

Railroad Administration shall conduct a comprehensive analysis to determine the impact resistance of the steels in the shells of pressure tank cars constructed before 1989. Within 6 months after completing that analysis the Administration shall transmit a report, including recommendations for reducing any risk of catastrophic fracture and separation of such cars, to the Committee on Commerce, Science, and Transportation of the Senate and the Committee on Transportation and Infrastructure of the House of Representatives.

(Added Pub. L. 109-59, title IX, §9005(b)(1), Aug. 10, 2005, 119 Stat. 1924.)

REFERENCES IN TEXT

The date of enactment of this section, referred to in text, is the date of enactment of Pub. L. 109-59, which was approved Aug. 10, 2005.

§ 20156. Railroad safety risk reduction program

(a) IN GENERAL.—

(1) PROGRAM REQUIREMENT.—Not later than 4 years after the date of enactment of the Rail Safety Improvement Act of 2008, the Secretary of Transportation, by regulation, shall require each railroad carrier that is a Class I railroad, a railroad carrier that has inadequate safety performance (as determined by the Secretary), or a railroad carrier that provides intercity rail passenger or commuter rail passenger transportation—

(A) to develop a railroad safety risk reduction program under subsection (d) that systematically evaluates railroad safety risks on its system and manages those risks in order to reduce the numbers and rates of railroad accidents, incidents, injuries, and fatalities;

(B) to submit its program, including any required plans, to the Secretary for review and approval; and

(C) to implement the program and plans approved by the Secretary.

(2) RELIANCE ON PILOT PROGRAM.—The Secretary may conduct behavior-based safety and other research, including pilot programs, before promulgating regulations under this subsection and thereafter. The Secretary shall use any information and experience gathered through such research and pilot programs under this subsection in developing regulations under this section.

(3) REVIEW AND APPROVAL.—The Secretary shall review and approve or disapprove railroad safety risk reduction program plans within a reasonable period of time. If the proposed plan is not approved, the Secretary shall notify the affected railroad carrier as to the specific areas in which the proposed plan is deficient, and the railroad carrier shall correct all deficiencies within a reasonable period of time following receipt of written notice from the Secretary. The Secretary shall annually conduct a review to ensure that the railroad carriers are complying with their plans.

(4) VOLUNTARY COMPLIANCE.—A railroad carrier that is not required to submit a railroad safety risk reduction program under this section may voluntarily submit a program that

meets the requirements of this section to the Secretary. The Secretary shall approve or disapprove any program submitted under this paragraph.

(b) CERTIFICATION.—The chief official responsible for safety of each railroad carrier required to submit a railroad safety risk reduction program under subsection (a) shall certify that the contents of the program are accurate and that the railroad carrier will implement the contents of the program as approved by the Secretary.

(c) RISK ANALYSIS.—In developing its railroad safety risk reduction program each railroad carrier required to submit such a program pursuant to subsection (a) shall identify and analyze the aspects of its railroad, including operating rules and practices, infrastructure, equipment, employee levels and schedules, safety culture, management structure, employee training, and other matters, including those not covered by railroad safety regulations or other Federal regulations, that impact railroad safety.

(d) PROGRAM ELEMENTS.—

(1) IN GENERAL.—Each railroad carrier required to submit a railroad safety risk reduction program under subsection (a) shall develop a comprehensive safety risk reduction program to improve safety by reducing the number and rates of accidents, incidents, injuries, and fatalities that is based on the risk analysis required by subsection (c) through—

(A) the mitigation of aspects that increase risks to railroad safety; and

(B) the enhancement of aspects that decrease risks to railroad safety.

(2) REQUIRED COMPONENTS.—Each railroad carrier's safety risk reduction program shall include a risk mitigation plan in accordance with this section, a technology implementation plan that meets the requirements of subsection (e), and a fatigue management plan that meets the requirements of subsection (f).

(e) TECHNOLOGY IMPLEMENTATION PLAN.—

(1) IN GENERAL.—As part of its railroad safety risk reduction program, a railroad carrier required to submit a railroad safety risk reduction program under subsection (a) shall develop, and periodically update as necessary, a 10-year technology implementation plan that describes the railroad carrier's plan for development, adoption, implementation, maintenance, and use of current, new, or novel technologies on its system over a 10-year period to reduce safety risks identified under the railroad safety risk reduction program. Any updates to the plan are subject to review and approval by the Secretary.

(2) TECHNOLOGY ANALYSIS.—A railroad carrier's technology implementation plan shall include an analysis of the safety impact, feasibility, and cost and benefits of implementing technologies, including processor-based technologies, positive train control systems (as defined in section 20157(i)), electronically controlled pneumatic brakes, rail integrity inspection systems, rail integrity warning systems, switch position monitors and indicators, trespasser prevention technology, highway-rail grade crossing technology, and other new or novel railroad safety technology, as appro-

priate, that may mitigate risks to railroad safety identified in the risk analysis required by subsection (c).

(3) **IMPLEMENTATION SCHEDULE.**—A railroad carrier's technology implementation plan shall contain a prioritized implementation schedule for the development, adoption, implementation, and use of current, new, or novel technologies on its system to reduce safety risks identified under the railroad safety risk reduction program.

(4) **POSITIVE TRAIN CONTROL.**—Except as required by section 20157 (relating to the requirements for implementation of positive train control systems), the Secretary shall ensure that—

(A) each railroad carrier's technology implementation plan required under paragraph (1) that includes a schedule for implementation of a positive train control system complies with that schedule; and

(B) each railroad carrier required to submit such a plan implements a positive train control system pursuant to such plan by December 31, 2018.

(f) **FATIGUE MANAGEMENT PLAN.**—

(1) **IN GENERAL.**—As part of its railroad safety risk reduction program, a railroad carrier required to submit a railroad safety risk reduction program under subsection (a) shall develop and update at least once every 2 years a fatigue management plan that is designed to reduce the fatigue experienced by safety-related railroad employees and to reduce the likelihood of accidents, incidents, injuries, and fatalities caused by fatigue. Any such update shall be subject to review and approval by the Secretary.

(2) **TARGETED FATIGUE COUNTERMEASURES.**—A railroad carrier's fatigue management plan shall take into account the varying circumstances of operations by the railroad on different parts of its system, and shall prescribe appropriate fatigue countermeasures to address those varying circumstances.

(3) **ADDITIONAL ELEMENTS.**—A railroad shall consider the need to include in its fatigue management plan elements addressing each of the following items, as applicable:

(A) Employee education and training on the physiological and human factors that affect fatigue, as well as strategies to reduce or mitigate the effects of fatigue, based on the most current scientific and medical research and literature.

(B) Opportunities for identification, diagnosis, and treatment of any medical condition that may affect alertness or fatigue, including sleep disorders.

(C) Effects on employee fatigue of an employee's short-term or sustained response to emergency situations, such as derailments and natural disasters, or engagement in other intensive working conditions.

(D) Scheduling practices for employees, including innovative scheduling practices, on-duty call practices, work and rest cycles, increased consecutive days off for employees, changes in shift patterns, appropriate scheduling practices for varying types of work, and other aspects of employee scheduling

that would reduce employee fatigue and cumulative sleep loss.

(E) Methods to minimize accidents and incidents that occur as a result of working at times when scientific and medical research have shown increased fatigue disrupts employees' circadian rhythm.

(F) Alertness strategies, such as policies on napping, to address acute drowsiness and fatigue while an employee is on duty.

(G) Opportunities to obtain restful sleep at lodging facilities, including employee sleeping quarters provided by the railroad carrier.

(H) The increase of the number of consecutive hours of off-duty rest, during which an employee receives no communication from the employing railroad carrier or its managers, supervisors, officers, or agents.

(I) Avoidance of abrupt changes in rest cycles for employees.

(J) Additional elements that the Secretary considers appropriate.

(g) **CONSENSUS.**—

(1) **IN GENERAL.**—Each railroad carrier required to submit a railroad safety risk reduction program under subsection (a) shall consult with, employ good faith and use its best efforts to reach agreement with, all of its directly affected employees, including any non-profit employee labor organization representing a class or craft of directly affected employees of the railroad carrier, on the contents of the safety risk reduction program.

(2) **STATEMENT.**—If the railroad carrier and its directly affected employees, including any nonprofit employee labor organization representing a class or craft of directly affected employees of the railroad carrier, cannot reach consensus on the proposed contents of the plan, then directly affected employees and such organization may file a statement with the Secretary explaining their views on the plan on which consensus was not reached. The Secretary shall consider such views during review and approval of the program.

(h) **ENFORCEMENT.**—The Secretary shall have the authority to assess civil penalties pursuant to chapter 213 for a violation of this section, including the failure to submit, certify, or comply with a safety risk reduction program, risk mitigation plan, technology implementation plan, or fatigue management plan.

(Added Pub. L. 110-432, div. A, title I, §103(a), Oct. 16, 2008, 122 Stat. 4853.)

REFERENCES IN TEXT

The date of enactment of the Rail Safety Improvement Act of 2008, referred to in subsec. (a)(1), is the date of enactment of div. A of Pub. L. 110-432, which was approved Oct. 16, 2008.

§ 20157. Implementation of positive train control systems

(a) **IN GENERAL.**—

(1) **PLAN REQUIRED.**—Not later than 18 months after the date of enactment of the Rail Safety Improvement Act of 2008, each Class I railroad carrier and each entity providing regularly scheduled intercity or commuter rail