

Final Rule

For the reasons discussed in the preamble, the Federal Railroad Administration amends part 213 of chapter II, subtitle B of Title 49, Code of Federal Regulations, as follows:

Part 213—[AMENDED]

- 1. The authority citation for part 213 continues to read as follows:
49 U.S.C. 20102-20114 and 20142; 28 U.S.C. 2461, note; and 49 CFR 1.49(m).
- 2. Section 213.119 is amended by revising the introductory language and paragraph (g) through (j) to read as follows:

§ 213.119 Continuous welded rail (CWR); general

Each track owner with track constructed of CWR shall have in effect and comply with a plan that contains written procedures which address: the installation, adjustment, maintenance, and inspection of CWR; inspection of CWR joints; and a training program for the application of those procedures. The plan shall be submitted to the Federal Railroad Administration by March 22, 1999. FRA reviews each plan for compliance with the following--

* * * * *

(g) Procedures which prescribe the scheduling and conduct of inspections to detect cracks and other indications of incipient failures in CWR joints. On and after January 1, 2007, in formulating the procedures under this paragraph, the track owner shall—

(1) Address the inspection of joints and the track structure at joints, including, at a minimum, periodic on-foot inspections; and also follow-up on-foot inspections where required by the track owner's CWR plan in response to periodic inspections;

(2) Specify the conditions of potential joint failure for which personnel must inspect, including, at a minimum, the following items:

- (i) Joint bars with visible or otherwise detectable cracks;
- (ii) Loose, bent, or missing joint bolts;
- (iii) Rail end batter or mismatch that contributes to instability of the joint; and
- (iv) Evidence of excessive longitudinal rail movement in or near the joint,

including, but not limited to, wide rail gap, defective joint bolts, disturbed ballast, surface deviations, gap between tie plates and rail, or displaced rail anchors;

(3) Specify the procedures for the inspection of CWR joints that are imbedded in highway-rail crossings or in other structures that prevent a complete inspection of the joint, including procedures for the removal from the joint of loose material or other temporary material;

(4) Specify the appropriate corrective actions, consistent with the track owner's CWR plan, that should be taken when personnel find conditions of actual or potential joint failure;

(5) Specify the timing of periodic inspections, which should be based on the configuration and condition of the joint:

(i) Except as provided in paragraphs (g)(5)(ii) through (iv), track owners must specify that all CWR joints are inspected, at a minimum, in accordance with the intervals identified in the following table—

Minimum Number of Inspections Per Calendar Year ²					
	Freight Trains operating over track with an annual tonnage of:			Passenger Trains operating over track with an annual tonnage of:	
	less than 40 mgt	40 to 60 mgt	greater than 60 mgt	less than 20 mgt	greater than or equal to 20 mgt
Class 5 & above	2x	3x ¹	4x ¹	3x ¹	3x ¹
Class 4	2x	3x ¹	4x ¹	2x	3x ¹
Class 3	1x	2x	2x	2x	2x
Class 2	0	0	0	1x	1x
Class 1	0	0	0	0	0
Excepted Track	0	0	0	n/a	n/a

4x = Four times per calendar year, with one inspection in each of the following periods: January to March, April to June, July to September, and October to December; and with consecutive inspections separated by at least 60 calendar days.

3x = Three times per calendar year, with one inspection in each of the following periods: January to April, May to August, and September to December; and with consecutive inspections separated by at least 90 calendar days

2x = Twice per calendar year, with one inspection in each of the following periods: January to June and July to December; and with consecutive inspections separated by at least 120 calendar days.

1x = Once per calendar year, with consecutive inspections separated by at least 180 calendar days.

¹Where extreme weather conditions prevent a track owner from conducting an inspection of a particular territory within the required interval, the track owner may extend the interval by up to 30 calendar days from the last day that the extreme weather condition prevented the required inspection.

²Where a track owner operates both freight and passenger trains over a given segment of track, and there are two different possible inspection interval requirements, the more frequent inspection interval applies.

(ii) All CWR joints over which a passenger train operates for an unscheduled detour operation are not required to be inspected at the frequencies identified in paragraph (g)(5)(i), provided that the operation lasts no more than 14 consecutive calendar days. In order to continue operations beyond the 14-day-period, the track owner must inspect the CWR joints in accordance with the requirements of paragraph (g)(5)(i).

(iii) All CWR joints over which a passenger train operates for a tourist, scenic, historic, or excursion operation are not required to be inspected at the frequency identified in paragraph (g)(5)(i) for the operation's designated class of track, as long as the train speed is limited to the maximum authorized speed for the next lowest class of track.

(iv) All CWR joints that are located in switches, turnouts, track crossings, lift rail assemblies or other transition devices on moveable bridges must be inspected on foot at least monthly, consistent with the requirements in §213.235; and all records of those inspections must be kept in accordance with the requirements in §213.241. Track owners may include in their §213.235 inspections, in lieu of the joint inspections required by paragraph (g)(5)(i), CWR joints that are located in track structure that is adjacent to switches and turnouts, provided that the track owners precisely define the parameters of that arrangement in their CWR plans.

(6) Specify the recordkeeping requirements related to joint bars in CWR, including the following:

(i) The track owner shall keep a record of each periodic and follow-up inspection required to be performed by the track owner's CWR plan, except for those inspections conducted pursuant to §213.235 for which track owners must maintain records pursuant to §213.241. The record shall be prepared on the day the inspection is made and signed by the person making the inspection. The record shall include, at a minimum, the following items: the boundaries of the territory inspected; the fact that all CWR joints in the specified territory were inspected; the nature and location of any deviations at the joint from the requirements of this Part or of the track owner's CWR plan, with the location identified with sufficient precision that personnel could return to the joint and identify it without ambiguity; the date of the inspection; the remedial action,

corrective action, or both that has been taken or will be taken; and the name or identification number of the person who made the inspection.

(ii) The track owner shall generate a Fracture Report for every cracked or broken CWR joint bar that the track owner discovers during the course of an inspection conducted pursuant to §§213.119(g), 213.233, or 213.235 on track that is required under §213.119(g)(5)(i) to be inspected.

(A) The Fracture Report shall be prepared on the day the cracked or broken joint bar is discovered. The record shall include, at a minimum: the railroad name; the location of the joint bar as identified by milepost and subdivision; the class of track; annual million gross tons for the previous calendar year; the date of discovery of the crack or break; the rail section; the type of bar (standard, insulated, or compromise); the number of holes in the joint bar; a general description of the location of the crack or break in bar; the visible length of the crack in inches; the gap measurement between rail ends; the amount and length of rail end batter or ramp on each rail end; the amount of tread mismatch; the vertical movement of joint; and in curves or spirals, the amount of gage mismatch and the lateral movement of the joint.

(B) The track owner shall submit the information contained in the Fracture Reports to the FRA Associate Administrator for Safety twice annually, by July 31 for the preceding six-month period spanning from January 1 through June 30 and by January 31 for the preceding six-month period spanning from July 1 through December 31.

(C) After February 1, 2010, any track owner may petition FRA to conduct a technical conference to review the Fracture Report data submitted through December of 2009 and assess whether there is a continued need for the collection of Fracture Report data. The track owner shall submit a written request to the Associate Administrator for Safety, requesting the technical conference and explaining the reasons for proposing to discontinue the collection of the data.

(iii) Track owners shall maintain records required by paragraph (g)(6) in accordance with §213.241.

(7) In lieu of the requirements for the inspection of rail joints contained in paragraphs (g)(1) through (6) of this section, a track owner may seek approval from FRA to use alternate procedures.

(i) The track owner shall submit the alternate procedures and a supporting statement of justification to the Associate Administrator for Safety (Associate Administrator).

(ii) If the Associate Administrator finds that the alternate procedures provide an equivalent or higher level of safety than the requirements in paragraphs (g)(1) through (g)(6) of this section, the Associate Administrator will approve the alternate procedures by notifying the track owner in writing. The Associate Administrator will specify in the

written notification the date on which the procedures will become effective, and after that date, the track owner shall comply with the procedures. If the Associate Administrator determines that the alternate procedures do not provide an equivalent level of safety, the Associate Administrator will disapprove the alternate procedures in writing, and the track owner shall continue to comply with the requirements in paragraphs (g)(1) and (2) of this section.

(iii) While a determination is pending with the Associate Administrator on a request submitted pursuant to paragraph (g)(7) of this section, the track owner shall continue to comply with the requirements contained in paragraphs (g)(1) through (6) of this section.

(h) The track owner shall have in effect a comprehensive training program for the application of these written CWR procedures, with provisions for periodic re-training, for those individuals designated under §213.7 as qualified to supervise the installation, adjustment, and maintenance of CWR track and to perform inspections of CWR track.

(i) The track owner shall prescribe recordkeeping requirements necessary to provide an adequate history of track constructed with CWR. At a minimum, these records must include:

(1) Rail temperature, location and date of CWR installations. This record shall be retained for at least one year;

(2) A record of any CWR installation or maintenance work that does not conform with the written procedures. Such record shall include the location of the rail and be maintained until the CWR is brought into conformance with such procedures;

(3) Information on inspection of rail joints as specified in paragraph (g)(6) of this part.

(j) As used in this section--

(1) Action Items mean the rail joint conditions that track owners identify in their CWR plans pursuant to paragraph (g)(2).

(2) Adjusting/De-stressing means the procedure by which a rail's temperature is re-adjusted to the desired value. It typically consists of cutting the rail and removing rail anchoring devices, which provides for the necessary expansion and contraction, and then re-assembling the track.

(3) Buckling Incident means the formation of a lateral misalignment sufficient in magnitude to constitute a deviation from the Class 1 requirements specified in §213.55. These normally occur when rail temperatures are relatively high and are caused by high longitudinal compressive forces.

(4) Continuous Welded Rail (CWR) means rail that has been welded together into lengths

exceeding 400 feet.

(5) CWR Joint means (a) any joint directly connected to CWR, and (b) any joint(s) in a segment of rail between CWR strings that are less than 195 feet apart, except joints located on jointed sections on bridges.

(6) Desired Rail Installation Temperature Range means the rail temperature range, within a specific geographical area, at which forces in CWR should not cause a buckling incident in extreme heat, or a pull-apart during extreme cold weather.

(7) Disturbed Track means the disturbance of the roadbed or ballast section, as a result of track maintenance or any other event, which reduces the lateral or longitudinal resistance of the track, or both.

(8) Mechanical Stabilization means a type of procedure used to restore track resistance to disturbed track following certain maintenance operations. This procedure may incorporate dynamic track stabilizers or ballast consolidators, which are units of work equipment that are used as a substitute for the stabilization action provided by the passage of tonnage trains.

(9) Rail Anchors means those devices which are attached to the rail and bear against the side of the crosstie to control longitudinal rail movement. Certain types of rail fasteners also act as rail anchors and control longitudinal rail movement by exerting a downward clamping force on the upper surface of the rail base.

(10) Rail Temperature means the temperature of the rail, measured with a rail thermometer.

(11) Tight/Kinky Rail means CWR which exhibits minute alignment irregularities which indicate that the rail is in a considerable amount of compression.

(12) Tourist, Scenic, Historic, or Excursion Operations mean railroad operations that carry passengers with the conveyance of the passengers to a particular destination not being the principal purpose.

(13) Train-induced Forces means the vertical, longitudinal, and lateral dynamic forces which are generated during train movement and which can contribute to the buckling potential.

(14) Track Lateral Resistance means the resistance provided by the rail/crosstie structure against lateral displacement.

(15) Track Longitudinal Resistance means the resistance provided by the rail anchors/rail fasteners and the ballast section to the rail/crosstie structure against longitudinal displacement.

(16) **Unscheduled Detour Operation** means a short-term, unscheduled operation where a track owner has no more than 14 calendar days' notice that the operation is going to occur.

- 3. Section 213.241(b) is revised to read as follows:

§ 213.241 Inspection records.

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(b) Each record of an inspection under §§ 213.4, 213.119, 213.233, and 213.235 shall be prepared on the day the inspection is made and signed by the person making the inspection. Records shall specify the track inspected, date of inspection, location and nature of any deviation from the requirements of this part, and the remedial action taken by the person making the inspection. The owner shall designate the location(s) where each original record shall be maintained for at least one year after the inspection covered by the record. The owner shall also designate one location, within 100 miles of each state in which they conduct operations, where copies of records which apply to those operations are either maintained or can be viewed following 10 days notice by the Federal Railroad Administration.

- 4. Section 213.343 is amended by adding a new paragraph (j) to read as follows:

§ 213.343 Continuous welded rail (CWR).

* * * * *

(j) Track owners shall revise their CWR plans to include provisions for the inspection of joint bars in accordance with §§ 213.119(g) and (i)(3).

- 5. Appendix B to part 213 is amended by revising the entry for § 213.119 to read as follows:

Appendix B to Part 213—Schedule of Civil Penalties

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§ 213.119 Continuous welded rail

(a) through (i)..... 5,000 7,500

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Issued in Washington, DC, on_____.

Joseph H. Boardman
Federal Railroad Administrator