able cause testing, pre-employment testing, return-to-duty testing, and follow-up testing.''

ALCOHOL AND CONTROLLED SUBSTANCE TESTING OF MECHANICAL EMPLOYEES

Pub. L. 115–271, title VIII, §8102, Oct. 24, 2018, 132 Stat. 4104, provided that:

''(a) IN GENERAL.—Not later than 2 years after the date of enactment of this Act [Oct. 24, 2018], the Secretary of Transportation shall publish a rule in the Federal Register revising the regulations promulgated under section 20140 of title 49, United States Code, to cover all employees of railroad carriers who perform mechanical activities.

''(b) DEFINITION OF MECHANICAL ACTIVITIES.—For the purposes of the rule under subsection (a), the Secretary shall define the term 'mechanical activities' by regulation.''

ALCOHOL AND CONTROLLED SUBSTANCE TESTING FOR MAINTENANCE-OF-WAY EMPLOYEES

Pub. L. 110–432, div. A, title IV, §412, Oct. 16, 2008, 122 Stat. 4889, as amended by Pub. L. 114–94, div. A, title XI, §11316(j)(6), Dec. 4, 2015, 129 Stat. 1678, provided that: ''Not later than 2 years following the date of enactment of this Act [Oct. 16, 2008], the Secretary shall complete a rulemaking proceeding to revise the regulations prescribed under section 20140 of title 49, United States Code, to cover all employees of railroad carriers and contractors or subcontractors to railroad carriers who perform maintenance-of-way activities.''

[For definition of ''railroad carrier'', as used in section 412 of Pub. L. 110–432, set out above, see section 2(a) of Pub. L. 110–432, set out as a note under section 20102 of this title.]'

§ 20141. Power brake safety

(a) REVIEW AND REVISION OF EXISTING REGULATIONS.—The Secretary of Transportation shall review existing regulations on railroad power brakes and, not later than December 31, 1993, revise the regulations based on safety information presented during the review. Where applicable, the Secretary shall prescribe regulations that establish standards on dynamic braking equipment.

(b) 2-WAY END-OF-TRAIN DEVICES.—(1) The Secretary shall require 2-way end-of-train devices (or devices able to perform the same function) on road trains, except locals, road switchers, or work trains, to enable the initiation of emergency braking from the rear of a train. The Secretary shall prescribe regulations as soon as possible, but not later than December 31, 1993, requiring the 2-way end-of-train devices. The regulations at least shall—

(A) establish standards for the devices based on performance;

(B) prohibit a railroad carrier, on or after the date that is one year after the regulations are prescribed, from acquiring any end-of-train device for use on trains that is not a 2-way device meeting the standards established under clause (A) of this paragraph;

(C) require that the trains be equipped with 2-way end-of-train devices meeting those standards not later than 4 years after the regulations are prescribed; and

(D) provide that any 2-way end-of-train device acquired for use on trains before the regulations are prescribed shall be deemed to meet the standards.

(2) The Secretary may consider petitions to amend the regulations prescribed under paragraph (1) of this subsection to allow the use of alternative technologies that meet the same basic performance requirements established by the regulations.

(3) In developing the regulations required by paragraph (1) of this subsection, the Secretary shall consider information presented under subsection (a) of this section.

(c) EXCLUSIONS.—The Secretary may exclude from regulations prescribed under subsections (a) and (b) of this section any category of trains or rail operations if the Secretary decides that the exclusion is in the public interest and is consistent with railroad safety. The Secretary shall make public the reasons for the exclusion. The Secretary at least shall exclude from the regulations prescribed under subsection (b)—

(1) trains that have manned cabooses;

(2) passenger trains with emergency brakes;

(3) trains that operate only on track that is not part of the general railroad system;

(4) trains that do not exceed 30 miles an hour and do not operate on heavy grades, except for any categories of trains specifically designated by the Secretary; and

(5) trains that operate in a push mode.

(Pub. L. 103–272, §1(e), July 5, 1994, 108 Stat. 878.)

HISTORICAL AND REVISION NOTES

Revised Section	*Source (U.S. Code)*	*Source (Statutes at Large)*
20141(a)	45:431(r)(1), (2).	Oct. 16, 1970, Pub. L. 91–458, 84 Stat. 971, §202(r); added Sept. 3, 1992, Pub. L. 102–365, §7, 106 Stat. 976.
20141(b)	45:431(r)(3).	
20141(c)	45:431(r)(4).	

Statutory Notes and Related Subsidiaries

STUDY AND TESTING OF ELECTRONICALLY CONTROLLED PNEUMATIC BRAKES

Pub. L. 114–94, div. A, title VII, §7311, Dec. 4, 2015, 129 Stat. 1601, provided that:

''(a) GOVERNMENT ACCOUNTABILITY OFFICE STUDY.—

''(1) IN GENERAL.—The Comptroller General of the United States shall conduct an independent evaluation of ECP brake systems, pilot program data, and the Department [of Transportation]'s research and analysis on the costs, benefits, and effects of ECP brake systems.

''(2) STUDY ELEMENTS.—In completing the independent evaluation under paragraph (1), the Comptroller General shall examine the following issues related to ECP brake systems:

''(A) Data and modeling results on safety benefits relative to conventional brakes and to other braking technologies or systems, such as distributed power and 2-way end-of-train devices.

''(B) Data and modeling results on business benefits, including the effects of dynamic braking.

''(C) Data on costs, including up-front capital costs and on-going maintenance costs.

''(D) Analysis of potential operational benefits and challenges, including the effects of potential locomotive and car segregation, technical reliability issues, and network disruptions.

''(E) Analysis of potential implementation challenges, including installation time, positive train control integration complexities, component availability issues, and tank car shop capabilities.

''(F) Analysis of international experiences with the use of advanced braking technologies.

''(3) REPORT.—Not later than 18 months after the date of enactment of this Act [Dec. 4, 2015], the Comp-

troller General shall transmit to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a report on the results of the independent evaluation under paragraph (1).

''(b) EMERGENCY BRAKING APPLICATION TESTING.—

''(1) IN GENERAL.—The Secretary [of Transportation] shall enter into an agreement with the National Academy of Sciences to—

''(A) complete testing of ECP brake systems during emergency braking application, including more than 1 scenario involving the uncoupling of a train with 70 or more DOT–117 specification or DOT–117R specification tank cars; and

''(B) transmit, not later than 18 months after the date of enactment of this Act, to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a report on the results of the testing.

''(2) INDEPENDENT EXPERTS.—In completing the testing under paragraph (1)(A), the National Academy of Sciences may contract with 1 or more engineering or rail experts, as appropriate, that—

''(A) are not railroad carriers, entities funded by such carriers, or entities directly impacted by the final rule issued on May 8, 2015, entitled ''Enhanced Tank Car Standards and Operational Controls for High-Hazard Flammable Trains'' (80 Fed. Reg. 26643); and

''(B) have relevant experience in conducting railroad safety technology tests or similar crash tests.

''(3) TESTING FRAMEWORK.—In completing the testing under paragraph (1), the National Academy of Sciences and each contractor described in paragraph (2) shall ensure that the testing objectively, accurately, and reliably measures the performance of ECP brake systems relative to other braking technologies or systems, such as distributed power and 2-way end-of-train devices, including differences in—

''(A) the number of cars derailed;

''(B) the number of cars punctured;

''(C) the measures of in-train forces; and

''(D) the stopping distance.

''(4) FUNDING.—The Secretary shall provide funding, as part of the agreement under paragraph (1), to the National Academy of Sciences for the testing required under this section—

''(A) using sums made available to carry out sections 20108 and 5118 of title 49, United States Code; and

''(B) to the extent funding under subparagraph (A) is insufficient or unavailable to fund the testing required under this section, using such sums as are necessary from the amounts appropriated to the Secretary, the Federal Railroad Administration, or the Pipeline and Hazardous Materials Safety Administration, or a combination thereof.

''(5) EQUIPMENT.—

''(A) RECEIPT.—The National Academy of Sciences and each contractor described in paragraph (2) may receive or use rolling stock, track, and other equipment or infrastructure from a railroad carrier or other private entity for the purposes of conducting the testing required under this section.

''(B) CONTRACTED USE.—Notwithstanding paragraph (2)(A), to facilitate testing, the National Academy of Sciences and each contractor may contract with a railroad carrier or any other private entity for the use of such carrier or entity's rolling stock, track, or other equipment and receive technical assistance on their use.

''(c) EVIDENCE-BASED APPROACH.—

''(1) ANALYSIS.—The Secretary shall—

''(A) not later than 90 days after the report date, fully incorporate the results of the evaluation under subsection (a) and the testing under subsection (b) and update the regulatory impact analysis of the final rule described in subsection (b)(2)(A) of the costs, benefits, and effects of the applicable ECP brake system requirements;

''(B) as soon as practicable after completion of the updated analysis under subparagraph (A), solicit public comment in the Federal Register on the analysis for a period of not more than 30 days; and

''(C) not later than 60 days after the end of the public comment period under subparagraph (B), post the final updated regulatory impact analysis on the Department of Transportation's Internet Web site.

''(2) DETERMINATION.—Not later than 2 years after the date of enactment of this Act, the Secretary shall—

''(A) determine, based on whether the final regulatory impact analysis described in paragraph (1)(C) demonstrates that the benefits, including safety benefits, of the applicable ECP brake system requirements exceed the costs of such requirements, whether the applicable ECP brake system requirements are justified;

''(B) if the applicable ECP brake system requirements are justified, publish in the Federal Register the determination and reasons for such determination; and

''(C) if the Secretary does not publish the determination under subparagraph (B), repeal the applicable ECP brake system requirements.

''(3) SAVINGS CLAUSE.—Nothing in this section shall be construed to prohibit the Secretary from implementing the final rule described under subsection (b)(2)(A) prior to the determination required under subsection (c)(2) of this section, or require the Secretary to promulgate a new rule on the provisions of such final rule, other than on the applicable ECP brake system requirements, if the Secretary does not determine that the applicable ECP brake system requirements are justified pursuant to this subsection.

''(d) DEFINITIONS.—In this section, the following definitions apply:

''(1) APPLICABLE ECP BRAKE SYSTEM REQUIREMENTS.—The term 'applicable ECP brake system requirements' means sections 174.310(a)(3)(ii), 174.310(a)(3)(iii), 174.310(a)(5)(v), 179.202–10, 179.202–12(g), and 179.202–13(i) of title 49, Code of Federal Regulations, and any other regulation in effect on the date of enactment of this Act requiring the installation of ECP brakes or operation in ECP brake mode.

''(2) CLASS 3 FLAMMABLE LIQUID.—The term 'Class 3 flammable liquid' has the meaning given the term flammable liquid in section 173.120(a) of title 49, Code of Federal Regulations.

''(3) ECP.—The term 'ECP' means electronically controlled pneumatic when applied to a brake or brakes.

''(4) ECP BRAKE MODE.—The term 'ECP brake mode' includes any operation of a rail car or an entire train using an ECP brake system.

''(5) ECP BRAKE SYSTEM.—

''(A) IN GENERAL.—The term 'ECP brake system' means a train power braking system actuated by compressed air and controlled by electronic signals from the locomotive or an ECP–EOT to the cars in the consist for service and emergency applications in which the brake pipe is used to provide a constant supply of compressed air to the reservoirs on each car but does not convey braking signals to the car.

''(B) INCLUSIONS.—The term 'ECP brake system' includes dual mode and stand-alone ECP brake systems.

''(6) RAILROAD CARRIER.—The term 'railroad carrier' has the meaning given the term in section 20102 of title 49, United States Code.

''(7) REPORT DATE.—The term 'report date' means the date that the reports under subsections (a)(3) and (b)(1)(B) are required to be transmitted pursuant to those subsections.''

§ 20142. Track safety

(a) REVIEW OF EXISTING REGULATIONS.—Not later than March 3, 1993, the Secretary of Transportation shall begin a review of Department of Transportation regulations related to track safety standards. The review at least shall include an evaluation of—

(1) procedures associated with maintaining and installing continuous welded rail and its attendant structure, including cold weather installation procedures;

(2) the need for revisions to regulations on track excepted from track safety standards; and

(3) employee safety.

(b) REVISION OF REGULATIONS.—Not later than September 1, 1995, the Secretary shall prescribe regulations and issue orders to revise track safety standards, considering safety information presented during the review under subsection (a) of this section and the report of the Comptroller General submitted under subsection (c) of this section.

(c) COMPTROLLER GENERAL'S STUDY AND REPORT.—The Comptroller General shall study the effectiveness of the Secretary's enforcement of track safety standards, with particular attention to recent relevant railroad accident experience and information. Not later than September 3, 1993, the Comptroller General shall submit a report to Congress and the Secretary on the results of the study, with recommendations for improving enforcement of those standards.

(d) IDENTIFICATION OF INTERNAL RAIL DEFECTS.—In carrying out subsections (a) and (b), the Secretary shall consider whether or not to prescribe regulations and issue orders concerning—

(1) inspection procedures to identify internal rail defects, before they reach imminent failure size, in rail that has significant shelling; and

(2) any specific actions that should be taken when a rail surface condition, such as shelling, prevents the identification of internal defects.

(e) TRACK STANDARDS.—

(1) IN GENERAL.—Within 90 days after the date of enactment of this subsection, the Federal Railroad Administration shall—

(A) require each track owner using continuous welded rail track to include procedures (in its procedures filed with the Administration pursuant to section 213.119 of title 49, Code of Federal Regulations) to improve the identification of cracks in rail joint bars;

(B) instruct Administration track inspectors to obtain copies of the most recent continuous welded rail programs of each railroad within the inspectors' areas of responsibility and require that inspectors use those programs when conducting track inspections; and

(C) establish a program to review continuous welded rail joint bar inspection data from railroads and Administration track inspectors periodically.

(2) INSPECTION.—Whenever the Administration determines that it is necessary or appropriate, the Administration may require railroads to increase the frequency of inspection, or improve the methods of inspection, of joint bars in continuous welded rail.

(Pub. L. 103–272, § 1(e), July 5, 1994, 108 Stat. 879; Pub. L. 103–440, title II, § 208, Nov. 2, 1994, 108 Stat. 4621; Pub. L. 109–59, title IX, § 9005(a), Aug. 10, 2005, 119 Stat. 1924.)

HISTORICAL AND REVISION NOTES

Revised Section	*Source (U.S. Code)*	*Source (Statutes at Large)*
20142(a)	45:431(s)(1) (1st sentence), (2).	Oct. 16, 1970, Pub. L. 91–458, 84 Stat. 971, § 202(s); added Sept. 3, 1992, Pub. L. 102–365, § 8, 106 Stat. 976.
20142(b)	45:431(s)(1) (last sentence).	
20142(c)	45:431(s)(3).	

In subsection (c), the word ''information'' is substituted for ''data'' for consistency in the revised title.

Editorial Notes

REFERENCES IN TEXT

The date of enactment of this subsection, referred to in subsec. (e)(1), is the date of enactment of Pub. L. 109–59, which was approved Aug. 10, 2005.

AMENDMENTS

2005—Subsec. (e). Pub. L. 109–59 added subsec. (e).

1994—Subsec. (a)(1). Pub. L. 103–440, § 208(2), inserted '', including cold weather installation procedures'' after ''attendant structure''.

Subsec. (b). Pub. L. 103–440, § 208(1), substituted ''September 1, 1995'' for ''September 3, 1994''.

Subsec. (d). Pub. L. 103–440, § 208(3), added subsec. (d).

Statutory Notes and Related Subsidiaries

COMMUTER RAIL TRACK INSPECTIONS

Pub. L. 114–94, div. A, title XI, § 11409, Dec. 4, 2015, 129 Stat. 1684, provided that:

''(a) IN GENERAL.—The Secretary [of Transportation] shall evaluate track inspection regulations to determine if a railroad carrier providing commuter rail passenger transportation on high density commuter railroad lines should be required to inspect the lines in the same manner as is required for other commuter railroad lines.

''(b) RULEMAKING.—Considering safety, including railroad carrier employee and contractor safety, system capacity, and other relevant factors, the Secretary may promulgate a rule for high density commuter railroad lines. If, after the evaluation under subsection (a), the Secretary determines that it is necessary to promulgate a rule, the Secretary shall specifically consider the following regulatory requirements for high density commuter railroad lines:

''(1) At least once every 2 weeks—

''(A) traverse each main line by vehicle; or

''(B) inspect each main line on foot.

''(2) At least once each month, traverse and inspect each siding by vehicle or by foot.

''(c) REPORT.—If, after the evaluation under subsection (a), the Secretary determines it is not necessary to revise the regulations under this section, the Secretary, not later than 18 months after the date of enactment of this Act [Dec. 4, 2015], shall transmit to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives a report explaining the reasons for not revising the regulations.

''(d) CONSTRUCTION.—Nothing in this section may be construed to limit the authority of the Secretary to promulgate regulations or issue orders under any other law.''