Part III

Department of Transportation

Federal Railroad Administration
49 CFR Part 214
Railroad Workplace Safety; Adjacent-Track On-Track Safety for Roadway Workers; Final Rule
DEPARTMENT OF TRANSPORTATION
Federal Railroad Administration

49 CFR Part 214
[Docket No. FRA-2008–0059, Notice No. 4]
RIN 2130–AB96
Railroad Workplace Safety; Adjacent-Track On-Track Safety for Roadway Workers

AGENCY: Federal Railroad Administration (FRA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: FRA is amending its regulations on railroad workplace safety to further reduce the risk of serious injury or death to roadway workers performing work with potentially distracting equipment near certain adjacent tracks. In particular, this final rule requires that roadway workers comply with specified on-track safety procedures that railroads must adopt to protect those workers from the movement of trains or other on-track equipment on “adjacent controlled track.” FRA defines “adjacent controlled track” to mean “a controlled track whose track center is spaced 19 feet or less from the track center of the occupied track.” These on-track safety procedures are required for each adjacent controlled track when a roadway work group with at least one of the roadway workers on the ground is engaged in a common task with on-track, self-propelled equipment or coupled equipment on an occupied track. In addition, FRA is removing the provision on preemptive effect.

DATES: This final rule is effective May 1, 2012.

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SUPPLEMENTARY INFORMATION: The NPRM issued as Notice No. 1 under this same docket number and published July 17, 2008, was withdrawn by Notice No. 2 published August 13, 2008. A second NPRM issued as Notice No. 3 under this same docket number was published November 25, 2009. All references to “the NPRM” in this final rule are to this second NPRM unless otherwise specified.

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I. Executive Summary

As will be detailed in this final rule, the recent increase in roadway worker fatalities that have occurred on an adjacent track (i.e., under the existing rule, any track within 25 feet of the centerline of the track to which the roadway work group was assigned to perform one or more roadway worker duties) has caused considerable concern at FRA and throughout the industry, even prompting the filing of a joint petition for emergency order under 49 U.S.C. 20104 on April 11, 2008. See 49 CFR part 214, subpart C (“Roadway Worker Protection Rule” or “RWP Rule”). FRA had issued a notice of safety advisory to address this same issue in May of 2004; however, it appears that the salutary effects of the safety advisory, which produced a period of 16 months with no fatalities on an adjacent track, were not long-lasting, as four fatalities have since occurred on an adjacent track where a roadway work group, with at least one of the roadway workers on the ground, was engaged in a common task with on-track, self-propelled equipment on an occupied track. These amendments to the Roadway Worker Protection Rule are based on the consensus language developed through the Roadway Worker Protection Working Group of FRA’s Railroad Safety Advisory Committee (RSAC), which is comprised of various representatives of the groups that are affected by this rule (including railroad management, railroad labor organizations, and contractors). Because incidents involving adjacent controlled tracks appear to present clear evidence of significant risk that is not effectively addressed by the existing regulation, FRA has concluded that moving forward with this final rule in advance of the other proposals contained in the RSAC consensus 2 is necessary and appropriate. As will be discussed in more detail in Section II.C, below, until this final rule’s amendments to § 214.335(c) become effective, the RWP Rule requires that roadway work groups engaged in “large-scale maintenance or construction” be provided with on-track safety in the form of “train approach warning” for
train or equipment movements on adjacent tracks if the adjacent tracks are not already included within the working limits. Applying the definition of “adjacent tracks” to the criteria discussed above, on-track safety is required for any tracks with track centers spaced less than 25 feet apart from the center of the track to which a roadway work group is assigned to perform “large-scale maintenance or construction.” The track to which the roadway work group is assigned to perform the large-scale maintenance or construction is commonly referred to as the “occupied track.”

Although FRA did provide some guidance on the term “large-scale maintenance or construction” in the preamble of the 1996 final rule, many railroads were not providing on-track safety on adjacent tracks for surfacing operations, small tie renewal operations, or similar maintenance operations that, while smaller in scale, still included one or more pieces of on-track, self-propelled equipment. Fatalities occurred on the adjacent track during such operations when on-track safety was not established on the adjacent track or had been temporarily or permanently nullified or suspended to permit the passage of a train or other on-track equipment. This final rule makes the conditions that trigger the requirement for adjacent-track on-track safety more objective.

New § 214.236 requires that railroads adopt specified on-track safety procedures to protect certain roadway workers engaged in the movement of trains or other on-track equipment on “adjacent controlled track.” An “adjacent controlled track” is “a controlled track whose track center is spaced 19 feet or less from the track center of the occupied track.” The “occupied track” is “the track on which on-track, self-propelled equipment or coupled equipment is authorized or permitted to be located while engaged in a common task with a roadway work group with at least one of the roadway workers on the ground.” These on-track safety procedures are required for each adjacent controlled track when a roadway work group with at least one of the roadway workers on the ground is engaged in a common task with on-track, self-propelled equipment or coupled equipment on an occupied track.

As a general rule, the procedures in paragraph (b) of new § 214.236 require all on-ground work and equipment movement on the occupied track to stop and all roadway worker to occupy a predetermined place of safety upon receiving a notification or warning that there is an authorized train or other on-track equipment movement on an adjacent controlled track. A roadway worker affected by such movement is permitted to resume work only after the trailing-end of the movement has passed such worker. As further described, below, the final rule provides a limited exception to the general rule in paragraph (c) of this section (i.e., by establishing different procedures to be used during low-speed movements on an adjacent controlled track than during higher-speed movements), and also establishes three categories of exceptions to the requirement to cease work in paragraphs (e)(1) through (e)(3) of this section. See §§ 214.336(c) and 214.336(e)(1) through (3).

Due to the lower risk associated with adjacent-controlled-track movements at low speeds (25 mph or less), certain work is permitted to continue after receiving a notification or warning of such a movement on an adjacent controlled track. The work permitted to continue is (1) equipment movement on the rails of the occupied track, and (2) on-ground work performed exclusively between the rails of the occupied track, provided that no on-ground work is performed within the areas 25 feet in front of and 25 feet behind any on-track, self-propelled equipment or coupled equipment permitted to move on the occupied track. See § 214.336(c).

There are three categories of exceptions to the requirement to cease work. See § 214.336(e)(1) through (3). The first two (“On-ground work performed on a side of the occupied track meeting specified condition[s]” and “Maintenance or repairs performed alongside machines or equipment on the occupied track”) permit work to continue if performed on a side of the occupied track where there should essentially be no danger posed by equipment movement on an adjacent track. See § 214.336(e)(1)(i) through (iii), regarding the side with no adjacent track, the side with working limits and no movements permitted within such working limits, and the side with an inter-track barrier. The third type of exception permits work to continue if it involves certain types of equipment (i.e., hi-rail vehicles, automated inspection cars, and catenary maintenance tower cars) used for certain purposes (e.g., inspection or minor correction purposes) that, as indicated by the fatality data, do not present a significant level of distraction. See § 214.336(e)(3)(i) through (iii). To help roadway workers and the regulated community to understand the exceptions and the interrelation of the various requirements of the sections, Table 1 in the rule text summarizes how the procedures apply to different factual scenarios. The diagrams (Figure 1) that follow Table 1 correspond to the same examples in the table, and help the reader to visualize the factual scenarios.

Given the importance of an on-track safety job briefing in roadway workers’ understanding of the nature of the work that they will be conducting and the conditions under which they will conduct it, FRA has expanded the on-track safety job briefing requirements to cover the new procedures for adjacent-track on-track safety in § 214.336 (if applicable) and a discussion of adjacent tracks (if any), generally.

In addition, FRA is removing the provision on preemptive effect. This section was prescribed in 1996 and has become outdated and, therefore, misleading because it does not reflect post-1996 amendments to 49 U.S.C. 20106. FRA now believes that the section is unnecessary because 49 U.S.C. 20106 sufficiently addresses the preemptive effect of § 214.336.

This final rule will impose costs that are likely outweighed by the quantified safety benefits. For the 20-year period analyzed, the estimated quantified cost that will be imposed on industry totals $285.7 million (undiscounted) with a present value (PV) (7 percent) of $151.4 million, and a PV (3 percent) of $212.6 million. For the same 20-year period, the estimated quantified benefits total $286.2 million (undiscounted), with a PV (7 percent) of approximately $151.6 million and a PV (3 percent) of $212.9 million. The costs will primarily be imposed by a small increase in job briefing time and additional resources spent to provide on-track safety for the safe conduct of other than large-scale maintenance and construction of track located adjacent to (and within a certain distance of) one or more controlled tracks on which train movements may be occurring. Training costs will also accrue. The benefits will primarily accrue from a reduction in roadway worker casualties (fatalities and injuries). This analysis estimates that there will be 10.3 fewer roadway worker fatalities over the next 20 years. In addition, it estimates that this final rule will reduce roadway worker injuries by 182 over the next 20 years. Business benefits stemming from avoided train delays and property damages, as well as benefits from reduced safety stand downs resulting from roadway worker

3 Currently, when a railroad experiences a roadway worker fatality, the railroad leadership holds a “safety stand down,” during which all scheduled maintenance work is postponed so that the railroad managers and employees are able to

Continued
fatalities will also accrue. FRA finds that the estimated quantified benefits will exceed the estimated quantified costs.

The following table presents the quantified costs broken down by section of the RIA and by section of the rule:

<table>
<thead>
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<th>Estimated cost of final rule</th>
<th>PV Rate, 3%*</th>
<th>PV Rate, 7%*</th>
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<td>9.2 Job Briefings—§ 214.315</td>
<td>$1.94</td>
<td>$1.38</td>
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<tr>
<td>9.4 On-track Safety—§ 214.336</td>
<td>207.60</td>
<td>147.83</td>
</tr>
<tr>
<td>9.4 Other (Signalmen, Lone Workers)—§§ 214.315/336</td>
<td>2.76</td>
<td>1.97</td>
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<td>9.4 Training—§ 214.336</td>
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<td>0.18</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>212.55</strong></td>
<td><strong>151.36</strong></td>
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*Dollars are in millions and are discounted over a 20-year period.

The table below presents the estimated benefits associated with this final rule by section of the RIA and by benefit category:

<table>
<thead>
<tr>
<th>Estimated benefits of final rule</th>
<th>PV Rate, 3%*</th>
<th>PV Rate, 7%*</th>
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<tbody>
<tr>
<td>10.1 Casualty Mitigation (§ 214.336)—Fatality (Struck by Train)</td>
<td>$43.72</td>
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<tr>
<td>10.2 Casualty Mitigation (§ 214.336)—Injury (Struck by Train)</td>
<td>71.62</td>
<td>51.00</td>
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<td>10.3 Casualty Mitigation (§ 214.336)—Injury (Struck by Object Other Than Train)</td>
<td>15.30</td>
<td>10.90</td>
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<td>10.4 Adjacent Track Revision</td>
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<td>6.97</td>
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<td>10.5 Damage Reduction</td>
<td>0.89</td>
<td>0.64</td>
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<td>10.6 Reporting/Recordkeeping—Cost Savings</td>
<td>0.02</td>
<td>0.01</td>
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<td>10.7 Business Industry Benefit</td>
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<td>10.8 Reduction in Safety Stand Downs</td>
<td>19.98</td>
<td>14.23</td>
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<td>10.9 Job Briefing Fatality Prevention (§ 214.315)</td>
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<td>2.63</td>
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<tr>
<td>10.9 Job Briefing Injury Prevention (§ 214.315)</td>
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<td><strong>Total</strong></td>
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<td><strong>151.59</strong></td>
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*Dollars are in millions and are discounted over a 20-year period.

II. Overview of the Existing Roadway Worker Protection (RWP) Rule

A. Applicability and Basic Definitions

As background, since the RWP Rule became effective in 1997, it has imposed certain safety requirements. In particular, the RWP Rule requires each railroad that operates rolling equipment on track that is part of the general railroad system of transportation to “adopt and implement a program that will afford on-track safety to all roadway workers whose duties are performed on that railroad.” See 49 CFR 214.3, 214.301(a).5 “On-track safety” is defined in the RWP Rule as “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. The roadway workers that must be afforded on-track safety are any employees 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 facilities or roadway maintenance machinery on or near track or with the potential of fouling a track, and flagmen and watchmen/lookouts * * *.” See §214.7, “Roadway worker.”

B. Authorized Methods of Establishing On-Track Safety

Several methods are authorized to be used to provide on-track safety for roadway workers, and many of those methods involve establishing “working limits,” which is defined in part as “a segment of track with definite boundaries established in accordance with [part 214] upon which trains and engines may move only as authorized by the roadway worker having control over that defined segment of track.” See §§214.7 and 214.319. Working limits may be established on controlled track (i.e., “track upon which the railroad’s operating rules require that all movements of trains must be authorized by a train dispatcher or a control operator”) through exclusive track occupancy (§214.321), time limited work (§214.323), or train coordination (§214.325). See §§214.7 and 214.319. Regardless of which method is chosen, the working limits are only permitted to be under the control of a qualified roadway worker in charge, and all affected roadway workers must be notified and either clear of the track or provided on-track safety through train approach warning (in accordance with §214.329) before the working limits are released to permit the operation of trains or other on-track equipment through the working limits. See id.

Train approach warning is another common method of establishing on-track safety in which a trained and qualified watchman/lookout provides warning to roadway worker(s) of the approach of a train or on-track equipment in sufficient time to enable each roadway worker to move to and occupy a previously arranged place of safety not less than 15 seconds before a train moving at the maximum speed authorized on that track would arrive at the location of the roadway worker. See §§214.329 and 214.7 “Watchman/

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5 All references in this preamble to a section or other provision of a regulation are to a section, part, or other provision in title 49, Code of Federal Regulations unless otherwise specified.
lookout.” Train approach warning is sometimes used as a temporary form of on-track safety when a roadway worker in charge needs to nullify the on-track safety previously established by working limits in order to permit a train or piece of on-track equipment to enter the roadway work group’s working limits. Train approach warning permits the roadway workers to continue working for longer (than if working limits were the only form of on-track safety in effect) if the working limits span several miles and the train or equipment will not be passing by the work area for some time due to a speed restriction, the distance away, or the train or equipment halting its movement. It should be noted that switching temporarily to “train approach warning” is permissible only if the change was discussed in detail with the roadway work group, prior to the change occurring, in an updated on-track safety job briefing pursuant to § 214.315(d).

C. Existing On-Track Safety Requirements for Roadway Work Groups With Respect to Adjacent Tracks

Until the amendments to § 214.335(c) become effective, the provision of the 1996 RWP Rule requires that roadway work groups engaged in “large-scale maintenance or construction” be provided with on-track safety in the form of “train approach warning” for train or equipment movements on adjacent tracks if the adjacent tracks are not already included within the working limits. Under the current definition of “adjacent tracks,” on-track safety as discussed above is required for any tracks with track centers spaced less than 25 feet apart from the track center of the track to which a roadway work group is assigned to perform large-scale maintenance or construction. See §§ 214.7 and 214.335(c). The track to which the roadway work group is assigned to perform the large-scale maintenance or construction is commonly referred to as the “occupied track.” Thus, in triple-main track territory, if a roadway work group is occupying the middle track (e.g., Main Track No. 2) in order to perform large-scale maintenance or construction, and the track centers of the tracks on either side of the occupied track are within 25 feet of the track center of the occupied track, then on-track safety is required to be established on both adjacent tracks (e.g., Main Track Nos. 1 and 3). In some yards or territories, where track centers are spaced only 12 feet apart, an occupied track (e.g., Yard Track No. 3) may have up to four adjacent tracks (e.g., Yard Track Nos. 1, 2, 4, and 5). In such cases, the existing rule requires on-track safety to be established on all four adjacent tracks, in addition, of course, to the on-track safety required for the occupied track itself. See § 214.335(c) (61 FR 65976) and § 214.337(a).

Although the term “large-scale maintenance or construction” is not specifically defined in the 1996 regulation, FRA noted in the preamble to the 1996 final rule establishing the 1996 RWP Rule that the principle behind the reference to large-scale maintenance or construction was “the potential for distraction, or the possibility that a roadway worker or roadway maintenance machine might foul the adjacent track and be struck by an approaching or passing train,” and further stated that “conditions in which the risk of distraction [were] significant” required measures to provide on-track safety on adjacent tracks. See 61 FR 65971. To further clarify what is meant by the term “large-scale maintenance or construction.” FRA referenced the recommendation of the Roadway Worker Safety Advisory Committee, which described large-scale track maintenance and/or renovations, such as but not limited to, “rail and tie gangs, production in-track welding, ballast distribution, and undercutting.” See id. Under such guidance, many railroads were not providing on-track safety on adjacent tracks for surfacing operations, small tie renewal operations, or similar maintenance operations that, while smaller in scale (e.g., because these were often single-task operations, rather than the multiple-task operations typical of production units), still included one or more pieces of on-track, self-propelled equipment. Fatalities occurred on the adjacent track during such operations when on-track safety was not established on the adjacent track or had been temporarily or permanently nullified or suspended to permit the passage of a train or other on-track equipment.

III. Notice of Safety Advisory 2004–01

After the occurrence of five roadway worker fatalities in one calendar year (2003), including one on an adjacent track, FRA responded on April 27, 2004, by issuing Notice of Safety Advisory 2004–01, which was later published in the Federal Register on May 3, 2004. See 69 FR 24220. FRA issued this safety advisory to recommend certain safety practices, to review existing requirements for the protection of roadway workers from traffic on adjacent tracks, and to heighten awareness to prevent roadway workers from inadvertently fouling a track when on-track safety is not provided. See id.

The safety advisory explained that the requirements of the RWP Rule, including the requirement to provide adjacent track on-track safety for large-scale maintenance or construction in § 214.335(c), are only minimum standards. The advisory emphasized that railroads and railroad contractors are free to prescribe additional or more-stringent standards consistent with the rule. See id. at 24222 and § 214.301(b).

FRA recommended that railroads and contractors to railroads develop and implement basic risk assessment procedures for use by roadway workers to determine the likelihood that a roadway worker or equipment would foul an adjacent track prior to initiating work activities, regardless of whether those activities were “large-scale” or “small-scale.” The advisory provided examples of relevant factors to consider in making such an assessment. These factors included whether the work could be conducted by individuals positioned between the rails of a track on which on-track safety has been established, as opposed to being positioned outside of the rails of such a track on a side of the track that has an adjacent track; whether there was a structure between the tracks to prevent intrusion (such as a fence between the tracks at a passenger train station and the tall beam of a through-plate girder bridge); the track-center distance, to ensure that the adjacent track would not be fouled if a worker were to inadvertently trip and fall; the nature of the work (inspection or repair); the sight distances; and the speed of trains on the adjacent track. See id.

FRA further noted that, upon completion of an on-site risk assessment, the on-track safety briefing required by § 214.315(a) would be the ideal instrument to implement preventive measures concerning adjacent tracks. See id.

In addition to the above recommendation concerning basic risk assessment, FRA recommended that railroads and contractors to railroads consider taking the following actions:

• Use of working limits for activities where equipment could foul adjacent track (whether large-scale or small-scale activities);
• Use rotation stops to mitigate the dangers associated with on-track equipment and trains passing on adjacent tracks;
• Review procedures for directing trains through adjacent track working limits, and enhance such procedures when necessary;
• Install adjacent track warning signs/devices in the operating cab of on-track machines to remind roadway maintenance machine operators to not
inadvertently depart the equipment onto a track where there may be trains and other on-track equipment passing:
- Provide additional training and monitoring to employees, emphasizing the need to cross tracks in a safe manner (i.e., single file and after looking in both directions);
- Reinforce to individual roadway workers that it is critical not to foul a track except in the performance of duty and only when on-track safety has been established. This training could be accomplished through training sessions, as well as daily job briefings; and
- Institute peer-intervention measures by which workers are encouraged to intervene when observing another roadway worker engaging in potentially non-compliant and unsafe activity. See id.

IV. Recent Roadway Worker Accidents (1997–2010)

In the more than thirteen years since the RWP Rule went into effect on January 15, 1997, there have been nine roadway worker fatalities on an adjacent track. Seven of those fatalities have occurred on a controlled track that was adjacent to the track on which a roadway work group, with at least one of the roadway workers on the ground, was engaged in a common task with on-track, self-propelled equipment. FRA notes that there has been only one adjacent-track fatality where a roadway work group had been engaged in a common task with a lone hi-rail vehicle, defined in § 214.7 as “a roadway maintenance machine that is manufactured to meet Federal Motor Vehicle Safety Standards and is equipped with retractable flanged wheels so that the vehicle may travel over the highway or on railroad tracks.” In addition, there have been no adjacent-track fatalities where a roadway work group had been engaged in a common task with a catenary maintenance tower car on the occupied track. This is likely because the duties normally performed by an employee operating a hi-rail vehicle or a catenary maintenance tower car on the occupied track. This is likely because the duties normally performed by an employee operating a hi-rail vehicle or a catenary maintenance tower car on the occupied track is distracting to on-ground roadway workers and produce less dust and noise than a typical on-track roadway maintenance machine. Given the above, FRA proposed that adjacent-track on-track safety not be required for roadway work groups engaged in a common task with a hi-rail vehicle or a catenary maintenance tower car, as discussed in the section-by-section analysis of paragraphs (b)(2) and (3), respectively, in new § 214.336.

Of the seven fatalities that occurred under the circumstances described above and which this final rule is intended to address, three occurred during the period after the effective date of the 1996 RWP Rule and before the publication of the safety advisory on May 3, 2004, and four have occurred since that period. In the four-year period prior to May of 2004 (May 1, 2000–April 30, 2004), there has been one adjacent-track fatality known to have occurred under such circumstances, for a rate of .25 per year. In the four-year period since (May 1, 2004–April 30, 2008), there have been four adjacent-track fatalities, for a rate of one per year, which is four times the rate of the previous four-year period. While FRA recognizes that even one death can make rates change dramatically when the total number of deaths is small, the increase in the rate of these deaths despite the safety advisory continues to lead FRA to conclude that regulatory action is needed to avert an escalating number of deaths. Moreover, given the extensive participation in developing these consensus regulatory provisions by representatives of all of the key interests involved in this issue, it is contrary to the public interest to wait for all of the other issues in the larger RWP rulemaking to be resolved or to engage in lengthy periods for notice and public comment before acting to prevent more deaths.

The following is a brief summary of the results of FRA’s investigations of the four most recent incidents that resulted in these unfortunate fatalities:
- **October 5, 2005:** A roadway surfacing gang tamper operator, with 28 years of service, was walking up to the front of the tamper to put away the light buggies as his surfacing gang, having just completed its work, was getting ready to travel to clear the number two main track. The operator was walking east on the side of the tamper between the two main tracks when he was struck by a westbound train on the adjacent track. The track centers were spaced approximately 13 feet apart, and the train was traveling at an estimated speed of 40 miles per hour (mph).
- **March 12, 2007:** A surfacing gang was occupying the number one main track in a double-main territory. The surfacing gang foreman (the roadway worker in charge), who earlier had notified the other members of the gang of pending movement on the adjacent track, was walking into the same adjacent track when he was struck by a train. It remains unclear why he was fouling the adjacent track at the time of the incident. The track centers were spaced approximately 13 feet, 6 inches apart, and the maximum authorized speed on the adjacent track was 50 mph. The foreman was the only roadway worker on the ground at the time of the incident.
- **February 10, 2008:** A train struck a roadway worker inside an interlocking on a triple-main track territory. The worker was part of a gang that consisted of approximately 10 workers that were engaged in the repair of a crossover on the middle main track with a tamper. Foul time was being used as adjacent-track on-track safety, but this on-track safety was removed by the roadway worker in charge, who gave permission to the dispatcher to permit a train to operate on the adjacent track through the roadway work group working limits. As the train entered the interlocking on a limited clear signal indication for a crossover move past the work area, one of the roadway workers attempted to cross the track in front of the train and was struck. The track centers were spaced approximately 13 feet apart, and the maximum authorized speed for the train on the adjacent track was 45 mph.
- **March 27, 2008:** A surfacing gang was working on double-main track territory. The surfacing gang foreman was standing in the foul of the adjacent track while his surfacing crew worked on the number two main track (the occupied track). A train operating on the adjacent track struck the foreman. No on-track safety was in effect on the adjacent track involved at the time of the incident. The task centers were spaced approximately 14 feet, 7 inches apart, and the maximum authorized speed on the adjacent track was 70 mph. The foreman was the only roadway worker on the ground at the time of the incident.

While the above discussion focuses on those fatalities that have occurred on an adjacent track where a roadway work group, with at least one of the roadway workers on the ground, was engaged in a common task with on-track, self-propelled equipment on an occupied track, it is important to discuss some of the common circumstances in all nine of the fatalities that have occurred on an adjacent track since the rule went into effect, as these circumstances were considered by FRA in its decision to issue the NPRM and this final rule. The first common circumstance is the type of track. All nine of the fatalities occurred on “controlled” track, rather than “non-controlled” track. This was taken into consideration when FRA’s proposed and final definition of “adjacent controlled track,” which has...
been included in new § 214.336(a)(3) and would be limited to controlled tracks whose track centers are spaced 19 feet or less from the track center of the occupied track. The term would only be applicable to § 214.336 and would not replace the broader term “adjacent tracks,” which is defined in § 214.7.

Second, all nine of the fatalities occurred on an adjacent track that was quite closely-spaced to the track that the roadway work group was occupying. Six of the adjacent tracks had track centers that were spaced approximately 14 feet or less from the respective track centers of the tracks that the roadway work groups were occupying, and all nine of the adjacent tracks were spaced 15 feet or less from the track centers of the respective occupied tracks. This common circumstance was also taken into consideration in FRA’s proposed and final definition of “adjacent controlled track,” which would have a narrower applicability for purposes of proposed and final § 214.336 than the term “adjacent tracks,” because it would not include tracks with track centers that were spaced more than 19 feet (but less than 25 feet) away from the track center of the occupied track.

The third common circumstance of the nine fatalities on adjacent track is the time of year. Four of the fatalities occurred during the first quarter (January-March), none of the fatalities occurred in the second and third quarters of the year (April-June and July-September, respectively), and the other five fatalities occurred during the fourth quarter (October-December). As noted earlier in Section I, above, because incidents involving adjacent controlled tracks appear to present clear evidence of significant risk that is not effectively addressed by the current regulation, FRA has concluded that moving forward with this rulemaking to address adjacent-track on-track safety in advance of the other proposals contained in the RSAC consensus is necessary and appropriate in order to reduce the risk of additional fatalities on adjacent track that are likely to occur late this year or early next year in the absence of further regulatory action.

V. Joint Petition to FRA for an Emergency Order

On April 11, 2008, the Brotherhood of Maintenance of Way Employes Division (BMWED) and the Brotherhood of Railroad Signalmen (BRS) filed a joint petition requesting that FRA issue an emergency order under 49 U.S.C. § 214.336 requiring adjacent-track protection for roadway work groups. The petition noted that similar requests, which were filed on October 7, 2005, November 7, 2003, and December 21, 1999, were denied by FRA. The petitioners expressed their belief that, under the existing provisions of the rule, roadway workers will continue to suffer preventable serious injuries and death. The petitioners asserted that FRA should require railroads and their contractors to establish on-track safety on adjacent tracks (“adjacent-track on-track safety”) for a wider range of work activities. In FRA’s January 5, 2006 denial of the October 2005 petition, FRA noted that the RSAC working group tasked to review and revise the RWP Rule (“RWP Working Group”) was “committed to presenting comprehensive draft language * * * that would more closely tailor the solution to the problem.” And while the RWP Working Group did in fact draft this language, and both the Working Group and the full RSAC were able to reach consensus on such language, BMWED and BRS were concerned that the language, which has not been published as an NPRM, would not become a final rule for a considerable period of time, leaving the possibility for further preventable fatalities. BMWED and BRS urged FRA to issue an emergency order that would adopt the adjacent-track consensus language of the RWP RSAC.

On April 18, 2008, the American Train Dispatchers Association (ATDA) filed a letter in support of the BMWED and BRS joint petition. In the letter, ATDA agreed that preventable injuries and deaths continue to occur because of a lack of positive regulation mandating adjacent-track on-track safety and urged FRA to issue an emergency order based upon the RSAC-approved and consensus-based replacement language for § 214.235(c), as indicated in the joint petition.

As an emergency order does not require prior notice to the affected party or an opportunity to be heard prior to issuance of the order, Congress declared that such an order may be invoked only “when an unforeseen and unexpected in which the danger is immediate.” To address this serious safety concern, FRA decided to issue a separate NPRM with an abbreviated comment period, as further discussed in Section VI.C, below.

VI. Current Rulemaking To Revise the RWP Rule

A. Overview of the RSAC

In March 1996, FRA established RSAC, which provides a forum for developing consensus recommendations to FRA’s Administrator on rulemakings and other safety program issues. The Committee includes representation from all of the agency’s major stakeholder groups, including railroads, labor organizations, suppliers and manufacturers, and other interested parties. A list of member groups follows:

• American Association of Private Railroad Car Owners (AARPCO);
• American Association of State Highway and Transportation Officials (AASHTO);
• American Chemistry Council;
• American Petroleum Institute;
• American Public Transportation Association (APTA);
• American Short Line and Regional Railroad Association (ASLRA);
• ATDA;
• Association of American Railroads (AAR);
• Association of Railway Museums;
• Association of State Rail Safety Managers (ASRSM);
• Brotherhood of Locomotive Engineers and Trainmen (BLET);
• BMWED;
• BRS;
• The Chlorine Institute, Inc.;
• Federal Transit Administration (FTA);
• Fertilizer Institute;
• High Speed Ground Transportation Association (HSGTA);
• Institute of Makers of Explosives;
• International Association of Machinists and Aerospace Workers;
• International Brotherhood of Electrical Workers (IBEW);
• Labor Council for Latin American Advancement;*
• League of Railway Industry Women;*
• National Association of Railroad Passengers (NARP);
• National Association of Railway Business Women;*
• National Conference of Firemen & Oilers;
• National Railroad Construction and Maintenance Association (NRCA);
• National Railroad Passenger Corporation (Amtrak);
• National Transportation Safety Board (NTSB);
• Railway Supply Institute (RSI);
• Safe Travel America (STA);
• Secretaria de Comunicaciones y Transporte;*
On January 26, 2005, the RSAC formed the RWP Working Group ("Working Group") to consider specific actions to advance the on-track safety of employees of covered railroads and their contractors engaged in maintenance-of-way activities throughout the general system of railroad transportation, including clarification of existing requirements. The assigned task was to review the existing rule, technical bulletins, and a safety advisory dealing with on-track safety. The Working Group was to consider implications and, as appropriate, consider enhancements to the existing rule. The Working Group would report to the RSAC any specific actions identified as appropriate, and would report planned activity to the full Committee at each scheduled Committee meeting, including milestones for completion of projects and progress toward completion.

The Working Group is comprised of members from the following organizations:

- Amtrak;
- APTA;
- ASLRRA;
- ATDA;
- AAR, including members from BNSF Railway Company (BNSF), Canadian National Railway Company (CN), Canadian Pacific Railway, Limited (CP), Consolidated Rail Corporation (Conrail), CSX Transportation, Inc. (CSXT), The Kansas City Southern Railway Company (KCS), Norfolk Southern Corporation railroads (NS), and Union Pacific Railroad Company (UP);
- Belt Railroad of Chicago;
- BLET;
- BMWED;
- BRS;
- FRA;
- Indiana Harbor Belt Railroad (IHB);
- Long Island Rail Road (LIRR);
- Metro-North Commuter Railroad Company (Metro-North);
- Montana Rail Link;
- NRC;
- Northeast Illinois Regional Commuter Railroad Corporation (Metrar);
- RailAmerica, Inc.;
- Southeastern Pennsylvania Transportation Authority (SEPTA);
- UTU; and
- Western New York and Pennsylvania Railroad (WNY&P).

The Working Group held 12 multi-day meetings. The group worked diligently and was able to reach consensus on 32 separate items.

C. Proceedings Concerning On-Track Safety Procedures for Adjacent Tracks

One of the items on which the Working Group was able to reach consensus dealt specifically with the adjacent-track on-track safety issue in § 214.335 On-track safety procedures for roadway work groups. The consensus language developed by the Working Group for this topic, which was approved by the full RSAC and formally recommended to FRA for paragraphs (c), (d), and (e), is as follows:

For paragraph (c)—"On-track safety is required for adjacent controlled track within 19 feet of the centerline of the occupied track when roadway work group(s) consisting of roadway workers on the ground and on-track self-propelled or coupled equipment are engaged in a common task on an occupied track."

"Except as provided by paragraph (c)(3) of this section, when trains are cleared through working limits on an adjacent controlled track, or when watchman/lookout warning in accordance with § 214.329 is the form of adjacent on-track safety, roadway workers shall occupy a predetermined place of safety and all on-ground work and equipment movement activity within the fouling space of the occupied track shall cease upon notification of pending adjacent track movement (working limits) or upon receiving the watchman/lookout warning.

"When single or multiple movements are cleared through adjacent controlled track working limits, on-ground work and equipment movement on the occupied track may resume only after all such movements on adjacent track have passed each component of the Roadway Work Group(s). If the train stops before passing all roadway workers, the employee in charge shall communicate with the engineer prior to allowing the work to resume.

"When single or multiple movements are cleared through adjacent controlled track working limits at a speed no greater than 25 mph, work performed exclusively between the rails of the occupied track, or to the field side of the occupied track with no adjacent track, may continue upon notification of each roadway worker of movement on adjacent track. On-ground work shall not be performed within 25 feet to the front or 25 feet to the rear of roadway maintenance machine(s) on the occupied track during such adjacent track movement."

For paragraph (d), the Working Group recommended “Equipment may not foul an adjacent controlled track unless protected by working limits and there are no movements authorized through the working limits by the roadway worker in charge.”

And for paragraph (e), the Working Group recommended “The mandatory provisions for adjacent controlled track protection under this subpart are not applicable to work activities involving—
A hi-rail vehicle as defined in §214.7, provided such hi-rail vehicle is not coupled to railroad cars. Where multiple hi-rail vehicles are engaged in a common task, the on-track safety briefing shall include discussion of the nature of the work to be performed to determine if adjacent controlled track protection is necessary. Nothing in this subpart prohibits the roadway worker in charge of the hi-rail vehicle from establishing adjacent controlled track protection, as he/she deems necessary.

* * * On-ground roadway workers exclusively performing work on the field side of the occupied track.

* * * Catenary maintenance tower cars with roadway workers positioned on the ground within the gage of the occupied track for the sole purpose of applying or removing grounds. Nothing in this subpart prohibits the roadway worker in charge of the catenary maintenance tower car from establishing adjacent track protection, as he/she deems necessary.

* * * Adjacent track protection, as he/she deems necessary.

Upon reviewing the joint petition of the BRS and BMWED for an emergency order, the consensus language of the Working Group quoted above, and the relevant accident data concerning roadway workers fouling adjacent tracks, FRA decided to issue a separate NPRM7 to lower the safety risk associated with roadway workers fouling adjacent tracks. Although FRA’s safety advisory may have had an initial effect and have raised awareness enough to help keep the number of all categories of roadway worker fatalities in 2004 and through almost six months in 2005 at zero, the effect was not sustained enough to combat the rise of roadway worker fatality incidents since late June of 2005, when the first roadway worker fatality occurred after the issuance of the safety advisory, or since October of 2005, when the first adjacent track roadway worker fatality occurred.

In light of recent roadway worker fatality trends, FRA determined that the agency must propose a more prescriptive approach to prevent further fatalities. The need to mandate adjacent-track on-track safety was recognized by FRA, members of the Working Group, and members of the full RSAC. The consensus language developed by the Working Group and recommended by the full RSAC was expected to reduce the risk of roadway worker fatalities due to fouling an adjacent track while working in conjunction with on-track, self-propelled equipment or coupled equipment on an occupied track. As part of the process in drafting the NPRM in the larger RWP rulemaking, FRA circulated the consensus rule text concerning adjacent track and other items to the Working Group for errata review. Both AAR and BMWED submitted comments on this provision. To address these issues, and other potential ambiguities discovered upon a closer review of the rule text, FRA reorganized and modified the consensus text in issuing an NPRM.

FRA published an NPRM addressing adjacent-track on-track safety on July 17, 2008 (73 FR 41214), but formally withdrew the notice on August 13, 2008 (73 FR 47124). The withdrawal stated, in part—

In crafting the NPRM, FRA presented the RSAC consensus language in the preamble verbatim and transparently explained its rationale for all changes it made to the consensus language. As this was an NPRM, FRA sought comment on the entire proposal, including those portions that FRA sought to clarify.

FRA recognizes that inadvertent errors do sometimes occur in formulating a proposal and expects that interested parties would provide comments to both FRA and all other interested parties through the established comment process detailed in the NPRM. Given the alleged discrepancies between the consensus language and the proposed rule, the need to clarify the essential issues and move toward resolution of the safety concern at hand, and the ex parte communications regarding this proposed rule, FRA has decided to withdraw this rulemaking and will take such further regulatory steps as safety requires.

**Id.** Due to the inherent dangers of roadway workers working in multiple-track territories among machines, FRA decided to revisit the issues and language of the withdrawn NPRM in light of the comments received, formal and informal (i.e., phone calls and emails), and issue a revised NPRM, which was published on November 25, 2009 (74 FR 61633). In accordance with DOT’s policy (Order No. 2100.2 (1970)), all communications (including informal phone calls and emails) between FRA employees and other parties since the publication of the July 17, 2008 NPRM and prior to its withdrawal were reduced to writing and placed in the public docket. While some comments were marked “draft” or received after the withdrawal of the NPRM, FRA posted them to the docket, since they were still taken into consideration in drafting the NPRM and this final rule.

A summary of the comments on the July 17, 2008 NPRM and FRA’s response to those comments appears in the preamble to the November 25, 2009 NPRM, and therefore is not repeated in the preamble to this final rule unless it is necessary to discussion of a pending issue.

A summary of the comments on the November 25, 2009 NPRM and any pertinent earlier comments and FRA’s response to those comments follows in Section V.D. below. However, there is one issue that was raised by AAR in its comments on the July 17, 2008 NPRM that merits further discussion in this section, namely the effective date of the rule. In its comments, AAR had urged FRA to make the effective date for training on the new requirements consistent with the railroads’ training schedules. Specifically, AAR indicated that if a rule were published before October 1st of a calendar year, then training could be completed by July 1st of the next calendar year. In support of this recommended effective date, AAR explained that most employees are trained during the first six months of each year, many during the first quarter, when there is typically less demand for railroad services. AAR further noted that railroads spend considerable resources to ensure that their training materials are comprehensive and effective, and that training outside the normal training cycle could be counterproductive and could potentially lead to errors in implementation, as the trainers may have a more difficult time effectively conveying the information.

The BMWED and BRS comments on the July 17, 2008 NPRM, though not expressly commenting on a particular effective date, expressed concern that the separate training and recordkeeping requirements proposed in §214.336(c) would have shifted the burden for effective training from the employer to the employees, and would have infringed on the employees’ right to quality, employer-provided training. FRA had proposed these separate training and recordkeeping requirements to serve as a stop-gap measure until the time of the employee’s recurrent training pursuant to §214.343(d). However, given the complexity of new §214.336, FRA agrees that it would be best to allow the railroads additional time to create comprehensive and helpful training materials and to train their employees during the normal training cycle. As a result, FRA has decided to make the rule effective on May 1, 2012. This should help ensure uniformity and quality of training. Until this final rule becomes effective, FRA encourages railroads and contractors to take measures to increase awareness on
the issue of the dangers posed by adjacent tracks, such as making it a topic of discussion at safety meetings or enhancing their on-track safety job briefings to include information about any adjacent tracks, on-track safety for such tracks, and identification of any roadway maintenance machines that will foul such tracks.

D. Response to Comments on the November 25, 2009 NPRM

FRA received four comments on the November 25, 2009 NPRM. Comments were submitted by a variety of affected parties, namely, BMWED and BRS (joint comments), AAR, APTA, and ATDA. FRA has extensively reviewed and evaluated the comments. In this section, FRA has responded to the comments regarding the following issues:

1. On-Ground Work Performed to the Clear Side

BMWED and BRS raised several issues in their joint comments on the NPRM. First and foremost, however, was their concern with the concept and definition of the term “clear side,” which they believed was an “unproven and novel concept” that had not been discussed in the RSAC and the Working Group, and that was a “dangerous surrogate for the consensus language defining ‘Field Side’ within the body of the text adopted by the Working Group in 214.335(c)(3).” In the NPRM, FRA had proposed the term “clear side” as a shorthand to describe the side on which there should essentially be no danger posed by any other adjacent track, for purposes of the exception in paragraph (e)(1) of proposed §214.336 for “one or more on-ground roadway workers performing work while exclusively positioned on the clear side of the occupied track.” In particular, FRA noted that, assuming compliance with the proposed rule, there would be no danger posed by any other adjacent track either because there is no adjacent track on that particular side of the occupied track or, even though there is an adjacent track on that side of the occupied track, working limits have been established in accordance with this subpart on the closest adjacent track on that side and, therefore, there are no movements authorized through the working limits on that adjacent track.

This proposed exception was based on paragraph (e)(2) of the consensus language, which read “[o]n-ground roadway workers exclusively performing work on the field side of the occupied track.” As discussed at length in the preamble of the NPRM (see 74 FR 61640), FRA believed that this language was broader than the consensus language in consensus paragraph (c)(3), which would have permitted work to continue “to the field side of the occupied track with no adjacent track” during a low-speed movement on an adjacent controlled track on the opposite side of the occupied track. Additionally, FRA noted that there were two field sides to each occupied track, beginning at each rail and continuing outward and away from the track center of the occupied track. However, in their joint comments on the NPRM, BMWED and BRS expressed their beliefs that the term “field side” was clear, and that each right-of-way (rather than each track) has only two field sides (i.e., the outermost extremes of the right-of-way). It was their opinion that FRA was mistaken in its conclusion that there was a conflict between consensus paragraphs (c)(3) and (e)(2) because the term “field side” in (e)(2) clearly referred to the side of the occupied track that had no adjacent track on that side; without such a conflict, they believed there was no need to introduce the term “clear side.”

FRA notes that the term “field side” is used by roadway workers inspecting track to indicate on which side of a rail a bolt was replaced (e.g., field side vs. gage side), regardless of whether the track is in single-track territory or multiple-track territory. Given this use of the term as described by BMWED and BRS’ view that the term has been used differently in the common parlance of roadway workers, it is evident that the term “field side” was understood by different people to mean different things. FRA has considered this fact as well as the comments raised concerning the safety of permitting work to continue on a side of the occupied track that had an adjacent track.

FRA had originally proposed in the July 17, 2008 NPRM (later withdrawn) that this rule would be permitted to continue on that side as long as on-track safety (including train approach warning) had been established on that side. In response to the concerns raised by BMWED and BRS that it would be unsafe to permit work on that side if working limits are not specifically required on any adjacent track on that side (with no movements permitted through such limits), FRA adjusted its proposal in the November 25, 2009 NPRM so as to better ensure the safety of the workers on that side of the occupied track. See 74 FR 61640.

In this final rule, FRA has considered the additional comments received from BMWED and BRS on the proposed section, particularly on the use of the term “clear side” and “field side” and has removed both terms to eliminate any confusion. However, FRA still believes that it is safe to work on the side of an occupied track with working limits on the closest adjacent track on that side and no movements within such limits on that side, and that establishing the near running rail as a demarcation point is a “bright line” approach that will make it easier for roadway workers and the regulated community at large to follow and for FRA to enforce. Thus, this final rule permits work while exclusively positioned on the side of the occupied track with one or more adjacent tracks, the closest of which has working limits on it and no movements permitted within such working limits by the roadway worker in charge. See §214.336(e)(1)(ii) of the final rule.

2. Hi-Rail Vehicles and Clarification of “Common Task”

In response to the exception proposed for hi-rail vehicles in the NPRM in paragraph (e)(2) of §214.336, FRA received comments from BMWED and BRS indicating that the exception was written too broadly and should be amended so as to limit it to only those hi-rail vehicles being used for inspection or minor correction purposes. These commenters submitted that this was the intent of the consensus language, and that failing to impose this limitation would permit work to be performed by hi-rail vehicles that was equally as distracting (such as a thermite welding crew working out of the back of a large hi-rail vehicle work platform) as that performed by other types of on-track, self-propelled equipment or coupled equipment subject to the requirements of this section.

AAR requested clarification of the exception for hi-rail vehicles, noting that the language limiting the exception for hi-rail vehicles to those that are not operating on the same occupied track and within the limits of a roadway
work group as described in §214.336(a)) should be modified so as to exclude from the exception only those hi-rail vehicles working on the occupied track within 300 feet in front of or behind any roadway maintenance machine of a roadway work group. AAR noted that there are circumstances where the working limits could extend between two control points for several miles, and that the hi-rail vehicle may be operated a considerable distance away from the roadway work group, but within the control points.

APT A raised a similar concern regarding the roadway workers’ proximity to the on-track, self-propelled equipment, noting that proposed §214.336 would require adjacent-track on-track safety for workers in a tie gang applying rail anchors on an occupied track where no power tools or roadway maintenance machines are in use within their hearing, and for an on-ground worker taking rail profile measurements behind a rail grinder. Because the fatalities recounted in the NPRM all suggest proximity to the on-track equipment as a defining factor, APTA suggested that FRA should narrowly define the phrase “common task,” so as to exclude from the limitations of §214.336(a) workers who are not in proximity to the on-track equipment and whose ability to see and hear approaching trains or other equipment on adjacent tracks is not limited by noise, lights, or other conditions.

FRA agrees with BMWED and BRS that the language in the NPRM would have permitted work to be performed by hi-rail vehicles that was equally as distracting, and thus has adopted BMWED’s and BRS’ suggestion in the final rule. See §214.336(e)(3)(i). As explained in detail in the Section-by-Section Analysis at Section VII of this preamble, FRA has added a definition of the term “minor correction purposes” to paragraph (a)(3) of this section for additional clarity. Additionally, in response to the concern raised by AAR (and a similar concern raised by APTA) that a hi-rail vehicle that is operated within the same working limits but a considerable distance away from the distractions of the roadway work group would not qualify for the exception, FRA has added language to permit the hi-rail vehicle exception to apply in this situation if both of the following conditions are met. The first is that the roadway worker in charge of the working limits has conducted an on-track safety job briefing with the principal (“non-excepted”) roadway work group and the entering (“excepted”) roadway work group and determined that adjacent-controlled-track on-track safety is not necessary for the entering “excepted group” (i.e., a group that would otherwise qualify for one of the exceptions in paragraph (e)(3)).

The second condition that would need to be met in order to permit the hi-rail vehicle exception to still apply in the above scenario is that the entering group is not working in such proximity to the principal (“non-excepted”) group so that the ability of a roadway worker in the entering (“excepted”) group to hear or see approaching trains and other on-track equipment is impaired by background noise, lights, sight obstructions or any other physical conditions caused by the equipment of the principal group. FRA notes that this additional language was based in part on the existing on-track safety procedures for lone workers, and that the selected language would be enforced in a similar manner. See §214.337(c)(6). Additionally, in recognition that, under the reverse scenario, the principal group could be the “excepted group” and the entering group could be the “non-excepted group,” FRA has written the language in such a manner so as to apply to both scenarios.

While the above approach is similar to what APTA suggested in its comments, FRA has decided not to apply this approach to any members of a roadway work group that includes equipment that triggers the requirements of §214.336 and that is not subject to an exception, regardless of whether the individual roadway workers are in proximity of such equipment. FRA notes that unless those individual roadway workers comprise an entirely separate roadway work group with its own roadway worker in charge, it is safer to provide uniformity in procedures for the work group as a whole. This approach, as applied to an entering group, is also safer than AAR’s suggestion that FRA permit the exception to apply to hi-rail vehicles that are at least 300 feet away from any roadway maintenance machine in the principal roadway work group, because it will capture distractions that impair the abilities of roadway workers from further than 300 feet away, due to factors such as the size of the on-track, self-propelled equipment or coupled equipment, and the amount of noise or dust generated by such equipment.

Because the concept of a “common task” is at the core of determining whether roadway workers are part of the same work group, and thus subject to the same adjacent-controlled-track on-track safety procedures per the triggering language in paragraph (a), FRA believes that it is important to provide clarification as to this concept. While the term “common task” is not defined in part 214, FRA has provided guidance in the preamble to the 1996 RWP Rule concerning the term in the context of a “lone worker” who, by definition, is not engaged in a common task with another roadway worker. See §214.7. This guidance may also be helpful in understanding the use of the term “common task” in the context of new §214.336. The preamble provides the following:

Generally, a common task is one in which two or more roadway workers must coordinate and cooperate in order to accomplish the objective. Other considerations are whether the roadway workers are under one supervisor at the worksite; or whether the work of each roadway worker contributes to a single objective or result.

For instance, a foreman and five trackmen engaged in replacing a turnout would be engaged in a common task. A signal maintainer assigned to adjust the switch and replace wire connections in the same turnout at the same time as the track workers would be considered a member of the work group for the purposes of on-track safety. On the other hand, a bridge inspector working on the deck of a bridge while a signal maintainer happens to be replacing a signal lens in a nearby signal would not constitute a roadway work group just by virtue of their proximity. FRA does not intend that a common task may be subdivided into individual tasks to avoid the use of on-track safety procedures required for roadway work groups.

61 FR 65965–66.

3. Rail-Bound Geometry or Detector Cars

In the NPRM, FRA had sought comment regarding whether the hi-rail vehicle exception should be expanded to include rail-bound geometry and detection equipment. See 74 FR 61641, 61648. As discussed in the NPRM, AAR had requested that the exception for hi-rail vehicles be expanded to include rail-bound geometry and detection equipment, since the level of distraction posed by this equipment is similar to that posed by hi-rail vehicles. AAR suggested that FRA expand the hi-rail vehicle exception by adding “or self-propelled track geometry or detector car” after “a hi-rail vehicle.” In seeking comments, FRA noted that “it seems that the level of distraction is similar for a roadway worker on the ground who is field-verifying a measurement behind a...”
geometry car and a roadway worker on the ground who is replacing a bolt behind a hi-rail.” 74 FR 61641.

BMWED and BRS responded that they believed that the distractions are dissimilar, in that the detector cars are larger (reducing visibility) and much louder than a hi-rail pickup, and could therefore reduce a person’s ability to detect the approach of a train. Additionally, they noted that there are other roadway maintenance machines performing a common task with such detection equipment that will also be at risk. In contrast, APTA expressed support for expanding the hi-rail vehicle exception to self-propelled detector (and “inspection-type”) cars, noting its belief that roadway workers engaged in a common task with self-propelled detector cars are performing work under the same circumstances as those engaged in a common task with hi-rail vehicles, and thus, should be granted the same exemption.

FRA has decided to adopt this exception in this final rule because the level of distraction posed by the task of inspecting or performing minor correction work is the same. Additionally, FRA has considered that inspection or minor correction work performed by a roadway work group with this type of equipment would clearly not have triggered the requirement for adjacent-track on-track safety under existing § 214.335(c) (as this would not have been considered “large scale maintenance or construction”).

4. Continuous Barrier

FRA requested comment in the NPRM as to whether a new exception should be added for locations where there is a physical barrier, such as a fence, between the occupied track and the adjacent track and, if so, whether it should be limited to where there is a continuous permanent or semi-permanent physical barrier of a certain height (such as a chain-linked fence at least 4’ in height or a concrete barrier at least 32” in height) between the occupied track and the adjacent controlled track. 74 FR 61642, 61648. FRA received several comments from interested parties on this issue. BMWED and BRS opposed a new exception for fences, etc., due to concerns that the fence and/or concrete barriers would not necessarily encompass the entire work environment of one or more roadway work groups, and would not prevent inadvertent fouling of the adjacent controlled track by roadway maintenance machines. The commenters noted in closing that if, however, FRA is inclined to grant this new exception, then FRA must establish clearly-prescribed minimum criteria for such a barrier, including that it be permanently-installed and continuous, of sufficient strength, without voids, openings, or defects and at least four feet in height, and FRA must require that all roadway workers are positioned or performing work “exclusively within the confines” of the barrier. The commenters believed that a minimum height requirement of four feet would be reasonable and necessary to prevent a roadway worker who stumbles from going over the top of a shorter barrier and landing in the foul of a live adjacent controlled track.

AAR suggested that an exception be added for “[w]ork on an occupied track where there is a physical barrier between the occupied track and the adjacent track of sufficient height to prevent the worker from stepping over the barrier.” APTA also supported the creation of an exception for locations that have permanent or semi-permanent barriers between the occupied and adjacent tracks, and noted that FRA should not be concerned about the use of plastic fencing for this purpose, as it has been used effectively in many passenger rail applications where short-term work is performed in multiple-track and shared-corridor alignments. APTA submitted that the plastic fencing is highly visible to workers on the ground and train operators alike, and its dielectric properties make it a preferred option in situations where work is performed near third rail or catenary power sources.

Having considered these comments and reviewed the fatality data, FRA has determined that it is safe to perform work on a side of the occupied track that has an inter-track barrier between it and the closest adjacent track on that side, provided that the inter-track barrier meets minimum requirements to ensure that it is sturdy enough to prevent a roadway worker from fouling the adjacent track. As a result, FRA has adopted a new exception for such inter-track barriers. See § 214.336(e)(1)(iii). FRA has incorporated several of the suggestions from the comments received and defined the term “inter-track barrier” to mean “a continuous barrier of a permanent or semi-permanent nature that spans the entire work area, that is at least four feet in height, and that is of sufficient strength to prevent a roadway worker from fouling the adjacent track.” See § 214.336(a)(3) (“inter-track barrier”). Further, FRA believes that this exception, as a practical matter, will be used primarily in commuter territories that already have permanent, sturdy chain-linked fences in place, often to prevent passengers from crossing the tracks. Most other semi-permanent barriers, such as concrete extra-tall jersey barriers (since standard jersey barriers are less than four feet in height), would be labor intensive to set up for a short work project. Regarding the use of plastic fencing, FRA notes that those fences are not typically permanently or semi-permanently installed, and FRA is also concerned that this material may be easily defeated by vandals with a pocket knife, thereby weakening the plastic fencing or leaving gaps in it through which a roadway worker could fall. As a result, FRA does not consider plastic fencing as an acceptable “inter-track barrier” for purposes of this section.

Finally, in order to address BMWED’s concern that the inter-track barrier would not prevent inadvertent fouling of the adjacent controlled track by roadway maintenance machines, FRA has added clarifying language to the introductory text in paragraph (e) that cross-references the requirements in paragraph (f), concerning components of roadway maintenance machines fouling an adjacent controlled track. This language is intended to reiterate that, the exception in paragraph (e)(1)(iii) exempts the roadway workers from the procedures in paragraphs (a), (b), and (c) only; they must still follow the procedures in paragraph (f), which generally provides that components of roadway maintenance machines shall not foul an adjacent controlled track unless working limits have been established on the adjacent controlled track and there are no movements permitted within the working limits by the roadway worker in charge that would affect the roadway worker operating such machine.

5. Requests for Additional Exceptions to, or Relief From, the Requirements of Proposed § 214.336 or for a Narrowing of Its Scope

FRA received several comments requesting additional exceptions to, or relief from, the requirements of proposed § 214.336 or for a narrowing of its scope. Three of those requests were made by AAR, and the other two were made by APTA. Each request or set of similar requests is described and then addressed.

a. Requested Exception Where There Is Only One Worker on the Ground

AAR commented that FRA had disagreed with its draft comments on the withdrawn NPRM that FRA’s proposal to apply adjacent-track protection requirements where there is only one worker on the ground is contrary to the intent of the Working
Group, AAR indicated that, even assuming FRA is correct, adjacent-track protection is not required when activities are performed between the rails of the occupied track or on the clear side, since employees undertaking such activities are not in danger from trains passing on adjacent track. AAR submitted that adjacent-track on-track safety serves no purpose for employees checking track characteristics (e.g., cross level, gage, or profile), a machine operator re-supplying a machine with materials, a mechanic repairing a machine, or where a machine is just being fueled. AAR further stated that the last three activities described above do not even constitute roadway work, thus the proposed adjacent-track protection requirements would not apply. Accordingly, AAR proposed that FRA add an additional exception to proposed § 214.336(e) for “a single employee performing work exclusively between the rails of the occupied track.” AAR noted that it would not be opposed to limiting the exception by requiring that the employee must first communicate with the operator of the roadway machine.

Regarding AAR’s request that FRA add an additional exception to proposed § 214.336(e) for “a single employee performing work exclusively between the rails of the occupied track,” FRA again notes, as it did in the NPRM, that an analysis of the agency’s accident investigations of these types of incidents revealed that four of the seven fatalities that involved a roadway work group engaged in a common task with on-track, self-propelled equipment on an adjacent track occurred with only one of the roadway workers on the ground. FRA specifically chose the clarifying words “one or more roadway workers on the ground” because FRA believed that this was the intent of the Working Group, since there was no safety rationale for excluding roadway work groups that consisted of only two roadway workers. Further, FRA notes that a lot of the work performed in a common task with on-track, self-propelled equipment or coupled equipment, other than hi-rail vehicles and automated rail inspection cars being used for inspection or minor correction and catenary maintenance tower cars, does not lend itself to being performed within the gage of the track without breaking the plane of the rails. Additionally, the exception in § 214.336(e)(2) would permit a roadway worker to refuel a machine, provided that he or she is positioned on a side of the occupied track meeting specified conditions, with the machine effectively preventing the roadway worker from fouling the adjacent controlled track on the other side of such machine. Additionally, FRA wants to make explicit that it disagrees with AAR’s characterization of a machine operator re-supplying a machine with materials, a mechanic repairing a machine, or a machine being fueled as not constituting work subject to the RWP rules (or “roadway work,” as used in AAR’s comments). The first activity is “roadway work” because the gathering or distribution of materials necessary to the performance of track maintenance duties is part of those duties, and the last activities are maintenance of roadway maintenance machinery. See § 214.7 (definition of “roadway worker”). FRA also disagrees with AAR’s characterization that adjacent-track on-track safety is not required when activities are performed between the rails of the occupied track, since employees undertaking such activities are not in danger from trains passing on adjacent track. Both the NPRM and final rule versions of paragraph (b) clearly require (or would have required) work to cease between the rails of the occupied track during adjacent-controlled-track movements authorized or permitted at speeds over 25 mph. FRA also notes that a train passing by at a speed over 25 mph presents a higher risk of injury to roadway workers from abnormal consist conditions or track construction/maintenance materials that may become airborne while the train passes the roadway workers.

b. Requested Revision of Proposed § 214.336(c) To Permit Work by the Machine Operator Within the Areas 25 Feet in Front of and 25 Feet Behind Equipment During Low-Speed Movements on an Adjacent Controlled Track

In its draft comments on the withdrawn NPRM, AAR had recommended that FRA permit the machine operator to perform work on the ground within 25 feet of the front or rear of the roadway maintenance machine that he or she was operating, during adjacent-controlled-track movements of 25 mph or less. AAR noted it would be impractical not to allow the operator to step off of his machine and walk directly behind it. Accordingly, AAR suggested that the proposed paragraph § 214.336(a)(2)(i) in the withdrawn NPRM (and later proposed as § 214.336(c) in the NPRM) be amended by adding after the word “movement” the phrase “unless the employee is the assigned operator of the machine.” FRA noted its belief (without agreeing to the concept as a whole, contrary to what was suggested by AAR’s comments on the NPRM) that the phrase “unless the employee is the assigned operator of the machine” would have better addressed AAR’s concerns, since presumably the employee would place the machine in the idle position and set the brakes before alighting and, therefore, would not be operating or moving the machine from the ground. FRA sought comment as to whether this amendment should be added.

AAR commented that it supported the revised language suggested by FRA, with one slight modification in order to address a situation where two workers, such as an operator and a helper, are assigned to a machine. Thus, AAR suggested that FRA add the following language to paragraph (c), “unless the employees are the assigned operators of the machines.”

BMVED and BRS submitted comments indicating that they are opposed to amending proposed § 214.336(c) by adding after the word “movement” the phrase “unless the employee is the assigned operator of the machine.” The risk from adjacent track movements associated with working on the occupied track within 25 feet to the front or rear of a roadway maintenance machine is not reduced simply because the roadway worker happens to be the “assigned operator.” The noise of the machine, the reduced visibility, and the distraction of performing work within 25 feet to the front or rear of the machine is the same for all roadway workers, regardless of whether or not the person is the assigned operator.

While FRA believes that the intent of this provision is mainly to prevent roadway workers from being struck by the machines or equipment, and generally agrees that if the machine is not being operated the main danger would be prevented; FRA does not believe that the danger would be adequately addressed if there is more than one assigned operator to a machine, as AAR stated is often the case. This presents a dangerous situation where one of the operators of a machine would be permitted to begin to operate a machine without first having to provide notice to the other operator(s), who would be permitted to work within the 25-foot areas in front of and behind the machine, and could potentially be positioned in a blind spot. Additionally, even if only one operator were permitted, if a roadway worker observed the operator in the 25-foot area and thought that the machine was off or safe to approach the machine within 25 feet and he positioned himself in a blind
APTA further noted that passenger trains, noting that passenger trains have historically been permitted to operate at higher maximum authorized speeds than freight trains on the same track. APTA further noted that passenger trains can stop more quickly and easily than freight trains, and the roadway worker in charge is in the best position to gauge whether a slower speed is necessary for safe operations, based on local conditions and the type of work being performed.

FRA has decided not to adopt APTA’s proposed change. FRA responds that because passenger trains are shorter and do not present the same dangers of shifted loads/shifted ladings as freight trains, the roadway worker in charge is likely to send the passenger train through the working limits at the maximum authorized speed. Thus, the amount of time that the work would not be permitted to continue on the side of the occupied track closest to the movement and between the rails of the occupied track would be minimal.

6. Predetermined Place of Safety

Both AAR and APTA requested in their comments that FRA provide clarification on what it considers a “place of safety” for purposes of the language in proposed § 214.336(b)(1) to require that each roadway worker cease work and “occupy a predetermined place of safety.” APTA requested that FRA affirmatively state that the occupied track may be designated as a place of safety for purposes of that proposed provision, and AAR noted its belief that “a place of safety” includes between the rails of the occupied track, and that it may be safer for the roadway workers to stay between the rails of the occupied track (particularly if the roadway workers are occupying a track located between two or more tracks) rather than to cross the other track(s) to reach an alternative location.

FRA agrees with AAR and APTA that under some circumstances, it may be safer for the roadway worker to stay between the rails of the occupied track, and that this is permitted to be an appropriate predetermined place of safety, as determined by the roadway worker in charge. In response to the comments made by APTA and AAR, FRA has provided clarification as to what is meant by “a predetermined place of safety” in Table 1 of this section. Specifically, FRA has added a note in Table 1, which provides that a “predetermined place of safety” (or “PPOS”), as used in the table, means a specific location that an affected roadway worker must occupy upon receiving a watchman/lookout’s warning of approaching movement(s) (“warning”) or a roadway worker in charge’s notification of pending movement(s) on an adjacent track (“notification”), as designated during the on-track safety job briefing required by § 214.315. The PPOS may not be on a track, unless the track has working limits on it and no movements permitted within such working limits by the RWIC. Thus, under these circumstances, the space between the rails of the occupied track may be designated as a place to remain in position or to otherwise occupy upon receiving a warning or notification. Additionally, in response to concerns raised by BMWED and BRS in their joint comments concerning the potential dangers of having contingent places of safety, note 1 further explains that the roadway worker in charge must determine any change to a PPOS, and communicate such change to all affected roadway workers through an updated on-track safety job briefing.

7. The Effect of the Proposed Rule on Dispatchers

FRA received comments from ATDA, submitted by Mr. Greg J. M. Godfrey (ATDA Local Chairman, New York Dispatchers), which are summarized in this paragraph. ATDA’s comments favored increased railroad workplace safety, but noted that adoption of the proposed rule would result in additional requests for protection from the train dispatchers. The comments asserted that as a result of technological innovation to reduce workforce and the understaffing of other crafts (e.g., a roadway worker may be forced to request foul time to complete work that could have been conducted with a watchman/lookout instead), the dispatchers are already under an enormous amount of pressure. ATDA stated its belief that this significant pressure is the reason for the rise in unfortunate incidents that could have been prevented through a sufficient workforce and that the final rule will need additional support and additional desks if the final rule provides increased measures of protections for roadway workers. Finally, ATDA indicated that this situation entails a real cost that needs to be factored in and that train dispatching districts will need to be studied to ensure adequate focus can be maintained by the train dispatchers.

FRA notes in response that it believes this final rule will not result in a significant increase in the number of calls to a dispatcher, as the economic analysis assumes that the majority of the time, the roadway workers will be...
utilizing train approach warning provided by watchmen/lookouts, rather than working limits established by a dispatcher. And in those circumstances where working limits need to be established, FRA anticipates that they will be established at the same time as the working limits for the occupied track are established; thus, FRA does not anticipate more than a de minimis increase in the workload of a dispatcher, especially since this rule will also eliminate many requests for working limits on adjacent tracks that are greater than 19 feet away from the occupied track (as measured from centerline to centerline).

VII. Section-by-Section Analysis

Amendments to 49 CFR Part 214, Railroad Workplace Safety

Subpart A—General

Section 214.4 Preemptive Effect

FRA has removed this section from 49 CFR part 214. This section was prescribed in 1996 and has become outdated and, therefore, misleading because it does not reflect post-1996 amendments to 49 U.S.C. 20106. See 61 FR 65975; Sec. 1710(c). Public Law 107–296, 116 Stat. 2319; Sec. 1528, Public Law 110–53, 121 Stat. 453. Although FRA considered updating this regulatory section, FRA now believes that the section is unnecessary because 49 U.S.C. 20106 sufficiently addresses the preemptive effect of part 214. In other words, providing a separate Federal regulatory provision concerning the proposed regulation’s preemptive effect is duplicative of 49 U.S.C. 20106 and, therefore, unnecessary.

There has been no opportunity for public comment on this particular amendment in the final rule. FRA has determined, pursuant to section 4 of the Administrative Procedure Act (5 U.S.C. 553), that prior notice and an opportunity for comment on the removal of § 214.4 are not necessary. The amendment is administrative in nature and merely eliminates an outdated and incomplete restatement of the preemptive effect of part 214. As such, FRA finds that notice and public comment procedures are “impracticable, unnecessary, or contrary to the public interest” under 5 U.S.C. 553(b)(3)(B).

Section 214.7 Definitions

The existing version of § 214.7 simply lists various terms used in part 214 and provides a definition of each term. Unlike the “definitions” sections of most FRA safety regulations, the usual kind of introductory text (e.g., “As used in this part” or “In this part”) is missing.

In this final rule, § 214.7 has been amended by adding introductory text, “Unless otherwise provided, as used in this part—” prior to the list of definitions. This change is necessary for two reasons: (1) to clarify that the definitions apply to part 214 and not necessarily to other parts of the Code of Federal Regulations; and (2) to ensure that the addition of similar definitions (“adjacent track” and “adjacent controlled track”) that are applicable only to § 214.336 do not conflict in any way with the same terms in this “general definitions” section. Note, however, that the definition of “adjacent tracks” still applies to any other sections in part 214 that reference the term, either in its plural or singular form, unless otherwise provided in the section in which the term is used.

Subpart C—Roadway Worker Protection

Section 214.315 Supervision and Communication

Given the importance of an on-track safety job briefing in roadway workers’ understanding of the nature of the work that they will be conducting and the conditions under which they will conduct it, the existing requirements in § 214.315 to hold a job briefing “when an employer assigns duties to a roadway worker that call for that employee to foul a track” have been expanded in revised § 214.315 of this final rule to cover the procedures for adjacent-controlled-track on-track safety in new § 214.336 if such procedures are required for that assignment or if adjacent-track on-track safety is deemed necessary by the roadway worker in charge (as provided in paragraph (d) of that section). With a few minor changes, the text concerning the additional components of an on-track safety job briefing that is adopted in this final rule is the same as the consensus language developed by the Working Group and recommended by the full RSAC. The consensus language relating to adjacent tracks was proposed as a new paragraph (a)(2) in existing § 214.315, to read as follows:

(2) Information about any tracks adjacent to the track to be occupied, on-track safety for such tracks, and identification of roadway maintenance machines that will foul any adjacent track. In such cases, the briefing shall include procedural instructions addressing the nature of the work to be performed and the characteristics of the work location to ensure compliance with this part.

On December 18, 2007, FRA emailed the Working Group members and requested an errata review of a document in which FRA had compiled all of the consensus items. In its errata review comments, AAR requested that FRA clarify that the provision was not intended to require a discussion about the on-track safety of an adjacent track unless on-track safety was required on that track by part 214. FRA agreed that this was not the intent of the proposed requirement, and had added the language “if required by this subpart or deemed necessary by the roadway worker in charge” to the consensus rule text, which was proposed as new paragraph (a)(3) in the NPRM. The language concerning the discretion of the roadway worker in charge was added to emphasize that the roadway worker in charge would still be permitted to establish on-track safety on an adjacent track, regardless of whether it was controlled or non-controlled, if that on-track safety was reasonably necessary given the nature of the work that was to be performed. This proposed section would still have required the on-track safety job briefing to include information concerning any “adjacent tracks” (as defined in § 214.7), so as to serve as a warning to each roadway worker of the potential danger in fouling such a track, even if no on-track safety is required for that particular track because it does not meet the definition of “adjacent controlled track” in proposed § 214.336(a)(3). While the second sentence of the consensus language began with the phrase “in such cases,” FRA deleted that language, and had moved the rest of the language into a new paragraph (a)(4) in the NPRM, since the on-track safety job briefing must always address the nature of the work to be performed and the characteristics of the work location to ensure compliance with this subpart, regardless of whether there is an adjacent track present.

In the NPRM, FRA had further clarified in a proposed revision to introductory paragraph (a) that this section would list only the minimum items that would have to be discussed in an on-track safety briefing. In proposed § 214.315(a), the words “at a minimum” were added, and the rest of existing paragraph (a) was moved to proposed paragraphs (a)(1) and (a)(2). FRA received no comments on the proposed amendments to this section, and FRA has adopted the amendments to this section as proposed for the reasons stated above.

Section 214.335 On-Track Safety Procedures for Roadway Work Groups, General

Currently, § 214.335(c) reads as follows:
(c) Roadway work groups engaged in large-scale maintenance or construction shall be provided with train approach warning in accordance with §214.327 for movements on adjacent tracks that are not included within working limits.

In this final rule, FRA has amended this section by deleting paragraph (c) and creating new requirements in a separate section to address on-track safety procedures for certain roadway work groups and adjacent tracks, §214.336, for the reasons discussed below. This final rule also amends the heading of §214.335 to reflect the general nature of the remaining requirements in that section.

Section 214.336 On-Track Safety Procedures for Certain Roadway Work Groups and Adjacent Tracks

Paragraph (a), Procedures: General

As discussed in Sections I and II.C, above, existing §214.335(c), which is in effect until this final rule becomes effective, requires adjacent-track on-track safety for a roadway work group only if such work group is engaged in “large-scale maintenance or construction.” Under this criterion and the limited guidance provided in the preamble to the 1996 final rule that prescribed the provision, many railroads had not been providing on-track safety on adjacent tracks for surfacing operations, small tie-renewal operations, or similar maintenance operations that, while smaller in scale, still include on-track, self-propelled equipment that may be similarly or equally distracting to the roadway workers on the ground. New §214.336 seeks to eliminate this interpretive issue by establishing new, more objective criteria for determining whether adjacent-track on-track safety is required for a roadway work group.

In developing language to address the increasing number of roadway worker fatalities on an adjacent track, the Working Group considered that most of the fatalities on an adjacent track occurred when a roadway work group with at least one of the roadway workers on the ground, was engaged in a common task with on-track, self-propelled equipment on an occupied track. In those circumstances, the potential for a roadway worker in the group to be distracted from the danger of an oncoming train was great due to the noise and dust generated by the operation of on-track, self-propelled equipment, the need to avoid entanglement in the operation of that equipment, and the need to monitor the quality of the work being performed. This set of factual circumstances became the basis for the new criteria for triggering the requirement to establish adjacent-track on-track safety in introductory paragraph (c)(1) of the consensus language, and in paragraph (a)(1) of new §214.336, which, as a general rule, requires that on-track safety be established for each adjacent controlled track when a roadway work group with at least one of the roadway workers on the ground is engaged in a common task with on-track, self-propelled equipment or coupled equipment (including single-unit, self-propelled equipment or units connected to non-powered on-track equipment by tow bars) on an occupied track. In particular, the on-track safety must be provided in accordance with §214.319 (Working limits, generally) (which includes §214.321 (Exclusive track occupancy), §214.323 (Foul time), and §214.325 (Train coordination)), or §214.329 (Train approach warning provided by watchmen/lookouts) and as more specifically described in this section.

This general rule is set forth in paragraph (a)(1), which also directs the reader to the exceptions described in paragraph (e). The more specific procedures for adjacent-controlled-track on-track safety are set forth in paragraphs (b) and (c), concerning movements on an adjacent controlled track at speeds over 25 mph, and at speeds of 25 mph or less, respectively. The language in RSAC-recommended paragraph (a) was also modified in light of the new definition of “adjacent controlled track,” mainly by removing the reference to the 19-foot track center distance and placing it in the definition in paragraph (a)(3).

Paragraph (a)(2) addresses the special circumstances arising in territories with at least three tracks, if an occupied track is between two adjacent tracks, at least one of which is an adjacent controlled track. This paragraph differs from that proposed in the NPRM in that it now addresses two special circumstances, instead of one. The first, which was proposed in the NPRM as paragraph (a)(2) and is now set forth in paragraph (a)(2)(i) of this final rule, provides that if an occupied track has two adjacent controlled tracks, and one of these adjacent controlled tracks has one or more train or other on-track equipment movements authorized or permitted at a speed of 25 mph or less, the other adjacent controlled track has one or more concurrent train or other on-track equipment movements authorized or permitted at a speed over 25 mph, the more restrictive procedures in paragraph (b) of this section apply. This special circumstance requires that all work (i.e., both on-ground work and equipment movement) on or between the rails of the occupied track and on both sides of the occupied track cease, since, as will be further discussed below, there is no side of the occupied track meeting the specified conditions for an exception to these procedures. See §214.336(e)(1).

The second special circumstance arising in territories with at least three tracks (if an occupied track is between two adjacent tracks, at least one of which is an adjacent controlled track), is set forth in new paragraph (a)(2)(ii). This paragraph provides that if an occupied track has an adjacent controlled track on one side (Side X), and a non-controlled track whose track center is spaced 19 feet or less from the track center of the occupied track on the other side (Side Y), the affected roadway workers must treat the non-controlled track on Side Y as an adjacent controlled track for purposes of this section. While this circumstance was not raised during the RSAC discussions or in either of the NPRMs, FRA was concerned that the additional confusion of working between two tracks that are spaced that closely to the occupied track (i.e., with track centers spaced 19 feet or less from the track center of the occupied track) and requiring that the on-track safety procedures apply to one of the closely-spaced tracks (the controlled track on Side X), but not the other (the non-controlled track on Side Y), could result in fatalities on the non-controlled adjacent track (on Side Y). This approach is consistent with FRA’s rationale for adopting the language in paragraph (e)(1)(ii) that imposes conditions on the exception for work performed on a side with one or more adjacent tracks so that work would be permitted on that side only if the danger posed by the closest track on that side had been essentially eliminated (i.e., either the closest adjacent track on that side has working limits on it with no movement permitted within such working limits by the roadway worker in charge (see paragraph (e)(1)(ii)), or that side has an inter-track barrier between the occupied track and the closest adjacent track on that side (i.e., an ‘‘inter-track barrier,’’ ‘‘minor correction,’’ and ‘‘occupied track’’). This paragraph also adds a definition of the term “adjacent track” to this section that in a sense is substantively the same as the existing term “adjacent tracks” that is defined in §214.7, but which has been made singular and reworded so as
to parallel the construction of the definition of the new term “adjacent controlled track” in this section and moreover is an application of the general definition of a track adjacent to the occupied track (not simply adjacent to another track).

For purposes of this section, “adjacent controlled track” means “a controlled track whose track center is spaced 19 feet or less from the track center of the occupied track.”10 In contrast, the definition of “adjacent tracks” (in § 214.7) includes any tracks, controlled or non-controlled (though this is implied, rather than explicitly stated), whose track centers are spaced less than 25 feet apart. The new definition of “adjacent track” in this section (“a controlled or non-controlled track whose track center is spaced less than 25 feet from the track center of the occupied track”) describes the track with respect to its relationship to the occupied track, and also explicitly states that the term could be applied to either a controlled or a non-controlled track. This helps ensure that the reader is aware of the distinctions between that term and the similar term “adjacent controlled track.” Additionally, as noted above in the discussion of the amendments to § 214.7, the definition of “adjacent tracks” still applies to any other sections in part 214 that reference the term, either in its plural or singular form, unless otherwise provided. To ensure that the terms do not conflict in any way, FRA has added qualifying language to the beginning of the general definition section (§ 214.7).

FRA has adopted this narrower definition of “adjacent controlled track” and used the term as part of the triggering language for the requirements of this section based on the roadway worker fatality data discussed above in “IV. Recent Roadway Worker Accidents (1997–2010),” which show that the adjacent tracks on which the roadway worker fatalities occurred were all controlled tracks and that the track centers of these controlled tracks were within 15 feet of the track centers of the occupied track. In light of these data, the Working Group agreed that 19 feet would be a reasonable and safe threshold at which to trigger the requirement to establish on-track safety on an adjacent track and that it would be reasonable to cover controlled tracks within that 19-foot zone but to exclude non-controlled tracks. FRA also agrees that it is wise to adopt a 19-foot threshold, rather than a 15-foot threshold, to have an additional safety factor built in to prevent fatalities as well as injuries that could occur as a result of a shifted load/lading or debris, stones, or track construction/ maintenance materials becoming airborne while trains pass roadway workers. FRA notes that the lack of fatalities on non-controlled adjacent tracks may be attributable to the reduced operating speeds on non-controlled tracks, where railroad operating rules generally require that movements must stop short of obstructions within half the range of vision. The Working Group discussed, and the full RSAC recommended for inclusion in § 214.335(c), that on-track safety be required for “adjacent controlled track within 19 feet of the centerline of the occupied track” for certain work activities. FRA agrees with this analysis, absent special circumstances (see discussion of § 214.33(d), above), and has reflected it in the proposed definition of “adjacent controlled track.” Note, however, that this section also uses the broader term “adjacent track” or “adjacent tracks” in paragraphs (a)(2), (a)(3) (see definition of “inter-track barrier”), (d), and (e)(1)(i) through (iii), as further discussed, below.

The third definition in § 214.336(a)(3) is of the term “inter-track barrier,” which means “a continuous barrier of a permanent or semi-permanent nature that spans the entire work area, that is at least four feet in height, and that is of sufficient strength to prevent a roadway worker from fouling the adjacent track.” As discussed in Section VI.D.4, regarding the comment requesting establishment of an exception for a “continuous barrier,” this term was added to clarify that only sturdy and continuous barriers that are at least four feet high are permissible for purposes of qualifying for this exception. See § 214.336(e)(1)(iii) of the final rule.

The fourth definition is of the term “minor correction,” which means “one or more repairs of a minor nature, including but not limited to, spiking, anchoring, hand tamping, and joint bolt replacement that is accomplished with hand tools or handheld pneumatic tools only.” The term does not include welding, machine spiking, machine tamping, or any similar type of repair. This term was added to provide guidance as to what type of work a roadway work group may perform under the exceptions for hi-rail vehicles and automated inspection cars being used for “inspection or minor correction purposes” (see paragraphs (e)(3)(i) and (ii)). The definition itself is based, in part, on the language in subpart B of part 214 describing “repairs or inspections of a minor nature” for purposes of an exception to the fall protection requirements for bridge workers. See § 214.103(d). FRA recognizes that the language in the bridge worker rule also contained the condition that the work be “completed by working exclusively between the outside rails of the occupied track.” See id. As FRA has decided not to impose that same limitation here, the language has been tailored to ensure that the hi-rail vehicles or automated inspection cars are not being used in such a manner so as to create similar levels of noise and dust generated by the operation of on-track, self-propelled equipment performing machine tamping or machine surfacing, for example.

The fifth definition to be used for purposes of § 214.336 is “occupied track.” FRA has defined the term “occupied track” to mean a track on which on-track, self-propelled equipment or coupled equipment is authorized or permitted to be located while engaged in a common task with a roadway work group with at least one of the roadway workers on the ground. FRA had originally proposed to replace the consensus language of “on-track, self-propelled or coupled equipment” with “on-track roadway maintenance machine or coupled equipment” so as to use a term that was already defined in part 214. While FRA recognized that the term “on-track roadway maintenance machine” excludes hi-rail vehicles, FRA did not anticipate any issues with the triggering language, as FRA had proposed that there be an exception for all hi-rail vehicles that were not coupled to one or more railroad cars or not operating on the same occupied track and within the working limits of a roadway work group as described in the NPRM-proposed paragraph (a) (e.g., a roadway work group that had triggered the applicability of this section due to being engaged in a common task with a hi-rail vehicle and at least one other piece of equipment that did in fact meet the definition of an on-track roadway maintenance machine). However, now that FRA has decided to limit the hi-rail vehicle exception in what is now paragraph (e)(3)(ii) to those hi-rail vehicles being used for inspection or minor correction purposes, the broader consensus language needs to be reinstated in order to capture those hi-rail vehicles that are being used for

10 The definition continues as follows: “Note, however, that under the special circumstances specified in paragraph (a)(2)(iii) of this section, a non-controlled track whose track center is spaced 19 feet or less from the track center of the occupied track must be treated as an adjacent controlled track for purposes of this section.”
purposes other than inspection or minor correction.

FRA has also added the words “authorized or permitted to be” in front of “located” to make clear that if a roadway work group and an on-track roadway maintenance machine, for example, were to be physically located on a track without authorization or permission (and would be occupying the track in the physical sense), FRA would not consider the track to be an “occupied track” for purposes of enforcing this section. Instead, FRA would enforce other sections of the rule that would prohibit an operator of such a machine from fouling a track without appropriate on-track safety on that track (see, e.g., §§ 214.313(c) and 214.335(a)), as the roadway workers in this scenario would be subject to a much greater danger than those that had established appropriate on-track safety for the track on which they were located but had failed to establish on-track safety on an adjacent controlled track.

Another change from the NPRM-proposed language was to add the phrase “with at least one of the roadway workers on the ground” following “a roadway work group” at the end of the sentence. This change was made in response to a concern raised by BMWED and BRS in their joint comments that it was unclear that one roadway worker on the ground would trigger the requirements of this section. Their comments noted that clarification was necessary because roadway worker fatalities have occurred while only one roadway worker was on the ground.

FRA notes that while the definition as proposed in the NPRM did not affect the triggering language in paragraph (a)(1), FRA decided to make the definition consistent with such language for additional clarity.

Paragraphs (b), Procedures for Adjacent-Controlled-Track Movements Over 25 mph. Paragraph (b) lists the procedures to follow for one or more adjacent-controlled-track movements authorized at over 25 mph (i.e., if a train or other on-track equipment is authorized by the dispatcher or by the applicable timetable or permitted by the roadway worker in charge to move on an adjacent controlled track at a speed greater than 25 mph). Paragraph (c) lists the procedures to follow when one or more adjacent-controlled-track movements are authorized or permitted at a speed of 25 mph or less.11 As noted above in the discussion of paragraph (a)(2)(i), if an occupied track has two adjacent controlled tracks, one of these adjacent controlled tracks has one or more movements authorized or permitted at 25 mph or less, and the other adjacent controlled track has one or more concurrent movements authorized or permitted at over 25 mph, the more restrictive procedures in paragraph (b) would apply. Note that the word “permitted” has been added to this section for consistency with its use in § 214.321(a)(2) and to ensure that there is no confusion caused by the use of the word “permitted,” which may be understood by some members of the regulated community to denote authorized or permitted service by a train dispatcher or by a timetable (e.g., maximum authorized speed).

The first clause of the introductory language in paragraph (b) has been slightly modified from what was proposed in the NPRM. The cross-reference to the exceptions in paragraph (e) has been revised to be more descriptive (“except for the work activities as specified in paragraph (e)”) instead of “except as provided in paragraph (e)”) and moved to paragraph (b)(1) to ensure that it is read in conjunction with the requirements listed in that paragraph.

The introductory language in paragraph (b) has also been modified by11: A roadway worker in charge, in his or her discretion, permits a train through the working limits on an adjacent controlled track at 30 mph, but the train is actually traveling at a speed of only 20 mph, or otherwise (not limited by a sign or some authority limits up to a designated point (i.e., between MP 10 and MP 15) short of the smaller working limits (i.e., between MP 15 and MP 20) given to the roadway workers, without first having to notify those roadway workers of the pending movement because they would not be “affected” by this movement.

In other cases, the limits of the track authority and the working limits for the roadway work group start off the same, but as the work is progressing along the track, the roadway worker in charge may decide that it is best to “roll up,”
or shorten, the working limits of the group (and may even formally relinquish a portion of the authority limits to the dispatcher). In such cases, the roadway worker in charge must inform each affected roadway worker in the roadway work group of the new working limits through an updated on-track safety job briefing. See §214.315(d). FRA believes that it is safe to apply the same principles that have been applied outside of the adjacent-controlled-track context (e.g., to single-main-track territory), regarding each "affected" roadway worker, to the adjacent-controlled-track context, especially since the train (or other on-track equipment movement) would be traveling on the adjacent controlled track rather than the occupied track, where an accidental incursion into the working limits of the roadway work group would likely be more dangerous.

Paragraph (b)(1), Ceasing Work and Occupying a Predetermined Place of Safety

Paragraph (b)(1) generally requires that, upon receiving a watchman/lookout warning or notification of one or more pending movements on an adjacent controlled track (as applicable), each roadway worker in the roadway work group shall, as described in Table 1 of this section, cease all on-ground work and equipment movement that is being performed on or between the rails of the occupied track or on one or both sides of the occupied track, and occupy a predetermined place of safety. FRA has added the language “as described in Table 1 of this section” to the rule text to ensure that the reader is aware that Table 1 indicates the areas where the work must cease and, in addition to providing clarifications of the rule text, expands upon the requirements.

When Work Must Cease

When the work must cease depends upon which method of on-track safety is being used. If on-track safety is established on the adjacent controlled track through train approach warning in accordance with §214.329 (either as the sole method of on-track safety or in addition to working limits), all work must cease upon receiving a watchman/lookout warning. See §214.336(b)(1)(i). On the other hand, if working limits are established on the adjacent controlled track and the roadway work group has not been assigned a watchman/lookout, all work must cease upon receiving a notification that the roadway worker in charge intends to permit one or more train movements or other on-track equipment movements within the working limits on the adjacent controlled track. See §214.336(b)(1)(i). This notification must occur before the roadway worker in charge releases the working limits (or a portion thereof that would affect one or more of the roadway workers in the roadway work group), in order to comply with existing §214.319(c). See also, Table 1 of §214.336, note 1. It should be noted that FRA has changed the word “through” to “within” so that there would be no doubt that the “cease work” procedures would also be triggered if, for example, a roadway worker in charge decided to permit a train “within” the limits, but not all the way “through” such limits. This same change has been made to paragraphs (e)(1)(ii) and (f) for consistency throughout this section and with existing §214.321(d), which states in part that movements of trains and roadway maintenance machines “within” working limits shall be made only under the direction of the roadway worker in charge.

Where Work Must Cease

Where the work must cease would depend upon various factors, including the speed of the movement on the adjacent-controlled track, the method(s) of on-track safety being used on one or both sides of the occupied track, and whether the work that is being performed meets one of the exceptions in paragraph (e). In order to help roadway workers and the regulated community at large better understand how these factors determine which procedures they are to follow, FRA has created a table (Table 1) that summarizes how the procedures apply to different factual scenarios. The accompanying diagrams (Figure 1), which were created to correspond to the same example numbers in Table 1, help the reader visualize the factual scenarios. While FRA refers to the tracks in Table 1 and in the diagrams in Figure 1 with specific track numbers, both Table 1 and the diagrams are intended to apply to similarly-situated tracks, regardless of the actual number or letter of the track.

As noted above, Table 1 is part of the rule text of §214.336 and provides examples of the application of the rest of the rule text, but Table 1 also expands upon the requirements set forth in the paragraphs of §214.336. One such expansion, which represents a change from the NPRM, is the way in which FRA is interpreting the word “side.” The NPRM proposed to require that (upon receiving a notification or a watchman/lookout warning, as applicable) work must cease “in the fouling space of the occupied track and the adjacent controlled track.” This language would have created a potential loophole, in which a roadway worker would technically not have been required to cease work in the small area (if any, depending on how closely spaced the track centers are) between the fouling space of the adjacent controlled track (e.g., Track 1 on Side A) and the fouling space of the occupied track (e.g., Track 2) on Side A.

While FRA does not believe that any member of the Working Group intended that work be permitted in any area between the fouling spaces on Side A during a movement to Side A, FRA believes that it would have been reasonable for some members to interpret this language as permitting work to continue beyond the fouling space of the occupied track on the opposite side of the occupied track (e.g., Side B), since work beyond the fouling space of the occupied track on that side (e.g., Side B) was not specifically addressed by the rule text, and since roadway workers that are fouling any adjacent track on that side would already be required to cease on-track safety for that track. However, this interpretation would have presented a potential conflict with the spirit of the proposed language in the NPRM that would have permitted work to occur on a side that “has an adjacent track or tracks on that side if working limits had been established in accordance with this subpart on the closest adjacent track on that side and there were no movements authorized through the working limits by the roadway worker in charge on that adjacent track.” 12

FRA has decided to resolve both the potential loophole and the potential conflict by describing a “side” with an adjacent controlled track (including an adjacent track that is being treated as an adjacent controlled track, per §214.336(a)(2)(ii)), broadly in Table 1 as...
“the side from the vertical plane of the near running rail of the occupied track extending outward through to the fouling space of the adjacent controlled track.” FRA does not expect this interpretation of a “side” to have a significant cost impact on a railroad because it is FRA’s understanding that the railroad would primarily be working on the occupied track (e.g., Track 2) and would not be likely to take Track 3 out of service (e.g., by establishing working limits, if Tracks 1 and 2 are already out of service) unless the work was of such a nature to require that, rather than establishing train approach warning. In such cases, the working limits would already need to be established on that track due to the nature of the work being performed on that track, rather than as a result of this rule. As Track 3 in this scenario would essentially become an extension of the occupied track (where work amongst components of a roadway work group on two tracks is coordinated in much the same way as work amongst components of a roadway work group on the same track), work would be permitted to continue in the fouling space of that track (and the rest of Side B), so long as there are no movements permitted within the working limits on that track (other than movements of the roadway work group that is occupying Tracks 2 and 3). FRA makes clear that it is concerned with “outside” movements, as all of the fatalities occurred on an adjacent track with equipment that was not being operated by a roadway worker that was a member of the same roadway work group as the employee that was fatally injured.

Table 1 also illustrates the interrelation of various sections of the rule. For example, note 2 (which is referenced in the center column of examples 1–4, and 6) reminds the reader that, per §214.336(a)(2)(i), work would no longer be permitted to continue on or between the rails of the occupied track during movement(s) on an adjacent controlled track at 25 mph or less if there is a simultaneous movement on the other adjacent controlled track at more than 25 mph.

Note 2 of Table 1 further provides that on-ground work is prohibited in the areas 25’ in front of and 25’ behind equipment (on the occupied track during a low-speed movement on an adjacent controlled track), and must not break the plane of a rail on the occupied track (Track 2) towards a side of the occupied track unless work is permitted on that side. Without this clarifying note, a roadway worker performing on-ground work exclusively between the rails of the occupied track would not technically have been permitted to break the plane of the rail closest to a side of the occupied track (e.g., Side B) on which work was permitted during a low-speed (25 mph or less) movement on an adjacent controlled track. Similarly, in note 3, FRA clarifies that breaking the plane of the rail while working on a side of the occupied track is permitted: 1) During the times that work is permitted on or between the rails of the occupied track in accordance with §214.336(c) (Procedures for adjacent-controlled-track movements 25 mph or less); or 2) if such work is performed alongside a roadway maintenance machine or coupled equipment in accordance with §214.336(e)(2).

Another clarifying point in the table worth noting is that, while the rule permits train approach warning to be used as a method for providing on-track safety for an adjacent controlled track, work that is being performed under train approach warning on both sides of an occupied track (assuming there is an adjacent controlled track on each side of the occupied track) must cease on both sides of the occupied track upon receiving a watchman/lookout warning for a train or other on-track equipment movement (at any speed) on the adjacent controlled track on either side. See Table 1, Ex. 4. This is the practical effect of not meeting the conditions for permitting work to continue on a side of the occupied track under the exception in paragraph (e)(1)(ii), which permits work on a side with one or more adjacent tracks if the closest adjacent track has work permitted on it and no movements permitted within such working limits. The cessation of work on both sides of the occupied track is necessary to ensure that a roadway worker will not mistake a watchman/lookout’s warning regarding a train on Track 1, for example, for a warning regarding a train on Track 3, and vice versa.

Additionally, FRA makes clear that upon receiving the warning for a train on Track 1 in the above scenario, it would not be safe for a roadway worker to occupy Track 3 as a predetermined place of safety, as a train could arrive on that track at any time during the movement on Track 1. Rather, the predetermined place of safety must be clear of all tracks that do not have working limits established on them (with no outside movements within such limits), and may be the space between the rails of the occupied track under such circumstances. See Table 1, note 1; see also Section VI.D.6 of this preamble (regarding the response to comments concerning a predetermined place of safety). Paragraph (b)(2), Resuming Work

Regarding when the work required to cease in paragraph (b)(1) is permitted to resume, paragraph (b)(2) provides that an affected roadway worker may resume on-ground work and equipment movement (on or between the rails of the occupied track or on one or both sides of the occupied track as described in Table 1 of this section) only after the trailing-end of all trains or other on-track equipment moving on the adjacent controlled track (for which a warning or notification has been received in accordance with paragraph (b)(1) of this section) has passed and remains ahead of that roadway worker. As discussed in Section VI.D.5 of this preamble, FRA received comments from AAR indicating that work performed exclusively between the rails of the occupied track on the side of the occupied track furthest from the movement should be permitted to resume when the leading end of the equipment has passed.

FRA has decided in this final rule that each affected roadway worker whose work is not subject to an exception shall not be permitted to resume such work until after the entire movement (the trailing-end of the movement) has passed by the location of the roadway worker, due to the concerns raised by BMWED and BRS on this issue. Those concerns include hazards presented to roadway workers by abnormal consist conditions (e.g., “shifted loads/shifted ladings, loose banding, dragging chains/binders, loose brake piping, loose/swinging boxcar doors, [and] fragmented brake shoes”) and by “dust, rust, debris, stone, and track construction/maintenance materials,” which may become airborne while trains pass roadway workers. For the reasons set forth in the NPRM and above, FRA has adopted the above language in this final rule, with modifications for consistency with other modified sections. For example, “a component of a roadway work group” was changed to “an affected roadway worker,” and the descriptions of the equipment and where the work needed to cease was revised to parallel the language for ceasing work in new paragraph (b)(1).

If the train or other on-track equipment stops before its trailing-end has passed all of the affected roadway workers in the roadway work group, the work to be performed (on or between the rails of the occupied track or on one or both sides of the occupied track as described in Table 1 of this section) ahead of the trailing-end of the train or other on-track equipment on the
adjacent controlled track may resume only under two circumstances. First, this work may resume if on-track safety through train approach warning (§ 214.329) has been established on the adjacent controlled track. See § 214.336(b)(2)(ii)(A). Second, this work may resume if the roadway worker in charge has communicated with a member of the train crew or on-track equipment operator and established that further movements of such train or other on-track equipment shall be made only as permitted by the roadway worker in charge. See § 214.336(b)(2)(ii)(B).

FRA received no comments on the proposed language in paragraph (b)(2)(ii) of the NPRM. For the reasons stated in the NPRM, FRA has adopted the proposed language with two minor modifications, namely, revising the description of where the work would need to cease to parallel the language for the requirement to cease work in new paragraph (b)(1), and changing “the train engineer or equipment operator” to “a member of the train crew or the on-track equipment operator” to be more consistent with § 214.325(b) (regarding train coordination).

Paragraph (c), Procedures for Adjacent-Controlled-Track Movements 25 mph or Less

The procedures for adjacent-controlled-track movements at a speed of 25 mph or less are the same as those procedures for adjacent-controlled-track movements at a speed greater than 25 mph, except that certain work would be permitted to continue, due to the low speed of the movements. In paragraph (a)(2), FRA makes clear that if an occupied track has two adjacent controlled tracks, and one of the tracks has one or more adjacent-controlled-track movements authorized at a speed of 25 mph or less, and the other has one or more concurrent adjacent-controlled-track movements authorized at a speed greater than 25 mph, the more restrictive procedures in paragraph (b) apply.

Paragraph (c) provides that “equipment movement on the rails of the occupied track and on-ground work performed exclusively between the rails (i.e., not breaking the plane of the rails) of the occupied track may continue” during low-speed movements on adjacent controlled tracks, “provided that any on-ground work is performed within the areas 25 feet in front of and 25 feet behind any on-track, self-propelled equipment or coupled equipment that is moving or permitted to move on the occupied track.” Thus, unless the work falls under one of the exceptions in paragraph (e), an affected roadway worker (after receiving a warning or notification of an adjacent-controlled-track movement at any speed) would be required to cease all on-ground work within the areas 25 feet in front of and 25 feet behind any on-track, self-propelled equipment or coupled equipment that is moving or permitted to move on the occupied track. The words “that is moving or permitted to move” were added to this condition to permit some (very limited) flexibility where preventive measures are in place to ensure that the equipment would not move and pose a danger or distraction to the on-ground roadway workers in its immediate vicinity. FRA makes clear, however, that stationary on-track, self-propelled equipment or coupled equipment located on the occupied track is considered to be “permitted to move” for purposes of this section unless it is expressly prohibited from moving by the roadway worker in charge (and discussed in a safety job briefing) or an operating rule of the railroad that prohibits all such equipment movement on the occupied track during a low-speed movement on an adjacent controlled track.

For the reasons set forth in the NPRM, FRA has decided to adopt the Working Group’s recommendation of a 25-foot buffer zone as a condition for permitting work to continue as described in paragraph (c). FRA has modified the language proposed in the NPRM for consistency with the rule text in this final rule, such as adding the concept of the “affected” roadway worker, and also to add clarity. For example, the NPRM language phrased the 25-foot buffer zone condition in part as, “provided that any on-ground work is performed more than

25 feet in front of or behind any roadway maintenance machine;” however, this language may have been interpreted by some as prohibiting work alongside equipment (to verify the quality of the work being performed by that equipment, for example) on a side of the occupied track meeting specified condition(s) (see § 214.336(e)(1)), which FRA intended to permit. See 74 FR 61647. FRA has also revised the applicability of the prohibition to the 25-foot areas in front of and behind any “on-track, self-propelled equipment or coupled equipment,” rather than “roadway maintenance machines,” because the need to maintain a safe distance between on-ground roadway workers and such equipment is the same as the need to maintain a safe distance between on-ground roadway workers and roadway maintenance machines on the occupied track.

Additionally, FRA does not believe that the Working Group intended to recommend requiring a distance between on-ground roadway workers and smaller roadway maintenance machines that are not rail-mounted (i.e., that are not designed to operate on the rails of a track) and self-propelled, such as pneumatic hand tampers, as it is FRA’s understanding that the machine-spacing requirements already in existence (per § 214.341(a)(5)) do not apply to these types of roadway maintenance machines.

Paragraph (c) has also been revised from that proposed in the NPRM to permit the continuation of on-ground work that is performed “exclusively between the rails (i.e., not breaking the plane of the rails) of the occupied track,” rather than “exclusively while positioned on or between the rails of the occupied track,” provided that the on-ground work is not performed within the 25-foot areas discussed above. This revision provides a clear, “bright line” approach to make it easier both for roadway workers and the regulated community at large to follow and for FRA to enforce. As a result, on-ground roadway workers must be mindful not to break the plane of the rail while working on or her person or tools towards a side of the occupied track on which work is prohibited during a low-speed movement on an adjacent controlled track. See Table 1, note 2. If, however, work is permitted on one side of the occupied track during the low-speed movement, then the roadway worker is permitted to break the plane of the rail on that side only. See id.

The NPRM had also proposed a second set of circumstances in paragraph (c) for permitting work to continue during a low-speed movement.
on an adjacent controlled track, which was where the work is performed to the “clear side” of the occupied track, provided that it is performed outside of the 25-foot areas described above. However, this set of circumstances was for the most part repetitive of what was proposed in the exceptions in paragraph (e) and was really provided as more of a cross-reference so that the reader would be able to understand the range of work that was permissible during a low-speed movement on an adjacent controlled track. Given that the proposed term “clear side” has not been adopted in this final rule and that FRA has created a table and diagrams that provide a more comprehensive overview of how the exceptions fit in with the general rules and procedures of this section (see, e.g., Table 1, note 3; Figure 1, Ex. 2), FRA has decided that replacing the term “clear side” with a cross-reference to the language in paragraph (e) is not necessary.

It should also be noted that paragraph (c) only directly addresses the types of work that a roadway worker in the roadway work group affected by the movement on the adjacent controlled track may continue performing. Paragraph (c) does not directly address when all other work (i.e., work that paragraph (c) does not cover) may resume. Thus, roadway workers who are assigned to perform work not covered by paragraph (c) must follow the procedures in paragraph (b)(2). For example, since on-ground work that would need to be performed between the rails and near a roadway maintenance machine (i.e., in the 25-foot areas in front of or behind the specified equipment that is on the occupied track) is not covered by paragraph (c), such work must cease upon receiving a warning or notification (as applicable) and is not permitted to resume until the conditions in paragraph (b)(2) have been fulfilled.

That is to say, such work (as well as all other work that an affected roadway worker must cease, as noted in paragraph (b)(1), that is not permitted to continue by paragraph (c) and not subject to one of the exceptions in paragraph (e)) is permitted to resume only after the trailing-end of all movements (for which a warning or notification (as applicable) has been received in accordance with paragraph (b)(1) of this section) has passed by (and remains ahead of) the affected roadway worker (including any equipment or tools that he or she is using). Paragraph (d), Discretion of Roadway Worker in Charge

This paragraph emphasizes that the on-track safety procedures of this section are minimum requirements, and that a roadway worker in charge is free to establish on-track safety on one or more adjacent tracks as he or she deems necessary consistent with both the purpose and requirements of this subpart. This paragraph was proposed in the NPRM as paragraph (f), but has been switched with what was proposed as paragraph (d) (“Procedures for a roadway maintenance machine or coupled equipment fouling an adjacent controlled track”) in order to accommodate a potential future deletion of that paragraph as discussed in the analysis of paragraph (f), below.

Paragraph (e) is based on the language recommended by the Working Group in consensus paragraphs (e)(1) and (3) for the reasons described in the preamble of the NPRM. No comments on paragraph (f) as proposed in the NPRM have been received, and proposed paragraph (f) has been adopted verbatim in this final rule as paragraph (d).

Paragraph (e), Exceptions to the Requirements in Paragraphs (a), (b), and (c) for Adjacent-Controlled-Track On-Track Safety

The Working Group also discussed, and the RSAC recommended, that there be three exceptions when adjacent-controlled-track on-track safety would not have to be established at all. See consensus paragraphs (e)(1) through (3). In this final rule, FRA has adopted all three exceptions proposed in the NPRM, with modifications for clarity, and has also adopted two additional exceptions on which FRA sought comment. See § 214.336(e); 74 FR 61641–42.

In this final rule, the introductory language and heading in paragraph (e) clarify that this paragraph is not meant to exempt roadway workers from having to establish on-track safety in accordance with paragraphs (d) (Discretion of roadway worker in charge) or (f) (Procedures for components of roadway maintenance machines fouling an adjacent controlled track). Rather, paragraph (e) is meant to exempt roadway workers from the requirements in paragraphs (a), (b), and (c) for adjacent-controlled-track on-track safety during the times that the roadway work group is exclusively performing one or more of the work activities listed in paragraphs (e)(1) through (3).

Paragraph (e)(1), On-Ground Work Performed on a Side of the Occupied Track Meeting Specified Conditions(s)

The first exception to the requirement for adjacent-controlled-track on-track safety is for on-ground work performed on a side of the occupied track meeting specified condition(s) that would ensure that those performing the work would essentially not be exposed to danger caused by a train movement on any adjacent track on that side. FRA believes that there are three types of sides meeting a condition (or sets of conditions) that make it safe for on-ground work to be performed on that side of an occupied track while there is no on-track safety (or the on-track safety, such as a Form B (a form of exclusive track occupancy) has been temporarily nullified to permit a train within or through the working limits) on the opposite side of the occupied track.

The first type of side of the occupied track is a side with no adjacent track. See § 214.336(e)(1)(i). This means that either that side has no track whatsoever, or else that the closest track on that side is at least 25 feet away from the occupied track (as measured from track center to track center). In the latter situation, there is sufficient distance to prevent inadvertent fouling of an adjacent track, as supported by the accident data as well as by current (through the effective date of this rule) § 214.335(c), which does not require on-track safety on tracks that are at least 25 feet away even if the work is considered “large-scale maintenance or construction.” If, on the other hand, a side of the occupied track has one or more adjacent tracks (i.e., one or more tracks within 25 feet), then work is permitted on that side by this final rule only if either (1) the closest adjacent track on that side has working limits on it and no movements permitted within such working limits by the roadway worker in charge, or (2) there is an inter-track barrier (meeting specified criteria) between the occupied track and the closest adjacent track on that side. See §§ 214.336(e)(1)(ii) and (iii) and 214.336(a)(3) (definition of “inter-track barrier”).

In this final rule, FRA has considered the additional comments raised by BMWED and BRS on this section, particularly on the use of the term “clear side,” and has removed the term to eliminate any confusion. However, FRA still believes that it is safe to work on the side of an occupied track with working limits on the closest adjacent track on that side and no movements permitted within such limits on that...
Examples the Working Group sought to change out a grinding stone (one of the controlled track on which a movement occupied track towards an adjacent permit a roadway worker to break the movement was occurring.

As the second exception to the requirements for adjacent-controlled-track on-track safety is for maintenance or repairs performed alongside roadway maintenance machines or coupled equipment (located on the occupied track), provided that such machine or equipment would effectively prevent the worker from fouling the adjacent controlled track on the other side of such equipment, and that such maintenance or repairs are performed while positioned on a side of the occupied track where there should essentially be no danger posed by any other adjacent track (i.e., a side of the occupied track as described in paragraph (e)(1)(i), (ii), or (iii) and Table 1 of this section). This new exception is really an outgrowth of the first exception which, as proposed in the NPRM, would have permitted this type of work to be performed during a train or other on-track equipment movement on the opposite side of the occupied track. However, the joint comments from BMWED and BRS expressed concern that work should not be permitted in the foul of the occupied track (even if mostly positioned on the side opposite from the movement) unless the machine acted as a physical barrier between the roadway worker and the adjacent controlled track on which the movement was occurring.

As this final rule adopts a bright line approach that would generally not permit a roadway worker to break the plane of a rail (into the gage of the occupied track towards an adjacent controlled track on which a movement is occurring, in order to change out a grinding stone (one of the examples the Working Group sought to address), the bright line of the rail must necessarily be crossed, FRA has decided to adopt this physical barrier concept for any work that would need to cross the plane of the rail into the gage of the occupied track. Thus, this final rule permits one or more roadway workers to perform maintenance or repairs alongside a roadway maintenance machine or coupled equipment, provided that (1) such machine or equipment would effectively prevent the worker from fouling the adjacent controlled track on the other side of such equipment, and (2) that such maintenance or repairs are performed while positioned on a side of the occupied track as described in paragraph (e)(1)(i), (ii), or (iii) and Table 1 of this section. FRA specifically refrained from using the word “barrier” to describe this first condition in the rule text, so that it would not be confused with the exception involving an “inter-track barrier.” The second condition ensures that the roadway worker will remain out of harm’s way because he or she will need to be positioned (standing, kneeling, sitting, squatting, or lying with both feet outside of the gage of the track) for the most part on a side meeting specified condition(s) (as described in paragraph (e)(1) and Table 1) while performing such maintenance or repairs. For example, paragraph (e)(2) permits a roadway worker to refuel a roadway maintenance machine, if the machine would effectively prevent the worker from fouling the adjacent controlled track on the other side of such equipment and he or she is able to do so while positioned (for the most part) on a side meeting the specified condition(s).

Paragraph (e)(3), Work Activities Involving Certain Equipment and Purposes

The third exception to the requirements for adjacent-controlled-track on-track safety is for work activities involving certain types of equipment used for certain purposes. Specifically, this exception applies one or more on-ground roadway workers engaged in a common task on an occupied track with on-track, self-propelled equipment or coupled equipment consisting exclusively of one or more of three types of equipment: hi-rail vehicles; automated inspection cars; and catenary maintenance tower cars. This language mimicking the triggering language in paragraph (a)(1) was moved to the introductory text in paragraph (e)(3), rather than having to repeat it multiple times in the paragraphs that follow paragraph (e)(3) (that is, paragraphs (e)(3)(i), (ii), and (iii)). The exception for the first type of equipment (hi-rail vehicles) was proposed in the NPRM as paragraph (e)(2) of this section, but has been modified in this final rule for clarity and in response to comments. See § 214.336(e)(3)(i) of this final rule. A hi-rail vehicle is defined by § 214.7 as “a roadway maintenance machine that is manufactured to meet Federal Motor Vehicle Safety Standards and is equipped with retractable flanged wheels so that the vehicle may travel over the highway or on railroad tracks.” As discussed in Section IV of this preamble, there has been only one adjacent-track fatality where a roadway work group had been engaged in a common task with a hi-rail vehicle as defined in § 214.7, and the roadway workers in that case were under the impression that adjacent-track on-track safety was in effect when, due to a miscommunication, it was not. Given the circumstances of the one fatality and because the duties normally performed by an employee operating a hi-rail vehicle tend to be less distracting to on-ground roadway workers and produce less dust and noise than a typical on-track roadway maintenance machine, FRA proposed in the NPRM that adjacent-track on-track safety not be required for roadway work groups engaged in a common task with a hi-rail vehicle. Additionally, FRA proposed that, in accordance with § 214.315(a)(3), where multiple hi-rail vehicles are engaged in a common task, the on-track safety briefing shall include discussion of the nature of the work to be performed to determine if adjacent-controlled-track on-track safety is necessary.

The final rule adopts this proposed exception, but limits it to those hi-rail vehicles being used only for inspection or minor correction purposes. This new limitation is imposed in response to comments from BMWED and BRS that this restriction is required by the consensus language, and that failing to impose this limitation would permit work to be performed by hi-rail vehicles that is equally as distracting (such as a thermite welding crew working out of the back of a large hi-rail vehicle work platform) as that performed by other types of on-track, self-propelled equipment or coupled equipment subject to the requirements of this section. FRA has added a definition of the term “minor correction purposes” to paragraph (a)(3) of this section for additional clarity. Additionally, paragraph (e)(3)(i) has been revised for clarity by adding the parenthetical “other than a catenary maintenance
In the November 25, 2009 NPRM, FRA noted that “it seems that the level of distraction is similar for a roadway worker on the ground who is field-verifying a measurement behind a geometry car and a roadway worker on the ground who is replacing a bolt behind a hi-rail.” 74 FR 61641.

BMWE and BRS commented that they believed that the distractions are dissimilar, in that the detector cars are larger (reducing visibility) and much louder than a hi-rail pickup, and could therefore affect a person’s ability to detect the approach of a train. Additionally, they note that there are other operators of roadway maintenance machines performing a common task with such detection equipment who will also be at risk. APTA expressed support for expanding the “hi-rail vehicle” exception to self-propelled detector (and “inspection-type”) cars, noting its belief that self-propelled detector cars are under the same circumstances as hi-rail vehicles, and thus, should be granted the same exemption.

No comments were received on this exception, and FRA has adopted the proposed exception with two modifications for clarity, along with other changes for consistency with the hi-rail vehicle exception (including moving similar language from the proposal for hi-rail vehicles and the proposal for catenary maintenance tower cars into introductory paragraph (e)(3)). First, the words “or vehicle” have been added to the end of “catenary maintenance tower car” to clarify that some of these maintenance machines are railroad cars and others are vehicles, but both are subject to the conditions of this exception. Second, FRA is requiring that all of the on-ground workers engaged in the common task (other than those performing work in accordance with another exception in paragraph (e) of this section), rather than “one or more roadway workers,” be positioned within the gage of the occupied track for the sole purpose of applying or removing grounds. This language is necessary because otherwise, one could interpret that as long as one of the roadway workers was positioned in the gage of the occupied track, the rest were permitted to be outside of the gage. Note that these roadway workers are permitted to break the vertical plane of the rail of the occupied track in order to apply or remove a ground (as it is not always possible to do so without

The third type of equipment (catenary maintenance tower cars or vehicles) was proposed in the NPRM as paragraph (e)(3) of this section, and has been modified in this final rule for clarity and consistency. See § 214.336(e)(3)(iii) of the final rule. FRA had proposed in the NPRM that an exception be adopted for a catenary maintenance tower car with one or more roadway workers positioned on the ground within the gage of the occupied track for the sole purpose of applying or removing grounds. As discussed in Section IV of this preamble and in the NPRM, there have been no adjacent-track fatalities where a roadway work group had been engaged in a common task with a catenary maintenance tower car on the occupied track, and the duties normally performed by an employee operating a catenary maintenance tower car tend to be less distracting to on-ground roadway workers and produce less dust and noise than a typical on-track roadway maintenance machine.

No comments were received on this exception, and FRA has adopted the proposed exception with two modifications for clarity, along with other changes for consistency with the hi-rail vehicle exception (including moving similar language from the proposal for hi-rail vehicles and the proposal for catenary maintenance tower cars into introductory paragraph (e)(3)). First, the words “or vehicle” have been added to the end of “catenary maintenance tower car” to clarify that some of these maintenance machines are railroad cars and others are vehicles, but both are subject to the conditions of this exception. Second, FRA is requiring that all of the on-ground workers engaged in the common task (other than those performing work in accordance with another exception in paragraph (e) of this section), rather than “one or more roadway workers,” be positioned within the gage of the occupied track for the sole purpose of applying or removing grounds. This language is necessary because otherwise, one could interpret that as long as one of the roadway workers was positioned in the gage of the occupied track, the rest were permitted to be outside of the gage. Note that these roadway workers are permitted to break the vertical plane of the rail of the occupied track in order to apply or remove a ground (as it is not always possible to do so without

The second type of equipment (“automated inspection cars”) is a new exception on which FRA had sought comment in the NPRM. See § 214.336(e)(3)(ii); 74 FR 61641, 61648.

As discussed in Section V.ID.3, above, AAR had requested in its comments on the first (July 17, 2008) NPRM that the exception for hi-rail vehicles be expanded to include rail-bound geometry and detection equipment, since the level of distraction posed by this equipment is similar to that of hi-rail vehicles. AAR suggested that FRA expand the hi-rail vehicle exception by adding “or self-propelled track geometry or detector car” after “a hi-rail vehicle.” In seeking comments on AAR’s request in the November 25, 2009 NPRM, FRA
breaking the plane of the rail) as long as they would still be positioned for the most part within the gage of the occupied track (i.e., standing, kneeling, sitting, or squatting with both feet between the rails of the occupied track).

Paragraph (f), Procedures for Components of Roadway Maintenance Machines Fouling an Adjacent Controlled Track

Regarding the prohibition in consensus paragraph (d) against “equipment” fouling an adjacent controlled track unless protected by working limits, FRA had changed the term to “roadway maintenance machines” in the language proposed in the NPRM to clarify that this prohibition is meant to be broad and includes hi-rail vehicles that would otherwise come under the exception in paragraph (e)(2)(iii). Further, FRA clarified in the NPRM that the prohibition is not meant to be so broad as to forbid a roadway worker from using readily portable tools or equipment similar to a jackhammer, such as a pneumatic tamping gun or a spike driver, on an adjacent controlled track while afforded on-track safety through train approach warning. FRA urged that employers and employees use common sense in determining which tools or equipment they would permit to be used or use under train approach warning. If there is any doubt as to whether the tools or equipment could be readily removed, the employee must not foul the track with those tools or equipment under train approach warning provided by watchmen/lookouts (§ 214.329). Because the issue of fouling a track with heavier tools or equipment is not unique to the adjacent-controlled-track context, FRA has decided to address the issue in the larger RWP rulemaking in the section concerning the appropriate use of train approach warning (§ 214.329). In the event that FRA is able to address the issue broadly in that section, FRA has moved the language proposed in paragraph (d) to paragraph (f), and vice versa, so that this paragraph would be able to be deleted without leaving a gap in the rule text paragraphs.

Additionally, in order to avoid a potential conflict with an existing section in part 214, and to make the final rule consistent with that language, FRA has added the introductory phrase “[e]xcept as provided for in § 214.341(c),” and the modifying language “a component of” ahead of the remainder of the requirement in this final rule that “a roadway maintenance machine fouling an adjacent controlled track unless working limits have been established on the adjacent controlled track and there are no movements permitted within the working limits by the roadway worker in charge that would affect any of the roadway workers engaged in a common task with such machine.” This language has also been modified from that proposed in the NPRM by (1) making “roadway maintenance machines” singular to ensure that the prohibition is applied to each machine; (2) substituting “within the working limits” for “through the working limits” to ensure that a movement that is permitted within the working limits, but not all the way “through” would still trigger the prohibition against fouling in this paragraph; and (3) adding “that would affect any of the roadway workers engaged in a common task with such machine” at the end of the sentence so that a movement permitted within the limits of the authority, but short of the group’s working limits (that would therefore not affect the roadway workers) would not trigger this prohibition.

VIII. Regulatory Impact and Notices

A. Executive Orders 12866 and 13563 and DOT Regulatory Policies and Procedures

This final rule has been evaluated in accordance with existing policies and procedures in Executive Orders 12866 and 13563 and DOT policies and procedures, and is determined to be significant under both Executive Order 12866 and DOT policies and procedures. See 44 FR 11034, Feb. 26, 1979. FRA has prepared and placed in the docket a Regulatory Impact Analysis (RIA) addressing the economic impact of this final rule. Document inspection and copying facilities are available at the Federal Docket Management Facility, U.S. Department of Transportation, West Building, Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590. Docket material is also available for inspection on the Internet at http://www.regulations.gov. Photocopies may also be obtained by submitting a written request to the FRA Docket Clerk at Office of Chief Counsel, Mail Stop 10, Federal Railroad Administration, 1200 New Jersey Avenue SE., Washington, DC 20590; please refer to Docket No. FRA–2008–0059, Notice No. 4.

Certain requirements contained in this rule reflect current industry practice, restate existing regulations, or both. As a result, in calculating the costs of this final rule, FRA has included both those regulations that would be performed voluntarily in the absence of a regulation, nor the costs of those actions that are required by an existing regulation. Similarly, in estimating the benefits of this final rule, FRA has included neither the benefits that result from those actions that would be performed voluntarily in the absence of a regulation, nor the benefits that result from those actions that are required by an existing regulation.

This analysis includes quantitative measurements and qualitative discussions of implementation costs for this final rule. The costs will primarily be imposed by a small increase in job briefing time and additional resources spent to provide on-track safety for the safe conduct of other than large-scale maintenance and construction of track located adjacent to (and within a certain distance of) one or more controlled tracks on which train movements may be occurring. Training costs will also accrue. The benefits will primarily accrue from a reduction in roadway worker casualties (fatalities and injuries). Business benefits stemming from avoided train delays and property damages will also accrue, as well as benefits from reduced safety stand downs.

At the NPRM stage, FRA found that the accident-reduction benefits expected to accrue over the first 20 years of the rule would exceed and justify the costs imposed. Cost estimates were based on an uncertain level of existing compliance with proposed requirements resulting from a strong safety culture. Although FRA requested comments on the actual level of such compliance, FRA received no comments. However, FRA reviewed its methodology and found that some improvements could be made, making the analysis more robust.

First, FRA increased the data period on which it based its estimate of fatalities, from a four-year period to a ten-year period, 1999–2008. This reduced the expected number of fatalities avoidable (had new § 214.336 been in effect) from 1.0 per year to 0.6 per year. It should be noted that FRA also added a benefit in this final rule for the revised on-track safety job briefing requirements in § 214.315, as the revised requirements will affect roadway workers broadly, and not just those required to establish adjacent-track on-track safety. Then, FRA estimated the number of injuries avoidable directly from casualty data, instead of from a loose ratio of injuries to fatalities. This reduced the number of injuries avoidable per year from approximately 11 to 9.36. FRA then applied recently updated values for monetizing benefits from casualties that would be occurring. This entailed increasing the value of a statistical life (VSL) from $6.0...
millions to $6.2 million, increasing the ratio of estimated costs per Abbreviated Injury Scale Level 3 injuries from 0.0595 times VSL to 0.105 times VSL, and using a range of VSL from 55 percent to 145 percent of the basic VSL value, $6.2 million, for sensitivity analysis.

For the 20-year period analyzed, the estimated quantified cost that will be imposed on industry totals $285.7 million, with a present value (PV) (7 percent) of $151.4 million, and a PV (3 percent) of $212.6 million. For the same 20-year period, the estimated quantified benefits total $286.2 million, with a PV (7 percent) of approximately $151.6 million and a PV (3 percent) of $212.9 million. Based on the annual fatality rate leading up to this rulemaking, this analysis estimates that there will be 10.3 fewer roadway worker fatalities over the next 20 years. In addition, it estimates that this final rule will reduce roadway worker injuries by 182 over the next 20 years. This analysis has been conducted using an implicit assumption that railroads continue existing maintenance and scheduling practices. In the past, when FRA has promulgated a new regulation, railroads have adapted their operations over time to reduce the adverse impact of the regulation. FRA is not in a position to predict how railroads may adapt their operations, but clearly, the railroads have an incentive to reduce the adverse impact of such events as slowing a train as it passes a work site. Hence, FRA believes that the railroads also have the ability to reduce such impacts. Therefore, this analysis has been conservative in using current operating and maintenance practices when calculating the burdens from this final rule.

The following table presents the estimated quantified costs broken down by section of the RIA and by section of the rule:

<table>
<thead>
<tr>
<th>Estimated cost of final rule</th>
<th>PV rate, 3%*</th>
<th>PV rate, 7%*</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.2 Job Briefings—§ 214.315</td>
<td>$1.94</td>
<td>$1.38</td>
</tr>
<tr>
<td>9.4 On-Track Safety—§ 214.336</td>
<td>207.60</td>
<td>147.83</td>
</tr>
<tr>
<td>9.4 Other (Signalmen, Lone Workers)—§§ 214.315/336</td>
<td>2.76</td>
<td>1.97</td>
</tr>
<tr>
<td>9.4 Training—§ 214.336</td>
<td>0.25</td>
<td>0.18</td>
</tr>
<tr>
<td>Total</td>
<td>212.55</td>
<td>151.36</td>
</tr>
</tbody>
</table>

* Dollars are in millions and are discounted over a 20-year period.

FRA believes that introduction of wireless technologies, such as Positive Train Control, may offer opportunities to reduce costs in the years to come. For instance, such wireless technologies may reduce the necessity to post watchmen/lookouts because automatic notification of crews may be possible. FRA is aware of at least two railroads that currently use or have successfully tested an advanced automatic warning system for roadway workers.

The table below presents the estimated benefits associated with this final rule by section of the RIA and by benefit category:

<table>
<thead>
<tr>
<th>Estimated benefits of final rule</th>
<th>PV rate, 3%*</th>
<th>PV rate, 7%*</th>
</tr>
</thead>
<tbody>
<tr>
<td>10.1 Casualty Mitigation (§ 214.336)—Fatality (Struck by Train)</td>
<td>$43.72</td>
<td>$31.13</td>
</tr>
<tr>
<td>10.2 Casualty Mitigation (§ 214.336)—Injury (Struck by Train)</td>
<td>71.62</td>
<td>51.00</td>
</tr>
<tr>
<td>10.3 Casualty Mitigation (§ 214.336)—Injury (Struck by Object Other Than Train)</td>
<td>15.30</td>
<td>10.90</td>
</tr>
<tr>
<td>10.4 Adjacent Track Revision</td>
<td>9.79</td>
<td>6.97</td>
</tr>
<tr>
<td>10.5 Damage Reduction</td>
<td>0.89</td>
<td>0.64</td>
</tr>
<tr>
<td>10.6 Reporting/Recordkeeping—Cost Savings</td>
<td>0.02</td>
<td>0.01</td>
</tr>
<tr>
<td>10.7 Business Industry Benefit</td>
<td>46.71</td>
<td>33.26</td>
</tr>
<tr>
<td>10.8 Reduction in Safety Stand Downs</td>
<td>19.98</td>
<td>14.23</td>
</tr>
<tr>
<td>10.9 Job Briefing Fatality Prevention (§214.315)</td>
<td>3.69</td>
<td>2.63</td>
</tr>
<tr>
<td>10.9 Job Briefing Injury Prevention (§214.315)</td>
<td>1.16</td>
<td>0.83</td>
</tr>
<tr>
<td>Total</td>
<td>212.88</td>
<td>151.59</td>
</tr>
</tbody>
</table>

* Dollars are in millions and are discounted over a 20-year period.

In accordance with guidance from DOT, the RIA casualty prevention benefits are based on the value of a statistical life being $6.2 million. Office of Management and Budget (OMB) Circular A–4 states that the majority of studies on the value of a statistical life use values that range from approximately $1 million to $10 million. Use of a higher or lower value of a statistical life could significantly affect potential safety benefits and, ultimately, the relative ratio of costs to benefits for this rulemaking. In recognition of this potential impact and the imprecision of assumptions regarding the value of a statistical life, FRA also analyzed the sensitivity of its findings by evaluating safety benefits using the values of $3.41 million and $8.99 million (i.e., the DOT value of a statistical life [$6.2 million] plus or minus 45 percent).

Applying $6.2 million for the value of a statistical life produces a total benefit of $286.2 million, with a discounted value of $151.6 million (PV, 7 percent) or $212.9 million (PV, 3 percent). If $3.41 million is used for the value of a statistical life, then the total benefit would be $204.2 million with a discounted value of $108.2 million (PV, 7 percent) or $151.9 million (PV, 3 percent). If $8.99 million is used for the value of a statistical life, then the total benefit would be $368.1 million with a discounted value of $195.0 million (PV, 7 percent) or $273.8 million (PV, 3 percent). The following table represents the range of benefits according to discount rate:

<table>
<thead>
<tr>
<th>Estimated costs or benefits</th>
<th>PV rate, 3%*</th>
<th>PV rate, 7%*</th>
</tr>
</thead>
<tbody>
<tr>
<td>9.2 Job Briefings—§ 214.315</td>
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<td>Total</td>
<td>212.55</td>
<td>151.36</td>
</tr>
</tbody>
</table>

* Dollars are in millions and are discounted over a 20-year period.
FRA finds that the estimated quantified benefits will exceed the estimated quantified costs. Quantitative methodologies such as this benefit-cost analysis are a useful way of organizing and comparing the favorable and unfavorable effects of regulations like this one. A benefit-cost analysis does not provide a policy answer, but rather defines and displays a useful framework for debate and review.\textsuperscript{15}

B. Regulatory Flexibility Act and Executive Order 13272

The Regulatory Flexibility Act (5 U.S.C. 601 et seq.) and Executive Order 13272 (67 FR 53461, Aug. 16, 2002) require agency review of proposed and final rules to assess their impact on small entities. FRA has prepared and placed in the docket a Certification Statement indicating that this final rule is not expected to have a significant economic impact on a substantial number of small entities. Document inspection and copying facilities are available at the Docket Management Facility, U.S. Department of Transportation, West Building, Ground Floor, Room W12–140, 1200 New Jersey Avenue SE., Washington, DC 20590. Docket material is also available for inspection on the Internet at http://www.regulations.gov. Photocopies may also be obtained by submitting a written request to the FRA Docket Clerk at Office of Chief Counsel, Mail Stop 10, Federal Railroad Administration, 1200 New Jersey Avenue SE., Washington, DC 20590; please refer to Docket No. FRA–2008–0059, Notice No. 4.

In order to determine the significance of the economic impact for the final rule’s Regulatory Flexibility Act requirements, FRA invited comments from all interested parties concerning data and information regarding the potential economic impact caused by the proposed rule, during the comment period. No comments were received pertaining to the potential impact on small entities.

“Small entity” is defined in 5 U.S.C. 601 as including a small business concern that is independently owned and operated, and is not dominant in its field of operation. The U.S. Small Business Administration (SBA) has authority to regulate issues related to small businesses, and stipulates in its size standards that a “small entity” in the railroad industry is a for profit “line-haul railroad” that has fewer than 1,500 employees, a “short line railroad” with fewer than 500 employees, or a “commuter rail system” with annual receipts of less than seven million dollars. See “Size Eligibility Provisions and Standards,” 13 CFR part 121, subpart A. Additionally, 5 U.S.C. 601(5) defines as “small entities” governments of cities, counties, towns, townships, villages, school districts, or special districts with populations less than 50,000. Federal agencies may use a different standard for small entities, in consultation with SBA and in conjunction with public comment. SBA’s “size standards” may be altered by Federal agencies upon consultation with SBA and in conjunction with public comment. Pursuant to that authority to alter the “size standards,” FRA has published a final statement of agency policy that formally establishes “small entities” or “small businesses” as being railroads, contractors, and hazardous materials shippers that meet the revenue requirements of a Class III railroad as set forth in 49 CFR 1201.1–1, which is $20 million or less in inflation-adjusted annual revenues, and commuter railroads or small governmental jurisdictions that serve populations of 50,000 or less. See 68 FR 24981, May 9, 2003, codified at appendix C to 49 CFR part 209. The $20-million limit is based on the Surface Transportation Board’s revenue threshold for a Class III railroad carrier. Railroad revenue is adjusted for inflation by applying a revenue deflator formula in accordance with 49 CFR 1201.1–1. FRA is using this definition of “small entity” for regulatory flexibility purposes in this rulemaking.

There are approximately 668 small railroads.\textsuperscript{16} Potentially all small railroads could be impacted by this proposed regulation. However, because of certain characteristics that these railroads typically have, there should not be any impact on the majority of them. Most small railroads have only single-track operations. Some small railroads, such as the tourist and historic railroads, operate across the lines of other railroads that would bear the burden or impact of the final rule’s requirements. Finally, other small railroads, if they do have more than a single track, typically have operations that are light enough such that the railroads have generally always performed the pertinent trackside work with the track and right-of-way taken out of service, or conducted the work during hours that the track is not used.

In addition, FRA is not aware of any commuter railroads that qualify as small entities. This is likely because commuter railroad operations in the United States are part of larger governmental entities whose jurisdictions exceed 50,000 in population. See 49 CFR part 209, appendix C.

FRA is uncertain as to the number of contractors that will be affected by this final rule. FRA is aware that some railroads hire contractors to conduct some of the functions of roadway workers on their railroads. However, most of the costs associated with the burdens from this final rule will ultimately get passed on to the pertinent railroad. Most likely, the contracts will be written to reflect that, and the contractor will bear no additional burden for the final requirements. In addition, at the proposed rule stage, FRA requested information related to contractors and the burdens that might impact them as a result of the proposed rule and received none. Hence, FRA is confident that the final rule’s requirements, which have not changed significantly from those proposed in the NPRM, will not have an impact on any contractors that will perform track work on a small railroad.

No other small businesses (non-railroads) are expected to be impacted by this final rule.

The impacts from this regulation are primarily a result of the requirements for roadway work groups to be provided on-track safety when working on a track within close proximity of an adjacent track that is controlled. Again, since small railroads either do not have any adjacent track or conduct track work on the occupied track with an adjacent track when the adjacent track is out of service, there is no impact for small railroads. Since contractors generally pass on costs to the railroads for which

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\textsuperscript{16} Approximately 718 railroads—50 large freight, medium freight, passenger, and commuter railroads + 668 small railroads.
they perform work, there should be no impact on contractors.

Having made these determinations, FRA certifies that this final rule is not expected to have a significant economic impact on a substantial number of small entities under 5 U.S.C. 605(b).

C. Paperwork Reduction Act

The information collection requirements in this final rule are being submitted upon publication in the Federal Register for approval to OMB under the Paperwork Reduction Act of 1995, 44 U.S.C. 3501 et seq. The sections that contain the new and current information collection requirements, and the estimated time to fulfill each requirement, are as follows:

<table>
<thead>
<tr>
<th>CFR Section</th>
<th>Respondent universe</th>
<th>Total annual responses</th>
<th>Average time per response</th>
<th>Total annual burden hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form FRA F 6180.119—Part 214 Railroad Workplace Safety Violation Report.</td>
<td>350 Safety Inspectors</td>
<td>150 forms</td>
<td>4 hours</td>
<td>600</td>
</tr>
<tr>
<td>214.303—Railroad On-Track Safety Programs.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>—Amendments to Programs</td>
<td>60 Railroads</td>
<td>20 amend. + 584 amend</td>
<td>20 hours; 4 hrs</td>
<td>2,736</td>
</tr>
<tr>
<td>—Subsequent Years: New Programs</td>
<td>5 New Railroads</td>
<td>5 new programs</td>
<td>250</td>
<td>1,250</td>
</tr>
<tr>
<td>214.313—Good Faith Challenges to On-Track Safety Rules.</td>
<td>20 Railroads</td>
<td>80 challenges</td>
<td>4 hours per challenge</td>
<td>320</td>
</tr>
<tr>
<td>214.315/335—Supervision and Communication:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>—Job Briefings</td>
<td>50,000 Rdwy. Workers</td>
<td>16,350,000 briefings</td>
<td>2 minutes per briefing</td>
<td>545,000</td>
</tr>
<tr>
<td>—Adjacent-Track Safety Briefings (New Requirement).</td>
<td>24,500 Rdwy. Workers</td>
<td>2,403,450 briefings</td>
<td>30 seconds per briefing</td>
<td>20,029</td>
</tr>
<tr>
<td>214.321—Exclusive Track Occupancy—Working Limits.</td>
<td>8,583 Rdwy. Workers</td>
<td>700,739 written authorities</td>
<td>1 minute</td>
<td>11,679</td>
</tr>
<tr>
<td>214.325—Train Coordination:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>—Establishing Working Limits through Communication.</td>
<td>50,000 Rdwy. Workers</td>
<td>36,500 communications</td>
<td>15 seconds</td>
<td>152</td>
</tr>
<tr>
<td>214.327—Inaccessible Track:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>—Working Limits on Non-Controlled Track: Notifications.</td>
<td>718 Railroads</td>
<td>50,000 notifications</td>
<td>10 minutes</td>
<td>8,333</td>
</tr>
<tr>
<td>—Notifications/Watchmen/Lookout Warnings.</td>
<td>100 Railroads</td>
<td>10,000 notifications</td>
<td>15 seconds</td>
<td>42</td>
</tr>
<tr>
<td>—Roadway Worker Communication with Train Engineers or Equipment Operators.</td>
<td>100 Railroads</td>
<td>3,000 communications</td>
<td>1 minute</td>
<td>50</td>
</tr>
<tr>
<td>—Procedures for Adjacent-Controlled-Track Movements 25 mph or less:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>—Notifications/Watchmen/Lookout Warnings.</td>
<td>100 Railroads</td>
<td>3,000 notifications</td>
<td>15 seconds</td>
<td>13</td>
</tr>
<tr>
<td>—Roadway Worker Communication with Train Engineers or Equipment Operators.</td>
<td>100 Railroads</td>
<td>1,500 communications</td>
<td>1 minute</td>
<td>25</td>
</tr>
<tr>
<td>—Exceptions to the Requirements in Paragraphs (a), (b), and (c) for Adjacent-Controlled-Track On-Track Safety: Work Activities Involving Certain Equipment and Purposes:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>—On-Track Job Safety Briefings</td>
<td>100 Railroads</td>
<td>1,030,050 briefings</td>
<td>15 seconds</td>
<td>4,292</td>
</tr>
<tr>
<td>214.337—On-Track Safety Procedures for Lone Workers: Statements by Lone Workers.</td>
<td>718 Railroads</td>
<td>2,080,000 statements</td>
<td>30 seconds</td>
<td>17,333</td>
</tr>
<tr>
<td>—Additional On-Track Safety Training (New Requirement).</td>
<td>50,000 Rdwy. Workers</td>
<td>50,000 tr. Rdwy. Workers</td>
<td>4.5 hours</td>
<td>225,000</td>
</tr>
<tr>
<td>—Records of Training</td>
<td>35,000 Rdwy. Workers</td>
<td>35,000 tr. Rdwy. Workers</td>
<td>5 minutes</td>
<td>2,917</td>
</tr>
<tr>
<td>214.503—Good Faith Challenges: Procedures for Notification and Resolution:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>—Notifications for Non-Compliant Roadway Maintenance Machines or Unsafe Condition.</td>
<td>50,000 Rdwy. Workers</td>
<td>125 notifications</td>
<td>10 minutes</td>
<td>21</td>
</tr>
<tr>
<td>—Development of Resolution Procedures.</td>
<td>644 Railroads</td>
<td>10 procedures</td>
<td>2 hours</td>
<td>20</td>
</tr>
<tr>
<td>214.505—Required Environmental Control and Protection Systems for New On-Track Roadway Maintenance Machines with Enclosed Cabs:</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>—Designations/Additions to List</td>
<td>644 Railroads/200 Contractors.</td>
<td>150 additions/designations</td>
<td>5 minutes</td>
<td>13</td>
</tr>
</tbody>
</table>
All estimates include the time for reviewing instructions; searching existing data sources; gathering or maintaining the needed data; and reviewing the information. For information or a copy of the paperwork package submitted to OMB, contact Mr. Robert Brogan at (202) 493–6292 or Ms. Kimberly Toone at (202) 493–6132 or via email at the following addresses: Robert.Brogan@dot.gov and Kimberly.Toone@dot.gov.

Organizations and individuals desiring to submit comments on the collection of information requirements should direct them to the Office of Management and Budget, Office of Information and Regulatory Affairs, Washington, DC 20503, Attention: FRA Desk Officer. Comments may also be sent via email to OMB at the following address:

OIRA Submissions@omb.eop.gov

OMB is required to make a decision concerning the collection of information requirements contained in this final rule between 30 and 60 days after publication of this document in the Federal Register. Therefore, a comment to OMB is best assured of having its full effect if OMB receives it within 30 days of publication.

FRA is not authorized to impose a penalty on persons for violating information collection requirements which do not display a current OMB control number, if required. FRA intends to obtain current OMB control numbers for any new information collection requirements resulting from this rulemaking action prior to the effective date of this final rule. The OMB control number, when assigned, will be announced by separate notice in the Federal Register.

D. Federalism Implications

FRA has analyzed this final rule in accordance with the principles and criteria contained in Executive Order 13132, issued on August 4, 1999, which directs Federal agencies to exercise great care in establishing policies that have federalism implications. See 64 FR 43255. This final rule will not have a substantial direct effect on the States, on the relationship between the National government and the States, or on the distribution of power and responsibilities among various levels of government.

One of the fundamental federalism principles, as stated in Section 2(a) of Executive Order 13132, is that “Federalism is rooted in the belief that issues that are not national in scope or significance are most appropriately addressed by the level of government closest to the people.” Congress expressed its intent that there be national uniformity of regulation concerning railroad safety matters when it enacted 49 U.S.C. 20106. As amended to date, that section provides that all regulations prescribed by the Secretary of Transportation with respect to railroad safety matters and the Secretary of Homeland Security with respect to railroad security matters preempt any State law, regulation, or order covering the same subject matter, except a provision necessary to eliminate or reduce an essentially local safety or security hazard that is not incompatible with a Federal law, regulation, or order and that does not unreasonably burden interstate commerce. Nothing in this final rule alters the preemptive effect of the RWP Rule so these provisions have the same preemptive effect as the 1996 RWP Rule in accordance with the statute.

FRA notes that the above factors have been considered throughout the development of this final rule both internally and through discussions within the RSAC forum, as described in Sections VI and VII of this preamble. The full RSAC, which, prior to the publication of this final rule, reached consensus on proposed rule text and recommended the proposal to FRA, has as permanent voting members two organizations representing State and local interests: AASHTO and ASRSM. As such, these State organizations concurred with the proposed requirements, which differ in only limited respects from the requirements contained in this final rule. The RSAC regularly provides recommendations to the FRA Administrator for solutions to regulatory issues that reflect significant input from its State members. To date, FRA has received no indication of concerns about the Federalism implications of this rulemaking from these representatives or from any other representative.

For the foregoing reasons, FRA believes that this final rule is in accordance with the principles and
E. Environmental Impact

FRA has evaluated this final rule in accordance with its “Procedures for Considering Environmental Impacts” (FRA’s Procedures) (see 64 FR 28545, May 26, 1999) as required by the National Environmental Policy Act (see 42 U.S.C. 4321 et seq.). other environmental statutes, Executive Orders, and related regulatory requirements. FRA has determined that this final rule is not a major FRA action (requiring the preparation of an environmental impact statement or environmental assessment) because it is categorically excluded from detailed environmental review pursuant to section 4(c)(20) of FRA’s Procedures. See 64 FR 28547. In accordance with section 4(c) and (e) of FRA’s Procedures, the agency has further concluded that no extraordinary circumstances exist with respect to this regulation that might trigger the need for a more detailed environmental review. As a result, FRA finds that this final rule is not a major Federal action significantly affecting the quality of the human environment.

F. Unfunded Mandates Reform Act of 1995

Pursuant to Section 201 of the Unfunded Mandates Reform Act of 1995 (Pub. L. 104–4, 2 U.S.C. 1531), each Federal agency “shall, unless otherwise prohibited by law, assess the effects of Federal regulatory actions on State, local, and Tribal governments, and the private sector (other than to the extent that such regulations incorporate requirements specifically set forth in law).” Section 202 of the Act (2 U.S.C. 1532) further requires that “[b]efore promulgating any general notice of proposed rulemaking that is likely to result in the promulgation of any rule that includes any Federal mandate that may result in expenditure by State, local, and Tribal governments, in the aggregate, or by the private sector, of $100,000,000 or more (annually adjusted for inflation) in any 1 year, and before promulgating any final rule for which a general notice of proposed rulemaking was published, the agency shall prepare a written statement” detailing the effect on State, local, and Tribal governments and the private sector. For the year 2010, this monetary amount of $100,000,000 has been adjusted to $140,800,000 to account for inflation. This final rule will not result in expenditure by State, local, and Tribal governments, in the aggregate, or by the private sector, of $140,800,000 or more in any one year, and thus preparation of such a statement is not required.

G. Energy Impact

Executive Order 13211 requires Federal agencies to prepare a Statement of Energy Effects for any “significant energy action.” See 66 FR 28355, May 22, 2001. Under the Executive Order, a “significant energy action” is defined as any action by an agency (normally published in the Federal Register) that promulgates or is expected to lead to the promulgation of a final rule or regulation, including notices of inquiry, advance notices of proposed rulemaking, and notices of proposed rulemaking: (1)(i) That is a significant regulatory action under Executive Order 12866 or any successor order, and (ii) is likely to have a significant adverse effect on the supply, distribution, or use of energy; or (2) that is designated by the Administrator of the Office of Information and Regulatory Affairs as a significant energy action. FRA has evaluated this final rule in accordance with Executive Order 13211. FRA has determined that this final rule is not likely to have a significant adverse effect on the supply, distribution, or use of energy. Consequently, FRA has determined that this regulatory action is not a “significant energy action” within the meaning of Executive Order 13211.

H. Trade Impact

The Trade Agreements Act of 1979 (Pub. L. 96–39, 19 U.S.C. 2501 et seq.) prohibits Federal agencies from engaging in any standards setting or related activities that create unnecessary obstacles to the foreign commerce of the United States. Legitimate domestic objectives, such as safety, are not considered unnecessary obstacles. The statute also requires consideration of international standards and, where appropriate, that they be the basis for U.S. standards.

FRA has assessed the potential effect of this final rule on foreign commerce and believes that its requirements are consistent with the Trade Agreements Act of 1979. The requirements imposed are safety standards, which, as noted, are not considered unnecessary obstacles to trade.

I. Privacy Act

Anyone is able to search the electronic form of all comments received into any of FRA’s dockets by the name of the individual submitting the comment (or signing the comment, if submitted on behalf of an association, business, labor union, etc.). You may review DOT’s complete Privacy Act Statement in the Federal Register published on April 11, 2000 (65 FR 19477–78), or you may visit http://DocketsInfo.dot.gov.

List of Subjects in 49 CFR Part 214

Occupational safety and health, Penalties, Railroad safety.

The Final Rule

In consideration of the foregoing, FRA amends part 214 of chapter II, subtitle B of title 49, Code of Federal Regulations, as follows:

PART 214—[AMENDED]

1. The authority citation for part 214 is revised to read as follows:


Subpart A—General

§214.4 [Removed]

2. Section 214.4 is removed.

3. Section 214.7 is amended by adding introductory text to read as follows:

§214.7 Definitions.

Unless otherwise provided, as used in this part—

Subpart C—Roadway Worker Protection

4. Section 214.315 is amended by revising paragraph (a) to read as follows:

§214.315 Supervision and communication.

(a) When an employer assigns a duty to a roadway worker that calls for that employee to foul a track, the employer shall provide the employee with an on-track safety job briefing that, at a minimum, includes the following:

(1) Information on the means by which on-track safety is to be provided for each track identified to be fouled;

(2) Instruction on each on-track safety procedure to be followed;

(3) Information about any adjacent tracks, on-track safety for such tracks, if required by this subpart or deemed necessary by the roadway worker in charge, and identification of any roadway maintenance machines that will foul such tracks; and

(4) A discussion of the nature of the work to be performed and the characteristics of the work location to ensure compliance with this subpart.

5. Section 214.335 is amended by removing paragraph (c) and revising the section heading to read as follows:
§ 214.335 On-track safety procedures for roadway work groups, general.

* * * * *

6. Section 214.336 is added to read as follows:

§ 214.336 On-track safety procedures for certain roadway work groups and adjacent tracks.

(a) Procedures: general. (1) General rule. Except as provided in paragraph (e) of this section, on-track safety is required for each adjacent controlled track when a roadway work group with at least one of the roadway workers on the ground is engaged in a common task with on-track, self-propelled equipment or coupled equipment on an occupied track. The required on-track safety shall be established through § 214.319 (Working limits, generally) or § 214.329 (Train approach warning provided by watchmen/lookouts) and as more specifically described in this section.

(2) Special circumstances arising in territories with at least three tracks, if an occupied track is between two adjacent tracks, at least one of which is an adjacent controlled track. (i) An occupied track has two adjacent controlled tracks, and one of these adjacent controlled tracks has one or more train or other on-track equipment movements authorized or permitted at a speed of 25 mph or less, and the other adjacent controlled track has one or more concurrent train or other on-track equipment movements authorized or permitted at a speed over 25 mph, the more restrictive procedures in paragraph (b) of this section apply.

(ii) If an occupied track has an adjacent controlled track on one side (Side X), and a non-controlled track whose track center is spaced 19 feet or less from the track center of the occupied track on the other side (Side Y), the affected roadway workers must treat the non-controlled track on Side Y as an adjacent controlled track for purposes of this section.

(3) Definitions. As used in this section—

Adjacent controlled track means a controlled track whose track center is spaced 19 feet or less from the track center of the occupied track. Note, however, that under the special circumstances specified in paragraph (a)(2)(ii) of this section, a non-controlled track whose track center is spaced 19 feet or less from the track center of the occupied track must be treated as an adjacent controlled track for purposes of this section.

Occupied track means a track on which on-track, self-propelled equipment or coupled equipment is authorized or permitted to be located while engaged in a common task with a roadway work group with at least one of the roadway workers on the ground.

(2) Procedures for adjacent-controlled-track movements over 25 mph. If a train or other on-track equipment is authorized to move on an adjacent controlled track at a speed greater than 25 mph, each roadway worker in the roadway work group that is affected by such movement must comply with the following procedures:

(1) Ceasing work and occupying a predetermined place of safety. Except for the work activities as described in paragraph (e) of this section, each affected roadway worker shall, as described in Table 1 of this section, cease all on-ground work and equipment movement that is being performed on or between the rails of the occupied track or on one or both sides of the occupied track, and occupy a predetermined place of safety upon receiving either a watchman/lookout warning or, alternatively, a notification that the roadway worker in charge intends to permit one or more train or other on-track equipment movements through the working limits on the adjacent controlled track.

(2) Resuming work. (i) An affected roadway worker may resume on-ground work and equipment movement (on or between the rails of the occupied track or on one or both sides of the occupied track as described in Table 1 of this section) only after the trailing-end of all trains or other on-track equipment moving on the adjacent controlled track (for which a warning or notification has been received in accordance with paragraph (b)(1) of this section) has passed and remains ahead of that roadway worker.

(ii) If the train or other on-track equipment permitted to move on an adjacent controlled track has one or more concurrent train or other on-track equipment on the adjacent controlled track. (A) If on-track safety through train approach warning (§ 214.329) has been established on the adjacent controlled track; or (B) After the roadway worker in charge has communicated with a member of the train crew or the on-track equipment operator and established that further movements of such train or other on-track equipment shall be made only as permitted by the roadway worker in charge.

(c) Procedures for adjacent-controlled-track movements 25 mph or less. If a train or other on-track equipment is authorized or permitted to move on an adjacent controlled track at a speed of 25 mph or less, each roadway worker in the roadway work group that is affected by such movement must comply with the procedures listed in paragraph (b) of this section, except that equipment movement on the rails of the occupied track and on-ground work performed exclusively between the rails (i.e., not breaking the plane of the rails) of the occupied track may continue, provided that no on-ground work is performed within the areas 25 feet in front of and 25 feet behind any on-track, self-propelled equipment or coupled equipment permitted to move on the occupied track.

(d) Discretion of roadway worker in charge. Nothing in this subpart prohibits the roadway worker in charge from establishing on-track safety on one or more adjacent tracks as he or she deems necessary consistent with both the purpose and requirements of this subpart.

(e) Exceptions to certain requirements for adjacent-controlled-track on-track safety. No on-track safety (other than that required by paragraph (f) of this section or provided under paragraph (d) of this section) is required by paragraphs (a) through (c) of this section for an adjacent controlled track during the times that the roadway work group is exclusively performing one or more of the following work activities:

(1) On-ground work performed on a side of the occupied track meeting specified condition(s). A roadway work group with all of its on-ground roadway workers (other than those performing work in accordance with another exception in paragraph (a) of this section) performing work while exclusively positioned on a side of the
occupied track as follows and as further specified in Table 1 of this section:

(i) The side with no adjacent track;
(ii) The side with one or more adjacent tracks, the closest of which has working limits on it and no movements permitted within such working limits by the roadway worker in charge; or
(iii) The side with one or more adjacent tracks, provided that that it has an inter-track barrier between the occupied track and the closest adjacent track on that side.

(2) Maintenance or repairs performed alongside machines or equipment on the occupied track. One or more roadway workers performing maintenance or repairs alongside a roadway maintenance machine or coupled equipment, provided that such machine or equipment would effectively prevent the worker from fouling the adjacent controlled track on the other side of such equipment, and that such maintenance or repairs are performed while positioned on a side of the occupied track as described in paragraph (e)(1)(i), (ii), or (iii) and Table 1 of this section.

(3) Work activities involving certain equipment and purposes. One or more on-ground roadway workers engaged in a common task on an occupied track with on-track, self-propelled equipment or coupled equipment consisting exclusively of one or more of the types of equipment described in paragraphs (e)(3)(i) through (iii) of this section. If such a roadway work group (“excepted group”) is authorized or permitted to operate on the same occupied track and within the working limits of a separate roadway work group performing work that is subject to the requirements of this section (“non-excepted group”) or vice versa (i.e., a non-excepted group is authorized or permitted to operate on the same occupied track and within the working limits of an excepted group), the groups must conduct an on-track safety job briefing to determine if adjacent-controlled-track on-track safety is necessary for the excepted group. Such determination shall be made by the roadway worker in charge of the working limits; however, if the groups are in such proximity where the ability of the roadway workers in the excepted group to hear or see approaching trains and other on-track equipment is impaired by background noise, lights, sight obstructions or any other physical conditions caused by the equipment, then this exception does not apply, and adjacent-controlled-track on-track safety must be provided to both groups. This exception otherwise applies to work activities involving one or more of the following types of equipment:

(i) A hi-rail vehicle (other than a catenary maintenance tower vehicle) being used for inspection or minor correction purposes, provided that such hi-rail vehicle is not coupled to one or more railroad cars. In accordance with §214.315(a), where multiple hi-rail vehicles being used for inspection or minor correction are engaged in a common task, the on-track safety job briefing shall include discussion of the nature of the work to be performed to determine if adjacent-controlled-track on-track safety is necessary.

(ii) An automated inspection car being used for inspection or minor correction purposes.

(iii) A catenary maintenance tower car or vehicle, provided that all of the on-ground workers engaged in the common task (other than those performing work in accordance with another exception in paragraph (e) of this section) are positioned within the gage of the occupied track for the sole purpose of applying or removing grounds.

(f) Procedures for components of roadway maintenance machines fouling an adjacent controlled track. Except as provided for in §214.341(c), a component of a roadway maintenance machine shall not foul an adjacent controlled track unless working limits have been established on the adjacent-controlled-track and there are no movements permitted within the working limits by the roadway worker in charge that would affect any of the roadway workers engaged in a common task with such machine.

BILLING CODE 4910–06–P
| Example No./ Diagram No. (see Figure 1) | “Side A” of the Occupied Track—the side from the vertical plane of the near running rail of the occupied track extending outward through to the fouling space of the adjacent controlled track (“No. 1” Track) | On or Between the Rails of the Occupied Track (“No. 2” Track), where On-Track Safety Is Established through Working Limits | “Side B” of the Occupied Track—either (1) the side with no adjacent track or (2) the side from the vertical plane of the near running rail of the occupied track extending outward through to the fouling space of the adjacent controlled track (“No. 3” Track) | Method of On-Track Safety on Side A | Requirements | Requirements | Requirements | Method of On-Track Safety on Side B |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Working limits or train approach warning | Upon receiving a notification or warning for movement(s) (“movement notification or warning”) for No. 1, cease work and occupy a predetermined place of safety (“PPOS”).  \[1\] | Upon movement notification or warning for No. 1, cease work and occupy a PPOS, except work may continue during movement(s) on No. 1 auth’d at 25 mph or less if maintain 25’ spacing.  \[2\] | Work \[2\] is not required to cease during movement(s) on No. 1. | Working limits or train approach warning | Not applicable (N/A), because there is no adjacent track |
| 2 | Working limits | Upon movement notification for No. 1, cease work and occupy a PPOS.  \[3\] Work \[3\] is not required to cease during movement(s) on No. 3. | Upon movement notification for No. 1 or No. 3, cease work and occupy a PPOS, except work may continue during movement(s) on No. 1 or No. 3 auth’d at 25 mph or less if maintain 25’ spacing.  \[2\] | Upon movement notification for No. 3, cease work and occupy a PPOS. Work \[2\] is not required to cease during movement(s) on No. 1. | Not applicable (N/A), because there is no adjacent track |
| 3 | Working limits | Upon movement notification for No. 1, cease work and occupy a PPOS.  \[3\] Work \[3\] is not required to cease during movement(s) on No. 3. | Upon movement notification for No. 1 or No. 3, cease work and occupy a PPOS, except work may continue during movement(s) on No. 1 or No. 3 auth’d at 25 mph or less if maintain 25’ spacing.  \[2\] | Upon movement notification for No. 3, cease work and occupy a PPOS. Work \[2\] is not required to cease during movement(s) on No. 1. | Not applicable (N/A), because there is no adjacent track |
| 4 | Train approach warning | Upon movement warning for No. 1 or No. 3, cease work and occupy a PPOS. | Upon movement warning for No. 1 or No. 3, cease work and occupy a PPOS, except work may continue during movement(s) on No. 1 or No. 3 auth’d at 25 mph or less if maintain 25’ spacing.  \[2\] | Upon movement warning for No. 3 or No. 1, cease work and occupy safety PPOS. | Not applicable (N/A), because there is no adjacent track |
| 5 | None, but with inter-track barrier | Work is prohibited on No. 1 and up to barrier (“Side A1”). Work is not required to cease b/twn. barrier and near running rail of occupied track (“Side A2”) during movement(s) on No. 1. | Work is not required to cease during movement(s) on No. 1. | Work is not required to cease during movement(s) on No. 1. | Not applicable (N/A), because there is no adjacent track |
| 6 | None, but with inter-track barrier | Work is prohibited on Side A1. Work \[4\] is not required to cease on Side A2 during movement(s) on No. 1 or No. 3. Work is not required to cease during movement(s) on No. 1. Upon movement notification or warning for No. 3, cease work and occupy a PPOS, except work may continue during movement(s) on No. 3 auth’d at 25 mph or less if maintain 25’ spacing. \[2\] | Upon movement notification or warning for No. 3, cease work and occupy a PPOS. Work \[2\] is not required to cease during movement(s) on No. 1. | Working limits or train approach warning |

\[1\] As used in the above table, a “predetermined place of safety” (or “PPOS”) means a specific location that an affected roadway worker must occupy upon receiving a watchman/lookout’s warning of approaching movement(s) (“warning”) or a roadway worker in charge’s (“RWIC’s”) notification of pending movement(s) on an adjacent track (“notification”), as designated during the on-track safety job briefing required by § 214.315. The PPOS may not be on a track, unless the track has working limits on it and no movements permitted within such working limits by the RWIC. Thus, under these circumstances, the space between the rails of the occupied track (No. 2 in this table) may be designated as a place to remain in position or to otherwise occupy upon receiving a warning or notification. The RWIC must determine any change to a PPOS, and communicate such change to all affected roadway workers through an updated on-track safety job briefing.

\[2\] On-ground work is prohibited in the areas 25’ in front of and 25’ behind equipment on the occupied track (No. 2), and must not break the plane of a rail on No. 2 towards a side of No. 2 unless work is permitted on that side. Note, however, that per § 214.336(a)(2)(i), work would no longer be permitted to continue on or between the rails of the occupied track during movement(s) on an adjacent controlled track at 25 mph or less if there is a simultaneous movement on the other adjacent controlled track at more than 25 mph.

\[3\] Work that does not break the plane of the near running rail of the occupied track (No. 2) is not required to cease during such movements; work that breaks the plane of the near running rail of the occupied track may also continue: 1) during the times that work is permitted on or between the rails of the occupied track in accordance with § 214.336(c) (Procedures for adjacent-controlled-track movements 25 mph or less); or 2) if such work is performed alongside a roadway maintenance machine or coupled equipment in accordance with § 214.336(e)(2).
FIGURE 1 - EXAMPLES APPLYING § 214.336, ON-TRACK SAFETY PROCEDURES FOR CERTAIN ROADWAY WORK GROUPS AND ADJACENT TRACKS

(All tracks are controlled, with centerlines less than 19 feet apart.)

Ex.1

Working Limits or Train Approach Warning
(on Track No. 1)

Side A - Upon receiving a notification or warning for movement(s) ("mvt. notification or warning") on No. 1, cease work and occupy a predetermined place of safety ("PPOS").

Occupied Track - Upon mvt. notification or warning for No. 1, cease work and occupy a PPOS, except that work may continue during mvt(s). on No. 1 auth'd at 25 mph or less if maintain 25' spacing.

Ex.2

Working Limits
(on Track No. 1)

Side A - Upon mvt. notification for No. 1, cease work and occupy a PPOS. Work is not req'd to cease during mvt(s). on No. 3.

Occupied Track - Upon mvt. notification for No. 1 or No. 3, cease work and occupy a PPOS, except that work may continue during mvt(s). on No. 1 or No. 3 auth'd at 25 mph or less if maintain 25' spacing.

Ex.3

Working Limits
(on Track No. 1)

Side A - Upon mvt. notification for No. 1, cease work and occupy a PPOS. Work is not req'd to cease during mvt(s). on No. 3.

Occupied Track - Upon mvt. notification for No. 1 or mvt. warning for No. 3, cease work and occupy a PPOS, except work may continue during mvt(s). on No. 1 or No. 3 auth'd at 25 mph or less if maintain 25' spacing.

Ex.2

Working Limits
(on Track No. 2)

Side A - Upon mvt. notification for No. 3, cease work and occupy a PPOS. Work is not req'd to cease during mvt(s). on No. 1.

Side B - Upon mvt. notification for No. 3, cease work and occupy a PPOS. Work is not req'd to cease during mvt(s). on No. 1.

Side B - Upon mvt. notification for No. 3 or mvt. notification for No. 1, cease work and occupy a PPOS.

Side A - Upon mvt. notification for No. 3 or mvt. notification for No. 1, cease work and occupy a PPOS.
7. Appendix A to part 214 is amended by revising the entry under subpart C for § 214.315, by removing the entry under subpart C for § 214.335(c), by adding an entry under subpart C for § 214.336, and by revising footnote 1 and adding footnote 2 to read as follows:
## APPENDIX A TO PART 214—SCHEDULE OF CIVIL PENALTIES

<table>
<thead>
<tr>
<th>Section ²</th>
<th>Violation</th>
<th>Willful violation</th>
</tr>
</thead>
<tbody>
<tr>
<td>214.315</td>
<td>Supervision and communication:</td>
<td></td>
</tr>
<tr>
<td>(a)(1)</td>
<td>Complete failure of employer to provide on-track safety job briefing</td>
<td>5,000</td>
</tr>
<tr>
<td>(a)(2)</td>
<td>Partial failure of employer to provide on-track safety job briefing</td>
<td>2,000</td>
</tr>
<tr>
<td>214.336</td>
<td>On-track safety procedures for certain roadway work groups and adjacent tracks:</td>
<td></td>
</tr>
<tr>
<td>(a)(1)</td>
<td>Failure to implement the more restrictive procedures required by paragraph (b) during special circumstance of concurrent movement(s) on two adjacent controlled tracks where one movement is authorized or permitted at a speed over 25 mph</td>
<td>1,500</td>
</tr>
<tr>
<td>(a)(2)</td>
<td>Failure to establish on-track safety on an adjacent track that is non-controlled and spaced 19 feet or less from the occupied track for special circumstance where there is a controlled track on the opposite side of an occupied track</td>
<td>2,000</td>
</tr>
<tr>
<td>(b)(1)</td>
<td>Failure of roadway worker to cease work and occupy a predetermined place of safety upon receiving a warning or notification of train or other on-track equipment movement(s) on an adjacent controlled track</td>
<td>5,000</td>
</tr>
<tr>
<td>(b)(2)</td>
<td>Resumption of work before trailing-end of all applicable movements has passed the roadway worker</td>
<td>5,000</td>
</tr>
<tr>
<td>(c)</td>
<td>Failure to maintain 25-foot spacing between on-track, self-propelled equipment or coupled equipment and roadway worker(s) on the occupied track during an adjacent-controlled-track movement at 25 mph or less</td>
<td>2,000</td>
</tr>
<tr>
<td>(d)</td>
<td>Failure to implement on-track safety procedures on an adjacent track when deemed necessary by the roadway worker in charge of providing on-track safety for a roadway work group</td>
<td>2,000</td>
</tr>
<tr>
<td>(e)</td>
<td>Roadway maintenance machine component fouling an adjacent controlled track without working limits or with movements permitted within working limits</td>
<td>(1)</td>
</tr>
</tbody>
</table>

¹A penalty may be assessed against an individual only for a willful violation. The Administrator reserves the right to assess a penalty of up to $100,000 for any violation where circumstances warrant. See 49 CFR part 209, appendix A. Failure to observe any condition(s) of an exception set forth in paragraph (e) of §214.336 will deprive the railroad or contractor of the benefit of the exception and make the railroad or contractor, and any responsible individuals, liable for penalty under the particular regulatory section(s) from which the exception would otherwise have granted relief.

²The penalty schedule uses section numbers from 49 CFR part 214. If more than one item is listed as a type of violation of a given section, each item is also designated by a “penalty code,” which is used to facilitate assessment of civil penalties, and which may or may not correspond to any subsection designation(s). For convenience, penalty citations will cite the CFR section and the penalty code, if any. FRA reserves the right, should litigation become necessary, to substitute in its complaint the CFR citation in place of the combined CFR and penalty code citation, should they differ.

Issued in Washington, DC, on November 17, 2011.

Joseph C. Szabo, 
Administrator, Federal Railroad Administration.

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