

1 State of Arkansas
2 94th General Assembly
3 Regular Session, 2023
4

A Bill

HOUSE BILL 1768

5 By: Representative D. Whitaker
6 By: Senator R. Murdock
7

For An Act To Be Entitled

9 AN ACT TO CREATE STANDARD REQUIREMENTS CONCERNING
10 RAILROAD TRAIN DEFECT DETECTORS; AND FOR OTHER
11 PURPOSES.
12
13

Subtitle

15 TO CREATE STANDARD REQUIREMENTS
16 CONCERNING RAILROAD TRAIN DEFECT
17 DETECTORS.
18
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20 BE IT ENACTED BY THE GENERAL ASSEMBLY OF THE STATE OF ARKANSAS:
21

22 SECTION 1. Arkansas Code Title 23, Chapter 12, is amended to add an
23 additional subchapter to read as follows:

Subchapter 11 – Defect Detector Safety

24 23-12-1011. Legislative intent.
25

26 The General Assembly finds that:
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28 (1) In light of the February 2023 railroad train derailment in
29 East Palestine, Ohio, and the absence of any federal regulation of defect
30 detectors, the continuance of railroad corporations with no oversight or
31 regulation of hot box detectors operating within the state on a main line or
32 branch line exposes the public to unnecessary dangers and disruptions of
33 commerce; and

34 (2) The intent of this act is to eliminate unnecessary dangers
35 and disruptions of commerce imposed upon communities and residents of
36 Arkansas.



1
2 23-12-1102. Definitions.

3 As used in this subchapter:

4 (1) "Defect detector" means an electronic device:

5 (A) That scans passing railroad trains or equipment for a
6 defect, including without limitation a defect in the:

7 (i) Hot wheel bearing;

8 (ii) Hot wheel;

9 (iii) Acoustic bearing detection; or

10 (iv) Dragging equipment as a primary function;

11 (B) That may be integrated to detect excessive height or
12 excessive wide shipments and shifted lading; and

13 (C) With wheel impact integration or that stands alone as
14 a singular unit to detect a wheel defect;

15 (2)(A) "Railroad" means a form of non-highway ground
16 transportation that runs on rails or electromagnetic guideways within this
17 state, including without limitation:

18 (i) Commuter railroad service or other short-haul
19 railroad passenger service in a metropolitan or suburban area; and

20 (ii) High-speed ground transportation systems that
21 connect metropolitan areas, without regard to whether those systems use new
22 technologies not associated with traditional railroads.

23 (B) "Railroad" does not include rapid transit operations
24 in an urban area that are not connected to the general railroad system of
25 transportation;

26 (3) "Railroad corporation" means all corporations, companies, or
27 individuals owning or operating any railroad in this state whether as owner,
28 contractor, lessee, mortgagee, trustee, assignee, or receiver;

29 (4)(A) "Railroad train" means one (1) or more locomotives
30 coupled with or without cars, requiring an air brake test in accordance with
31 49 C.F.R. § 232, as it existed on January 1, 2023, or 49 C.F.R. § 238, as it
32 existed on January 1, 2023, including without limitation:

33 (i) A single locomotive;

34 (ii) Multiple locomotives coupled together; or

35 (iii) One (1) or more locomotives coupled with one
36 (1) or more cars.

1 (B) "Railroad train" does not include a locomotive or car
 2 during switching operations or when the operation of the locomotive or car is
 3 that of classifying and assembling cars within a railroad yard for the
 4 purpose of making or breaking up railroad trains;

5 (5) "Restricted speed" means a speed that permits a railroad
 6 train to stop within one half (1/2) the range of vision but does not exceed
 7 twenty miles per hour (20 m.p.h.); and

8 (6) "Trending defect detector technology" means an algorithm
 9 technology applied to a defect detector that allows for communication from
 10 one (1) defect detector to another to predict or detect a defect, including
 11 without limitation the communication of:

12 (A) The changing temperature of wheel bearings on railroad
 13 equipment;

14 (B) Acoustic information; or

15 (C) Other data that would lead to the discovery of a
 16 failure of the rolling equipment.

17
 18 23-12-1103. Defect detector minimum requirements.

19 (a) A defect detector installed within the state shall be equipped
 20 with a:

21 (1) Hot box detector;

22 (2) Hot wheel detector; and

23 (3) Dragging equipment detector technology.

24 (b)(1) A defect detector shall be equipped with an audible alarm that
 25 is assigned to the Association of American Railroads frequency assigned to
 26 the specific territory in which the defect detector is located.

27 (2) In the event of a defect, the:

28 (A) Alarm shall sound over the assigned radio channel
 29 three (3) consecutive times for no longer than five (5) seconds and with five
 30 (5) seconds of silence in between the sounding of the alarm;

31 (B) Defect detector shall repeat an audible message three
 32 (3) times with twenty (20) seconds of silence between messages stating the
 33 following information to the operating crew or person, the:

34 (i) Detector location milepost and name;

35 (ii) Track number in multiple track territory;

36 (iii) Total number of axles in the railroad train,

1 which shall include motive power; and

2 (iv) Location of defects within the railroad train
3 or equipment.

4 (3) If no defects are found the defect detector shall provide an
5 audible message to the operating crew or person stating the following:

6 (A) The location of the defect detector milepost and name;

7 (B) The track number in multiple track territory;

8 (C) The total number of axles in the railroad train, which
9 shall include motive power;

10 (D) Railroad train speed; and

11 (E) A no defects message, including a "repeat no defects,
12 out" message.

13
14 23-12-1104. Trending defect detector technology.

15 (a) A defect detector equipped with trending defect detector
16 technology or similar technology shall not have a silent alarm and shall be
17 listed to all railroad personnel operating equipment on the railroad tracks.

18 (b) After a railroad train passes a defect detector with trending
19 defect detector technology and a trending defect issue is detected, the
20 following procedure is required:

21 (1) The railroad train shall stop in accordance with safe
22 railroad train handling procedures issued by the railroad corporation;

23 (2) An inspection of the railroad train shall be made by the
24 operating crew from a position on the ground;

25 (3) The railroad train inspection results shall be noted and
26 presented to the appropriate officer of the railroad corporation, dispatcher,
27 or qualified person; and

28 (4) Based on the inspection results, the railroad train may
29 proceed at a speed that does not exceed ten miles per hour (10 m.p.h.) if
30 carrying hazardous materials or thirty miles per hour (30 m.p.h.) if the
31 railroad train is not carrying hazardous materials.

32 (c) After a railroad train passes a defect detector with trending
33 defect detector technology and a trending defect issue is detected for the
34 second time, the following procedure is required:

35 (1) The railroad train shall stop in accordance with safe
36 railroad train handling procedures issued by the railroad corporation;

1 (2) The railroad train or equipment shall be inspected by a
2 position on the ground and a determination shall be made by a qualified
3 person whether the railroad train is safe to move;

4 (3) After the inspection required under subdivision (c)(2) of
5 this section, the equipment shall be set out immediately at the nearest
6 siding, spur, or designated repair track; and

7 (4) The equipment shall not be moved unless a qualified person
8 has thoroughly inspected the equipment and has repaired the equipment.

9
10 23-12-1105. Installation of defect detector.

11 (a) A defect detector shall be installed every ten (10) miles.

12 (b) If the terrain does not permit the installation of a defect
13 detector, a defect detector shall be installed at least fifteen (15) miles
14 from the location of the previous defect detector.

15 (c)(1) If installment of a defect detector is not possible, a railroad
16 train shall proceed at a restricted speed through the area until passing the
17 next defect detector.

18 (2) The railroad train may resume timetable speed if the defect
19 detector indicates that the railroad train has no defects.

20
21 23-12-1106. Publishing.

22 A railroad corporation shall publish and make known to all operating
23 crews and personnel that operate equipment over railroad tracks and all types
24 of defect detectors the following:

25 (1) A railroad train receiving an alarm from any form of defect
26 detector or a defect detector equipped with trending defect detector
27 technology or similar technology in use shall reduce speed in accordance with
28 the railroad corporation's operating rules until the defect detector is
29 cleared;

30 (2) After receiving the defect detector message indicating a
31 defect, the railroad train shall stop in accordance with the railroad
32 corporation's operating rules and inspect the railroad train from a position
33 on the ground;

34 (3) A railroad train receiving a defect message of dragging
35 equipment or a similar message shall stop immediately in accordance with the
36 railroad corporation's operating rules and inspect the railroad train from a

1 position on the ground;

2 (4) If defects are found then the railroad train shall be
3 inspected based on the industry standard of twenty (20) axles before and
4 after the reported defect on both sides of the equipment;

5 (5) Inspections shall not be made from a vehicle or any form of
6 transportation; and

7 (6) A person shall not relieve railroad train operating crew or
8 an operator of any form of railroad equipment from inspections under this
9 section while operating the equipment within the state.

10
11 23-12-1107. Extra axles.

12 (a) If a defect detector detects that a railroad train has at least
13 two (2) fewer axles than the number of axles that should be in the railroad
14 train, the discrepancy shall be reported to the proper railroad authority in
15 charge of railroad train movement on the territory.

16 (b) If the axle count provided by a defect detector is at least two
17 (2) axles or more than the number of axles known to be in the railroad train,
18 the following procedure is required:

19 (1) The proper railroad authority governing train movement on
20 the territory shall be notified;

21 (2) The extra equipment or extra railroad train shall be
22 identified within five (5) miles of the location where the defect detector
23 reported the defect;

24 (3) If communication is not established with the proper
25 governing railroad authority, all movement of the railroad train shall stop
26 within five (5) miles from the location where the defect detector reported
27 the defect;

28 (4) The railroad train shall not proceed unless the equipment
29 has been identified;

30 (5) If the extra equipment is known to be hazardous, the
31 railroad train shall not proceed without a radio waybill or proper
32 documentation; and

33 (6) Employees at the operating controls of moving equipment
34 shall not be permitted to copy or repeat radio waybill information.

35
36 23-12-1108. Civil penalty – Compromise.

1 (a)(1) A person or railroad corporation who violates this subchapter
2 is subject to a civil penalty of at least ten thousand dollars (\$10,000) but
3 not more than twenty-five thousand dollars (\$25,000) for each day that the
4 violation persists.

5 (2) If the Director of State Highways and Transportation finds
6 the violation to be grossly negligent or that a pattern of repeated
7 violations has caused an imminent hazard of death or injury or has caused
8 death or injury to an individual, the person or the railroad corporation that
9 violates this subchapter is subject to a one-time fine of five hundred
10 thousand dollars (\$500,000).

11 (3) The civil penalties collected under subdivisions (a)(1) and
12 (2) of this section shall be deposited into a general fund account of the
13 Arkansas Department of Transportation to be used for the maintenance, repair,
14 and construction of the state highway system.

15 (b) If a violation of this subchapter results in a railroad train
16 derailment in the vicinity of a municipality triggering a one-time civil
17 penalty under subdivision (a)(2) of this section, the civil penalty collected
18 shall be split evenly between the Arkansas Department of Transportation and
19 the affected municipality.

20 (c)(1) The Director of State Highways and Transportation may
21 compromise the amount of the civil penalty under subsection (a) of this
22 section.

23 (2) In determining the amount of a compromise, the director
24 shall consider:

25 (A) The nature, circumstances, extent, and gravity of the
26 violation;

27 (B) With respect to the violator, the degree of
28 culpability, any history of violations, the ability to pay, and any effect on
29 the ability to continue to do business; and

30 (C) Any other matters that law requires.

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32 23-12-1109. Compliance.

33 Upon the effective date of this act, a railroad corporation operating
34 within the state shall have twelve (12) months to complete modifications to
35 railroad infrastructure to ensure compliance with this subchapter.

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