the right of way to persons carrying a load.
- **20.4** Clean and/or apply salt, sand, or other suitable material on a slippery surface during inclement weather. Salt must not be applied to magnesium surfaces.
- **20.5** Get on or off turntable, transfer table, coping, movable bridge, or elevator only when movement has stopped.
- **20.6** Use a flashlight, lantern, or other portable lighting while walking or working in areas with low lighting conditions.
- **20.7** Do not use material conveyor, chute, bucket, or other such facility as a step, walkway, or means of personal transportation.
- **20.8** Do not reach into any area without being able to see where hands will be placed.

Elevators and Escalators

- **20.9** Maintain door, gate, or barrier closed until the elevator is stopped and elevator floor is even with the adjoining floor and all persons, trucks, or other objects are in the clear.
- **20.10** Stop truck, tractor, or other equipment, not less than three feet from the elevator.
- **20.11** Transporting hand trucks, carts, wheelchairs, straight back chairs, or strollers on escalators is prohibited.
- **20.12** Pick up dropped objects/debris only while escalator is stopped and precaution is taken against start of movement.

Assisting Passengers in Wheelchairs or Other Special Chairs

- **20.13** When using a wheelchair, wheelchair lift, or straight back chair:
 - a) Inspect prior to use and remove damage/defective equipment from service.
 - b) Follow all manufacturer's instructions and posted placards.
 - c) Ensure handbrakes are locked when seating the customer or otherwise not in motion.
 - d) Pull wheelchairs and lifts when maneuvering across obstructions, tracks, curbs, or other uneven surfaces. Pushing wheelchairs and lifts during these maneuvers is prohibited.

Office and Locker Room Safety

NOTE: Office employees are subject to all other applicable sections of these rules.

- **20.14** Use office equipment and supplies only for their intended purpose.
- **20.15** When seated, keep all chair legs on the floor and feet off desks.
- **20.16** Open only one file cabinet drawer at a time. Close drawer when finished using it. Fill file cabinets from bottom to top, placing heaviest loads in the bottom drawers.
- **20.17** Keep objects off of the top of file cabinets, cupboards, lockers, or other elevated locations that are overhead and not designed for continuous storage or use.
- **20.18** When using a paper cutter, keep hands clear of cutting edge. When not in use, lock blade in lowered position.
- **20.19** Keep self and loose clothing clear of the feed of a paper shredder.
- **20.20** Materials having special storage requirements (e.g. chemicals and flammable liquids) must not be kept in offices or locker rooms unless an approved and compliant storage location is contained therein.



Appendix A: PPE Requirements Tables

General PPE Requirements Eye Protection Requirements Welding Shade Chart Hand Protection Requirements PPE and Work Practice Requirements for PCB Contaminated Areas

Employee Safety Rules

| GENERAL PPE REQUIREMENTS | | | | | | | | | | |
|---|--------------------|----------------------|------------------------|---------------------|------------------|------------------|--|------------------------|----------------|--|
| R = Required equipment | Не | Prot | Resp | Dis | Ru | E | Welding Protective Equipment See Welding Shade Chart | | e nt ng | Remarks/Special Requirements |
| X = May be required based on task and materials * = Recommended additional equipment | Hearing Protection | Protective Hand-wear | Respiratory Protection | Disposable Overalls | Rubberized Apron | Welder's Sleeves | Welder's Jacket | Welder's Leathers/Suit | Spats/Leggings | |
| | | | | | | | | uit | | |
| Abrasive grinding/cutting (portable) | R | R | х | | | | | | х | Overhead work requires earflaps, earplugs, hoods, or other protective device to prevent material entering ear canal. |
| Abrasive grinding/cutting (stationary) | * | R | Х | | | | | | | |
| Banding materials | | R | | | | | | | | |
| Batteries: Servicing/Storage | | R | Х | Х | Х | | | | | |
| Blowing/cleaning with compressed air, steam, water | х | х | х | * | * | | | | | |
| Boring, reaming, or drilling | R | Х | | | | | | | | |
| Brakes, presses, shears, and lathes | х | х | | | | | | | | Do not wear rubber gloves when operating rotating tool. |
| Breaking frozen material (ice, ground, gravel, cinders, ballast, etc.) with hand tools | * | R | | | | | | | | |
| Breaking or cutting concrete, stone, or asphalt | R | R | х | | | | | | | |
| Buffing and polishing with a wire wheel | х | R | х | | | | | | | |
| CAD Welding | | R | | | | | | | | Before igniting powder, position self to avoid exposure to gas or molten metal. |
| Carbon-arc cutting and gouging | R | R | х | | | R | х | х | Х | Overhead work requires earflaps, earplugs, hoods, or other protective device to prevent material entering ear canal. |
| Chain saw | R | R | | | | | | | R | |
| Chemicals, refrigerants, or fuels – handling | | R | х | х | х | | | | | |
| Chipping or cutting | х | R | х | | | | | х | х | Overhead work requires earflaps, earplugs, hoods, or other protective device to prevent material entering ear canal. |
| Chop saw | R | Х | | | Х | | | | Х | |
| Cleaning agents – spray/general use | | R | х | х | х | | | | | Follow manufacturer's instructions. Long sleeves may be recommended |
| Cleaning and polishing stainless steel | | R | х | х | х | | | | | Follow manufacturer's instructions. |
| Cleaning windows, mirrors and glass surfaces | | R | х | х | х | | | | | Follow manufacturer's instructions. |
| Cleaning exterior windows, mirrors, and glass surface | | R | х | х | х | | | | | Follow manufacturer's instructions. |
| Cut-off disks, saws, or other tools with carbide bits | R | х | х | | | | | | х | Overhead work requires earflaps, earplugs, hoods, or other protective device to prevent material entering ear canal. |
| Cutting rivets, bolts, or cotter keys; splitting nuts, etc. | R | х | Х | | | | | | Х | |
| Dusty conditions | | * | Х | х | | | | | | Refer to Amtrak Respiratory Protection and/or other program associated with material. |
| Electrical hazard | х | R | | | | | | | | PPE selection will be further governed by task specific procedure. |
| Electrical welding (MIG/TIG) | x | R | x | | | R | x | x | х | Kneepads required when kneeling for extended periods. Overhead work requires earflaps, earplugs, hoods, or other protective device to prevent material entering ear canal. |
| Fueling equipment | | Х | * | | | | | | | |

Employee Safety Rules

| GENERAL PPE REQUIREMENTS | | | | | | | | | | |
|---|--------------------|----------------------|------------------------|---------------------|------------------|------------------|--|------------------------|----------------|---|
| R = Required equipment | Не | Pro | | | | I E S | Welding Protective Equipment See Welding Shade Chart | | e it ig | Remarks/Special Requirements |
| X = May be required based on task and materials * = Recommended additional equipment | Hearing Protection | Protective Hand-wear | Respiratory Protection | Disposable Overalls | Rubberized Apron | Welder's Sleeves | Welder's Jacket | Welder's Leathers/Suit | Spats/Leggings | |
| Fueling locomotives | Х | * | * | | | | | | | |
| Gas welding, cutting, or heating | * | R | x | | | x | x | x | x | Kneepads required when kneeling for extended periods. Overhead work requires earflaps, earplugs, hoods, or other protective device to prevent material entering ear canal. Position body to avoid gases discharged from crucible or mold. |
| Hand tools | * | Х | Х | | | | | | | Do not wear rubber gloves when operating rotating tool. |
| Hydraulic tools | Х | Х | | | | | | | | |
| Painting/spray painting | | Х | Х | Х | | | | | | |
| Pneumatic tools | R | Х | | | | | | | | Do not wear rubber gloves when operating rotating tool. |
| Powder-actuated tools | R | R | Х | | | | | | | |
| Sand blasting – Closed (abrasive blasting) | R | R | | | | | | | х | Respirator is not required if employee is isolated from sand blaster. |
| Sand blasting – Open (abrasive blasting) | R | R | R | | | | | | х | Contact Safety Department prior to sand blasting outside of enclosed hood. |
| Scaling, scraping, or removing welding flux | х | R | х | | | | | | | |
| Steam cleaning | Х | R | Х | Х | Х | | | | Х | |
| Striking or striking with hardened tools | х | R | | | | | | | | |
| Thermite welding | | R | | | | | | | | Before igniting powder, position self to avoid exposure to gas or molten metal. |
| Trash removal or "bagging" passenger cars | | R | | | | | | | | |
| Woodworking machines | Х | Х | Х | | | | | | * | |

| EYE PROTECTION REQUIREMENTS NOTE: Unless more prescriptive goggles are required by this section, rule 6.9 requires that safety glasses or goggles must also be worn | | | | | | | | |
|--|--|--|---|--|--|--|--|--|
| NOTE: Unless more prescriptive gog when a face shield or welding shield | gles are required by this section, ru is required. | le 6.9 requires that safety glasses or | r goggles must also be worn | | | | | |
| Task | Basic Requirement | More Severe Exposure | Remarks/ Special Requirements | | | | | |
| Abrasive grinding/cutting (portable or stationary) | Face shield over impact goggles | | | | | | | |
| Acids, Caustics, or Corrosives – Handling | Splash goggles | Face shield over splash goggles | | | | | | |
| Banding with Loose End - Handling | Face shield | | | | | | | |
| Batteries: Servicing/Storage of wet cells or otherwise opening any type of battery | Splash goggles | Face shield over splash goggles | Any opening of a wet cell battery is a "more severe exposure". | | | | | |
| Blowing/cleaning with compressed air, steam, water | Face shield | Face shield over splash or impact goggles | Always direct away from eyes. Always use nozzle that meets OSHA requirements (max. 30 PSI & can't be deadheaded) | | | | | |
| Boring, reaming, or drilling | Face shield | Impact goggles | | | | | | |
| Brakes, presses, shears, and lathes | | Face shield over splash or impact goggles | | | | | | |
| Breaking frozen material (ice, ground, gravel, cinders, ballast, etc.) with hand tools | Face shield or impact goggles | Face shield over impact goggles | | | | | | |
| Breaking or cutting concrete, stone, or asphalt | Face shield over impact goggles | Face shield over impact goggles | | | | | | |
| Brush, briars, or vines – Power Tool Cutting or other Handling | Face shield | | | | | | | |
| Buffing, cleaning, or polishing with a wire wheel or power operated metal brush | Face shield | Face shield over impact goggles | | | | | | |
| CAD Welding | Face shield over impact goggles | | | | | | | |
| Carbon-arc cutting and gouging | Welding Helmet | | See Welding Shade Chart | | | | | |
| Chain saw | Face shield | Face shield over impact goggles | | | | | | |
| Chemicals, refrigerants, or fuels – handling | Face shield | Face shield over splash goggles | | | | | | |
| Chipping or cutting | Face shield | Face shield over impact goggles | | | | | | |
| Chop saw | Face shield | Face shield over impact goggles | | | | | | |
| Cleaning agents – spray/general use | | Face shield over splash goggles | | | | | | |
| Cleaning exterior windows, mirrors, and glass surfaces | Face shield over splash goggles | | | | | | | |
| Cut-off disks, saws, or other tools with carbide bits | Face shield | | | | | | | |
| Cutting rivets, bolts, or cotter keys; splitting nuts, etc. | | Face shield or impact goggles | When working overhead, wear impact goggles and face shield | | | | | |
| Dusty conditions | | Impact goggles | | | | | | |
| Electrical hazard | | | | | | | | |
| Electrical welding (MIG/TIG) | Welding Helmet | | See Welding Shade Chart | | | | | |
| Fueling equipment | Face shield | | | | | | | |
| Fueling locomotives | Face shield | Face shield over splash goggles | | | | | | |
| Gas welding, cutting, or heating | Welding goggles or shaded face shield | Welding helmet | | | | | | |
| Hand tools | | Impact goggles | | | | | | |
| Irritants (strong) – Handling | Splash Goggles | | | | | | | |
| Molten paraffin, metal or other substance – handling | Face shield | | | | | | | |
| Painting/spray painting | | Face shield | | | | | | |

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| EYE PROTECTION REQUIREMENTS | | | | | | | | | |
|--|-------------------------------|---------------------------------|--|--|--|--|--|--|--|
| NOTE: Unless more prescriptive goggles are required by this section, rule 6.9 requires that safety glasses or goggles must also be worn when a face shield or welding shield is required. | | | | | | | | | |
| Task | Remarks/ S | | | | | | | | |
| Power-actuated tools | Face shield or impact goggles | Face shield over impact goggles | | | | | | | |
| Power table saw | Face shield | | | | | | | | |
| Sanding locomotives | Face shield | Face shield over impact goggles | | | | | | | |
| Scaling, scraping, or removing welding flux | | Impact goggles | | | | | | | |
| Steam cleaning | | Face shield over splash goggles | | | | | | | |
| Striking or striking with hardened tools and fastenings | | Face shield over impact goggles | | | | | | | |
| Woodworking machines | | Face shield over impact goggles | | | | | | | |

| WELDING SHADE CHART | | | | | | | | | | | | | | |
|---|--------------|--------|--------|--------|--------|----|----|----|----|--|--|--|--|--|
| Taak | Shade Number | | | | | | | | | | | | | |
| Task - | | 3 or 4 | 4 or 5 | 5 or 6 | 6 or 8 | 10 | 11 | 12 | 14 | | | | | |
| Carbon-arc cutting & gouging | | | | | | Х | х | х | X | | | | | |
| Carbon-arc welding | | | | | | | | | х | | | | | |
| Gas shielded-arc welding (ferrous): 1/16", 3/32", 1/8", 5/32" electrodes | | | | | | | | x | | | | | | |
| Gas shielded-arc welding (non-ferrous): 1/16", 3/32", 1/8", 5/32" electrodes | | | | | | | Х | | | | | | | |
| Gas welding: up to 1/8" | | | Х | | | | | | | | | | | |
| Gas welding: 1/8" to ½" | | | | х | | | | | | | | | | |
| Gas welding: ½" and over | | | | | Х | | | | | | | | | |
| MIG welding | | | | | | | х | х | Х | | | | | |
| Oxygen heating & cutting: up to 1" | | x | | | | | | | | | | | | |
| Oxygen heating & cutting: 1" to 6" | | | х | | | | | | | | | | | |
| Oxygen heating & cutting: 6" and up | | | | Х | | | | | | | | | | |
| Plasma-arc cutting: less than 300 amps | | | | | | х | | | | | | | | |
| Plasma-arc cutting: 300 to 400 amps | | | | | | | | x | | | | | | |
| Plasma-arc cutting: greater than 400 amps | | | | | | | | | Х | | | | | |
| Shielded metal-arc welding: 1/16", 3/32", 1/8", 5/32" electrodes | | | | | | х | | | | | | | | |
| Shielded metal-arc welding: 3/16", 7/32", 1/4" electrodes | | | | | | | | х | | | | | | |
| Shielded metal-arc welding: 5/16", 3/8" electrodes | | | | | | | | | Х | | | | | |
| Soldering | Х | | | | | | | | | | | | | |
| TIG welding: less than 50A | | | | | | Х | | | | | | | | |
| TIG welding: 50 – 150A | | | | | | | | Х | | | | | | |
| Torch brazing | | х | | | | | | | | | | | | |

Employee Safety Rules

| HAND PROTECT | | - | | | ENT | S | | | | | | | |
|--|--------------|--------|------|--------------|-------------------------|-----------------|----------------|-----------------|--------------------|---------------|--------------------|---------------------|---------|
| 0 = Preferred Glove X = Acceptable Alternative | Brown Jersey | Canvas | Grip | Leather Palm | Vinyl-Coated Knit-Lined | Leather Drivers | Welder's Glove | Welder's Mitten | Chemical Resistant | Cut Resistant | Puncture Resistant | Electrician's Glove | Nitrile |
| | | | | | | | | | | | | | |
| Abrasive blasting | | | | | | | X | | | | | | |
| Abrasive blasting (media blasting booth) | | | | _ | _ | | Х | | | | | | |
| Abrasive grinding/cutting (portable) | | | | 0 | 0 | | х | 0 | | | | | |
| Banding materials | | | | Х | | Х | | | | Х | | | |
| Batteries, handling or servicing | | | | | | | | | Х | | | | |
| Batteries, jump starting or placing on battery charger | | | | | | 0 | | | Х | | | | |
| Blowing/cleaning with compressed air, steam, water | | | | 0 | Х | 0 | | | Х | | | | |
| Boring, reaming, or drilling | 0 | 0 | 0 | Х | 0 | 0 | | | | 0 | | | |
| Breaking frozen material (ice, ground, gravel, cinders, ballast, etc.) with hand tools | | 0 | 0 | х | Х | Х | | | | 0 | | | |
| Breaking or cutting concrete, stone, or asphalt | | 0 | 0 | Х | Х | Х | | | | 0 | | | |
| Buffing and polishing with a wire wheel | | | | Х | | 0 | | | | 0 | | | |
| CAD Welding | | | | | | Х | 0 | | | | | | |
| Chain saw | | | | Х | | Х | | | | | | | |
| Chipping or cutting, or caulking metal | | | 0 | Х | | Х | | | | | | | |
| Chop saw | | | | Х | | Х | | | | | | | |
| Cleaning agents – spray/general use | | | | | | | | | Х | | | | |
| Cleaning and polishing stainless steel | | | | | | | | | Х | 0 | | | |
| Cleaning passenger cars and locomotives (generally) | | | | | | | | | Х | Х | | | 0 |
| Cleaning windows, mirrors and glass surfaces | | | | | | | | | Х | 0 | | | |
| Climbing poles | | | | 0 | 0 | 0 | | | | | | | |
| Climbing rail / work equipment | | | | 0 | 0 | 0 | | | | | | | |
| Cut-off disks, saws, or other tools with carbide bits | | | Х | Х | | Х | | | | 0 | | | |
| Cutting, plasma arc | | | | | | | Х | 0 | | | | | |
| Cutting rivets, bolts, or cotter keys; splitting nuts, etc. | | | 0 | Х | 1 | Х | | | 1 | 0 | | | |
| Cutting, welding, gouging, and heating (Gas) | | | | | | | Х | 0 | | | | | |
| Driving, bucking, sticking, or heating rivets | | | | | 1 | 1 | х | 0 | 1 | | | | |
| Dusty conditions | | | | | | Х | Х | 0 | | | | | |
| Fueling equipment | | | 0 | 0 | 0 | 0 | | | Х | | | | |
| Fueling locomotives | | | 0 | 0 | 0 | 0 | | | Х | | | | |
| Hand tools | 0 | 0 | 0 | 0 | 0 | 0 | | | | 0 | | | |
| Handling acids and caustics | | | | | | | | | Х | | | | |
| Handling chemicals or refrigerants, or in greasy conditions | | | | | | | | | Х | | | | |
| Lifting and carrying | | 0 | Х | Х | 0 | Х | | | | Х | | | |
| Machine operators | 0 | 0 | 0 | Х | | Х | | | | Х | | | |
| Machining steel, iron, or other metals | | | 0 | X | 0 | X | | | | Х | | | |
| geneer, eer, er enner monaio | | | 5 | | | | | | | | | | |

| Employee | Safety | Rules |
|----------|--------|-------|
|----------|--------|-------|

| HAND PROTECT | HAND PROTECTION REQUIREMENTS | | | | | | | | | | | | |
|--|------------------------------|--------|------|--------------|-------------------------|-----------------|----------------|-----------------|--------------------|---------------|--------------------|---------------------|---------|
| 0 = Preferred Glove X = Acceptable Alternative | Brown Jersey | Canvas | Grip | Leather Palm | Vinyl-Coated Knit-Lined | Leather Drivers | Welder's Glove | Welder's Mitten | Chemical Resistant | Cut Resistant | Puncture Resistant | Electrician's Glove | Nitrile |
| Painting (general) | | | | | Х | | | | Х | | | | |
| Painting (spray with gun) | | | | | | | | | Х | | | | |
| Powder-actuated tools | | | | | | Х | Х | 0 | | 0 | | | |
| Power-actuated tools | | Х | Х | | | Х | | | | 0 | | | |
| Rail drill | | | 0 | 0 | | Х | 0 | | | Х | | | |
| Rail grinder or saw | | | 0 | 0 | | Х | 0 | | | Х | | | |
| Sanding locomotives | 0 | 0 | 0 | Х | 0 | 0 | | | | | | | |
| Scaling, scraping, or removing welding flux | | | 0 | 0 | | Х | | | | 0 | | | |
| Spraying / general use of cleaning agents: Follow manufacturer's instructions. | | | | | | | | | х | | | | |
| Steam cleaning | | | | | | | | | х | | | | |
| Striking or striking with hardened tools and fastenings | | | Х | 0 | Х | | | | | 0 | | | |
| Stripping cable | | | | | | 0 | | | | Х | | | |
| Thawing with Propane | | | | | | | Х | Х | | | | | |
| Thermite welding | | | | | | Х | 0 | | | | | | |
| Tools, hammer & punch | | | | 0 | | Х | | | | Х | | | |
| Tools, woodworking | 0 | | Х | Х | 0 | Х | | | | Х | | | |
| Trash removal or "bagging" passenger cars | | | | | | | | | | | Х | | |
| Troubleshooting live electrical currents/circuits | | | | | | | | | | | | Х | |
| Utility vehicles, forklifts, and ATVs, operation of | 0 | 0 | 0 | Х | | Х | | | | Х | | | |
| Washing locomotives and equipment | | | | | Х | | | | Х | | | | |
| Welding, electrical | | | | | | | Х | | | | | | |
| Welding, MIG/TIG | | | | | | | Х | 0 | | | | | |
| Working in close proximity to live electrical currents/circuits | | | | | | | | | | | | Х | |

| PPE AND WORK PRACTICE REQUIREMENTS FOR PCB CONTAMINATED AREAS | | | | | | | | | | |
|---|--|--|---|--|--|--|--|--|--|--|
| Average PCB soil or ballast concentration ppm = parts per million | No Soil or Ballast Disturbance (e.g. walking on ballast/soils or other tasks that do not involve digging) | Hand Digging (e.g. small soil/ballast disturbance, limited contact with soil) | Machine Excavation* (e.g. backhoe, excavation, undercutter. Large soil/ballast disturbance.) | | | | | | | |
| 0 to 49 ppm | No PPE required. | No PPE required. | Tyvek Suits, gloves and booties are not required. Dust control measures are required. Respirator may be needed if visible airborne dust is present. Contact Industrial Hygiene (IH) for assistance with dust control measures or respiratory protection. | | | | | | | |
| 50 to 999 ppm | No PPE required. | Tyvek suits and gloves required. No respirator needed if dust control is used. | Tyvek Suits and gloves are required. Dust control measures are required. Respirator may be needed if visible airborne dust is generated. Contact Industrial Hygiene (IH) for assistance with dust control measures or respiratory protection. | | | | | | | |
| 1000 to 2500 ppm | No PPE required. | Tyvek suits, gloves and foot coverings required, foot coverings include boot covers, dedicated work boots or washable rubber work boots. No respirator needed if dust control is used. | Tyvek suits, gloves and foot coverings required, foot coverings include boot covers, dedicated work boots or washable rubber work boots Dust control measures are required. Respirator may be needed if visible airborne dust is generated. Contact Industrial Hygiene (IH) for assistance with dust control measures or respiratory protection. | | | | | | | |
| Greater than 2500 ppm | No PPE required. | Case by Case Basis. Contact Industrial Hygiene (IH) for assistance with dust control measures or respiratory protection. | Case by Case basis. Contact IH for assistance with dust control measures or respiratory protection. | | | | | | | |

*Machine Operator is exempt from PPE requirements specified under Machine Excavation

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