



U.S. Department
of Transportation

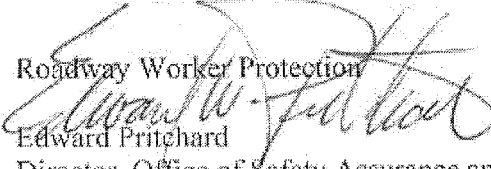
**Federal Railroad
Administration**

Memorandum

Date: **AUG 13 2007**

Reply to Attn of: G-07-02

Subject: **Roadway Worker Protection**

From: 
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To: **Regional Administrators for Distribution**
RRS-1, RRS-2, RRS-3, RRS-10, RRS-11, RRS-20, Ted Bundy

The Federal Railroad Administration (FRA) has issued this Technical Bulletin to address ongoing questions concerning the applicability of the Roadway Worker Protection (RWP) Rule in locomotive and car repair facilities. This matter also has applicability with respect to the Blue Signal regulation (safety of workers engaged in the inspection, testing, repair, and servicing of rolling equipment). First, a review of the RWP and Blue Signals regulations is in order.

Roadway Worker Protection (Part 214, Subpart C)

The purpose of this Subpart is to prevent accidents and casualties caused by moving railroad cars, locomotives, or roadway maintenance machines striking roadway workers or roadway maintenance machines. See §214.301. As defined under §214.7, a roadway worker is any employee of a railroad, or of a contractor to a railroad, whose duties include inspection, construction, maintenance, or repair of railroad track, bridges, roadway, signal and communication systems, electric traction systems, roadway facilities¹ or roadway maintenance machinery on or near track or with the potential of fouling a track, and flagmen and watchmen/lookouts as defined in this section. The operating procedures prescribed under the RWP regulation, otherwise known as on-track safety,² protects roadway workers from the dangers of moving trains and roadway maintenance machines.

¹ FRA considers a locomotive shop or car repair facility to be a roadway facility.

² On-track safety is a state of freedom from the danger of being struck by a moving railroad train or other railroad equipment, provided by operating and safety rules that govern track occupancy by personnel, trains, and on-track equipment. See §214.7, On-track safety.

For shop areas, in which the vast majority of track is non-controlled,³ on-track safety is generally limited to the following methodologies:

- Inaccessible track - A method of establishing working limits on non-controlled track by physically preventing entry and movement of trains and equipment. For a roadway work group, this is the more practical and widely used method to provide on-track safety. See §214.327.
- Train approach warning - A method of establishing on-track safety by warning roadway workers of the approach of trains in ample time for them to move to or remain in a place of safety in accordance with the requirements of this Part. A watchman/lookout must provide sufficient warning (visual and audible) to enable the workers to be clear of the track 15 seconds before the arrival of trains/on-track equipment. See §214.329.
- Individual train detection - A procedure by which a lone worker acquires on-track safety by seeing approaching trains and leaving the track before they arrive and which may be used only under circumstances strictly defined in this Rule. See §214.337.

For a shop in close proximity to a controlled track (e.g., main track), employees engaged in maintenance/construction of the exterior of the facility would also need to consider working limits for such tracks. Specifically, exclusive track occupancy, foul time, or train coordination, as applicable. See §§214.321, 323, and 325.

In addition to the on-track safety procedures outlined above, railroads and contractors to railroads must comply with the following "RWP elements":

- On-track safety manual - Rules and operating procedures governing track occupancy and protection shall be maintained together in one manual and be readily available to all roadway workers. Each roadway worker responsible for the on-track safety of others, and each lone worker, shall be provided with and shall maintain a copy of the program document. See §214.309.
- Good faith challenge - Each employer shall guarantee each employee the absolute right to challenge in good faith whether the on-track safety procedures to be applied at the job location comply with the rules of the operating railroad, and to remain clear of the track until the challenge is resolved. See §214.311(b).
- On-track safety briefing - Each employer shall provide the employee with a job briefing that includes information on the means by which on-track safety is to be provided, and instruction on the on-track safety procedures to be followed. See §214.315(a).

³ Non-controlled track means track upon which trains are permitted by railroad rule or special instruction to move without receiving authorization from a train dispatcher or control operator. See §214.7.

- Roadway worker in charge - Every roadway work group whose duties require fouling a track shall have one roadway worker designated by the employer to provide on-track safety for all members of the group. The responsible person may be designated generally, or specifically for a particular work situation. See §214.315(b).
- Roadway maintenance machines - Each employer shall include in its on-track safety program specific provisions for the safety of roadway workers who operate or work near roadway maintenance machines. See §214.341.
- Training and qualification - Each employer shall provide to all roadway workers in its employ initial or recurrent training once every calendar year on the on-track safety rules and procedures that they are required to follow. See §§214.343, 347, 349, 351, 353, and 355.

Blue Signal Protection of Workers (Part 218, Subpart B)

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. See §218.21.

For blue signal protection on other than main tracks, §218.27 requires blue signal protection to be established for each individual track, while §218.29 permits blue signal protection to be established for the area as a whole.⁴ It provides greater flexibility for the movement of equipment within, as well as to and from, the area.

Section 218.29 also authorizes use of locked derails to fulfill the requirements of a manually operated switch on any track, other than a main track, when placed at a minimum distance of 150 feet from the end of the protected equipment. If speed is restricted to 5 mph or less, then this distance may be reduced to not less than 50 feet when used in locomotive servicing and car shop repair track areas. The 5 mph restriction may be conveyed by a physical sign or by a written bulletin or timetable instruction. If a derail is used, it must be locked in a derailing position with an effective locking device and a blue signal must be displayed at the derail. Blue signals must be attached to the controlling locomotive whenever workers are on, under, or between that locomotive or any rolling equipment attached to that locomotive. A remotely controlled switch may be effectively locked to prevent movement into a track for blue signal purposes. See §218.30.

When blue signals are displayed, the equipment must stop short of coupling to another locomotive or piece of equipment, and other rolling equipment may not pass a displayed blue signal. Except for alternate protection, the equipment may not be moved, and other equipment may not reduce or block the view of a blue signal. See §218.29(a)(5) through (a)(8).

⁴ A locomotive or car shop area.

Shop Facility RWP/Blue Signal Considerations

As shown above, the RWP and Blue Signal regulations are specific to the type of work undertaken. Furthermore, each type of protection has specific procedural elements to address each unique work environment (engineering vs. mechanical). The Blue Signal regulation is required for the protection of railroad employees engaged in the inspection, testing, repair, and servicing of rolling equipment. However, FRA would not take exception to a mechanical employee working on rolling stock and performing "incidental" work as a part of that activity on a track that is under blue signal protection (e.g., a mechanical employee performing maintenance on or about rolling stock who might, as part of those duties, sweep a shop floor or change a light bulb in an inspection pit).

However, if an employee is assigned to specifically perform any of the work activities as defined under §214.7 (Roadway Worker), that activity must be conducted under a form of on-track safety. FRA is cognizant that in some cases, an employee might be performing such an activity on a track that is already under blue signal protection. In such cases, all the applicable⁵ elements of the RWP Rule would need to be in place (see the "RWP Elements" as described above on Page 2).

Some examples of the activities that would need RWP protection under a form of on-track safety would include:

- Maintenance work on a power-operated shop door.
- Troubleshooting/maintenance of the electrical parts of a permanently installed power operated blue signal derail.
- General building maintenance or construction of a shop building.

The above work would need protection under the RWP Rule if any of the activities encroach into the fouling space of a track. As such, work in a shop facility not in the track area would not be subject to the RWP Rule. It is also important to note that regardless of who supervises an employee, the appropriate form of protection must be utilized. For example, if an employee works under the supervision of a mechanical department manager and that employee performs any of the work defined under the RWP regulation, on-track safety must be utilized. Likewise, if an engineering department manager supervises an employee and that employee performs maintenance on rolling stock, such work must be protected under the provisions of the Blue Signal regulation.⁶

⁵ If the location does not involve any possibility where the work would foul a controlled track, a roadway worker in charge may be qualified to all the necessary elements. Specifically, if an individual would never encounter controlled track, he/she must at a minimum must be qualified to establish inaccessible track.

⁶ If an employee performs work on a roadway maintenance machine, that activity falls under the requirements of the RWP Rule. See §214.327(c).

For a roadway worker to invoke the provisions of inaccessible track on a track that is otherwise protected by blue signals, the following procedures would need to be followed:

- The track must be made inaccessible under one of the provisions of §214.327. If using the devices that are providing the blue signal protection (derail or switch), the roadway worker may place an RWP-specific effective securing device on the derail or switch. For example, for a switch secured with a blue signal padlock, the roadway worker may choose to spike the same switch and place an engineering-specific tag on the switch handle. Using special interlock-type devices that will accept two padlocks but can only allow operation with both removed is an acceptable procedure.
- The roadway worker in charge must communicate with the employee in charge of the blue signal to coordinate activities.
- Any rolling stock within the inaccessible track would need to be under the control of the roadway worker. See §214.327(c).

It is not the intent of this Technical Bulletin to cover every situation; railroads must carefully consider each task to be undertaken. Further, it is not the intent of this Technical Bulletin to provide a comprehensive overview of either the RWP or Blue Signal regulations.