

“(2) FINAL REGULATIONS.—Not later than October 1, 2006, the Secretary shall issue final regulations implementing the program.”

§ 20155. Tank cars

(a) STANDARDS.—The Federal Railroad Administration shall—

(1) validate a predictive model to quantify the relevant dynamic forces acting on railroad tank cars under accident conditions within 1 year after the date of enactment of this section; and

(2) initiate a rulemaking to develop and implement appropriate design standards for pressurized tank cars within 18 months after the date of enactment of this section.

(b) OLDER TANK CAR IMPACT RESISTANCE ANALYSIS AND REPORT.—Within 1 year after the date of enactment of this section the Federal 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, mainte-

nance, 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 appropriate, 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 nonprofit 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 miti-

gation 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 passenger transportation shall develop and submit to the Secretary of Transportation a plan for implementing a positive train control system by December 31, 2015, governing operations on—

(A) its main line over which intercity rail passenger transportation or commuter rail passenger transportation, as defined in section 24102, is regularly provided;

(B) its main line over which poison- or toxic-by-inhalation hazardous materials, as defined in parts¹ 171.8, 173.115, and 173.132 of title 49, Code of Federal Regulations, are transported; and

(C) such other tracks as the Secretary may prescribe by regulation or order.

(2) IMPLEMENTATION.—The plan shall describe how it will provide for interoperability of the system with movements of trains of other railroad carriers over its lines and shall, to the extent practical, implement the system in a manner that addresses areas of greater risk before areas of lesser risk. The railroad carrier shall implement a positive train control system in accordance with the plan.

(b) TECHNICAL ASSISTANCE.—The Secretary may provide technical assistance and guidance to railroad carriers in developing the plans required under subsection (a).

(c) REVIEW AND APPROVAL.—Not later than 90 days after the Secretary receives a plan, the Secretary shall review and approve or disapprove it. If the proposed plan is not approved, the Secretary shall notify the affected railroad carrier or other entity as to the specific areas in which the proposed plan is deficient, and the railroad carrier or other entity shall correct all deficiencies within 30 days 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.

(d) REPORT.—Not later than December 31, 2012, the Secretary shall transmit a report to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate on the progress of the railroad carriers in implementing such positive train control systems.

(e) ENFORCEMENT.—The Secretary is authorized to assess civil penalties pursuant to chapter 213 for a violation of this section, including the failure to submit or comply with a plan for implementing positive train control under subsection (a).

(f) OTHER RAILROAD CARRIERS.—Nothing in this section restricts the discretion of the Secretary to require railroad carriers other than those specified in subsection (a) to implement a positive train control system pursuant to this section or section 20156, or to specify the period by which implementation shall occur that does not exceed the time limits established in this section or section 20156. In exercising such discretion, the Secretary shall, at a minimum, consider the risk to railroad employees and the public associated with the operations of the railroad carrier.

(g) REGULATIONS.—The Secretary shall prescribe regulations or issue orders necessary to implement this section, including regulations specifying in appropriate technical detail the essential functionalities of positive train control systems, and the means by which those systems will be qualified.

(h) CERTIFICATION.—The Secretary shall not permit the installation of any positive train control system or component in revenue service unless the Secretary has certified that any such system or component has been approved through the approval process set forth in part 236 of title 49, Code of Federal Regulations, and complies with the requirements of that part.

(i) DEFINITIONS.—In this section:

(1) INTEROPERABILITY.—The term “interoperability” means the ability to control locomotives of the host railroad and tenant railroad to communicate with and respond to the positive train control system, including uninterrupted movements over property boundaries.

(2) MAIN LINE.—The term “main line” means a segment or route of railroad tracks over which 5,000,000 or more gross tons of railroad traffic is transported annually, except that—

(A) the Secretary may, through regulations under subsection (g), designate additional tracks as main line as appropriate for this section; and

(B) for intercity rail passenger transportation or commuter rail passenger transportation routes or segments over which limited or no freight railroad operations occur, the Secretary shall define the term “main line” by regulation.

(3) POSITIVE TRAIN CONTROL SYSTEM.—The term “positive train control system” means a system designed to prevent train-to-train collisions, over-speed derailments, incursions into established work zone limits, and the movement of a train through a switch left in the wrong position.

(Added Pub. L. 110-432, div. A, title I, §104(a), Oct. 16, 2008, 122 Stat. 4856.)

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.

¹ So in original. Probably should be “sections”.