

Regulation:

§218.21 Scope.

This Subpart prescribes minimum requirements for the protection of railroad employees engaged in the inspection, testing, repair, and servicing of rolling equipment whose activities require them to work on, under, or between such equipment and subjects them to the danger of personal injury posed by any movement of such equipment.

Guidance:

Initially, the rationale in developing the language of this subsection was that these general work categories (inspecting, testing, repair, and servicing) usually require an employee to go on, under, or between rolling equipment. In so doing, the employee would be in close proximity to the equipment, where he/she would be vulnerable to the possibility of a serious personal injury if an unexpected movement of the equipment were to occur. However, in identifying those general work activities and positions in relation to railroad rolling equipment in such broad terms, it was inevitable that they would encompass a number of specific jobs which definitely do not expose the worker to personal injury. FRA realized the predicament, and revised the language in 1979 by inserting the word “and” in the regulatory language -

“...**and** subjects them to the danger of personal injury...”

Therefore, it is not solely the work being done (inspecting, testing, repairing, or servicing) and where the employee is positioned in relation to the equipment (on, under, or between), but additionally, whether this causes the employee to be placed in a potentially hazardous position.

Generally, non-hazardous work will be combined with work that is hazardous, and blue signal protection is required. However, there may be times when certain non-hazardous work can be isolated in such a manner that blue signal protection would not be required. As an example, equipment inspections that can be made by an employee from a position on the ground alongside the equipment does not represent a hazardous situation. Seated at the controlling locomotive and manipulating the air brake handles or throttle or setting the MU valve on the control stand does not represent a hazardous situation. Testing of an air brake system, when purely visual in nature, which requires an employee to observe the position of air brake piston while standing on the ground beside the cars is another example of a nonhazardous situation that would not require blue signal protection. If the employee has to go under the equipment to observe the piston travel, as with many truck-mounted brake systems, blue signal protection is required. A § 215 pre-departure inspection would require blue signal protection, because the individual making the inspection would have to go under and between the equipment to properly conduct the inspection. A train crew making an Appendix D inspection would not have to establish blue signal protection **if** it is the equipment he/she is called to operate.

When conducting a purely visual inspection of a locomotive, as long as the employee does not

go under the locomotive, or does not step into the engine compartment, or go onto the roof of the locomotive, the employee would not be in a hazardous situation. For example, gaging wheels would require blue signal protection because the individual would be under the equipment. An employee could open engine compartment doors and look inside to inspect for oil/water leaks, exhaust leaks, check the cooling water sight glass, and check engine oil, as long as he/she does not physically step inside the engine compartment and does not do anything beyond visual checks - all without establishing blue signal protection. If the locomotive engineer is conducting the inspection on locomotives he/she is called to operate, no blue signal protection is required.

Certain servicing activities can be carried out without exposure to danger. Examples of such activities would be bleeding of the air brake system on cars, oiling journal boxes, passenger coach interior and exterior cleaning not requiring the use of ladders, evacuating and recharging passenger car soil holding tanks, and supplying passenger cars with water or supplying locomotives with water and fuel by attaching a hose to an exterior outlet.

Changing radios and HTD's on locomotives that use quick disconnect fittings and does not require the use of tools. In instances where sanding a locomotive can be accomplished by attaching the sanding hose to a side filler cap, without physically going on the locomotive. Similarly, certain supplying activities such as supplying locomotives and cabooses with ice, water, fusees, stationery and paper toweling can be carried out without exposure to danger. These and similar activities, when effectively confined to the specific non-hazardous work function, do not require blue signal protection.

There are certain activities that definitely call for the display of blue signals. Examples of such activities (when performed by non-train or non-yard crew members) are breaking or making air hose connections, connecting or disconnecting electric control cables between equipment, installing/removing/servicing/repair of rear end devices (markers and telemetry units), and any air brake test requiring an employee to go under, or between rolling equipment. Other examples include: replacing broken windows, changing brake shoes, activities that require the use of a ladder, electrical repairs which involve work partially or wholly within the confines of an electrical cabinet, any inspection of the undercarriage from a pit, repairing and closing doors on a car if tools are required. All these and other activities do cause the workers to position themselves in such a way that they are vulnerable to personal injury if unexpected movement of the equipment occurred. In the event a worker has to position himself/herself between the rails at the end of a car, as when changing a knuckle or air hose, blue signal protection is required. When repairs require the worker to be on, under, or between rolling equipment, then blue signals unquestionably are required. It is the function or nature of the work being performed that determines the protective provisions of the rule, not the craft or title of the employee.

The blue signal regulation does not apply to derailment situations. Assuring protection for workers involved in such operations is the responsibility of the individual railroad in accordance with its own operating rules. Such operations are usually well coordinated, controlled operations under the direction of a wreck master and/or transportation supervisor at the scene. Requiring

blue signals under these circumstances would unreasonably hamper re-railing operations. Unlike routine operations, all personnel involved in this type of work are aware of the special conditions that exist and are familiar with the necessary precautions to take when equipment moves take place.

Mechanized track maintenance operations do not require blue signal protection, as these operations are addressed by railroad operating rules and other regulations. Under railroad operating rules, flags of another color have been designated for this purpose, and those rules specify the exact manner in which they are to be displayed to provide protection for such operations.

Taking a track “out of service” does not provide relief to this regulation. Blue signal protection would have to be established on “out-of-service” tracks if the work being performed requires it.