

CHAPTER 427—H. F. No. 462

An act relating to railroad fire patrolmen, their equipment; patrol or railroad rights-of-way, locomotive ash pans and spark arresters, inspection of fire protective appliances, reports and authorized forms; and to amend Mason's Minnesota Statutes of 1927, Section 4031-26, and Section 4031-27, as amended by Laws 1929, Chapter 349, and by Laws 1931, Chapter 266.

Be it enacted by the Legislature of the State of Minnesota:

Sec. 1. Law amended.—Mason's Minnesota Statutes of 1927, Section 4031-26, is hereby amended so as to read as follows:

“4031-26. Railroad companies to provide patrolmen.—When in the judgment of the *director* there is danger of the setting and spreading of fires from locomotive engines, he shall order any railroad company to provide patrolmen to follow each train throughout such fire patrol district or districts as he deems necessary to prevent fires. *From and after April 1, 1939, such patrolmen shall be equipped with a patrol speeder or some other suitable conveyance and such railroad patrolman shall carry with him on such conveyance when performing patrol duty one number two shovel and a suitable container with a double acting pump attached thereto, commonly called a “pump tank,” holding at least five gallons of water, such pump tank to be kept filled with water ready for use and maintained in such condition at all times that under normal operation of the pump a stream of water can be forced through a 3/16 inch diameter nozzle a distance of at least 20 feet.* When the *director* has so notified a railroad company to provide such patrol after trains, the said railroad company shall immediately comply with requirements of such notice throughout the territory designated; and upon its failure so to do, the *director* may employ patrolmen with the necessary equipment to patrol the rights-of-way of said railroad, and the expense of the same shall be charged to the said railroad company and may be recovered in a civil action in the name of the State of Minnesota, and in addition thereto the said company shall be guilty of a misdemeanor. All moneys so recovered shall be paid into the state treasury and credited to the appropriation from which such expenses were paid.

The *director* may prescribe such other measures as are considered by him to be essential for the immediate control of fire.

It is also made the duty of any railroad company acting independently of such *director*, to patrol its right-of-way after the passage of each train when necessary to prevent the spread of fires and to use the highest degree of diligence to prevent the setting and spread of fire, to cause the extinguishment of fires set by locomotives or found existing upon their respective rights-of-way; and any failure of such railroad company, its officers and patrolmen to comply with this section shall be a misdemeanor and shall be punished by a fine of not less than \$50.00 nor more than \$100.00 and costs, and in addition thereto such railroad company shall be liable for all expenses and damages caused by or resulting from such failure of duty."

Sec. 2. Law amended.—Mason's Minnesota Statutes of 1927, Section 4031-27 as amended by Laws 1929, Chapter 349, and by Laws 1931, Chapter 266, is hereby amended so as to read as follows:

"4031-27. Reports by railroad companies.—Subsection (1). —*When the director of the division of forestry has reason to believe that a certain locomotive caused a fire he can order the railroad company to forward to him, at once, by mail, a written report covering the inspection of the fire protective appliances of such locomotive, made next after the occurrence of the fire. Such written report shall be copied from the inspection book required to be kept by the railroad company under this act. Every person operating a railroad for any purpose shall equip and use upon each locomotive engine a practical and efficient ash pan and spark arrester device, which the master mechanic or corresponding skilled employe of such operator shall cause to be inspected each time before such locomotive leaves the roundhouse or starts on any trip, between the dates of March 1 and November 30, both dates inclusive, of each year; provided, however, that it shall not be required to make more than one such inspection of any one engine within a period of 24 hours. Between the dates of December 1 and February 28, both dates inclusive, of each year, such inspection shall be made at intervals of not more than seven days. Where spark arresters are equipped with a manhole door such door shall be removed at the time of inspection and replaced before an engine goes on any trip. Such ash pan and spark arrester device shall be constructed and operated in conformity and in compliance with all the following specifications and rules, to-wit:*

(a) Except when the ash pan is being cleaned, the hopper opening for removal of cinders on ash pans constructed

with hoppers shall be kept closed while the engine is in use by a cast slide supported by cast guides; and there shall be no opening greater than *five-sixteenths* of an inch between the slide and hopper; or such openings in hoppers for removal of cinders may be closed by what is known as the "radial type of hopper bottom," the general design of which shall be approved in writing by the *director*.

(b) Ash pans commonly known as solid or swipe pans shall have the ends, if open, covered either with a substantially constructed solid damper or screen damper, which shall extend at least *one and one-fourth* inside or outside the pan when closed, leaving no opening greater than *five-sixteenths* of an inch in width, so arranged that it can be fastened down, and kept fastened down when the engine is in use. If a screen is used, it shall conform to the specifications for use in spark arresters, as contained in this act.

(c) Openings in ash pans for draught purposes shall be protected by screens bolted firmly and securely over such openings, or by the use of deflector plates in place of screens, provided that any deflector plate used for such purpose shall extend above or below (as the case may be) the opening to be protected a distance at least equal to the width of such opening; and, provided, further, that any such deflector plate so used shall be closed in at each end thereof. All screens so used and the bolting in place thereof shall conform to the specifications for spark *arresters*, as contained in this act.

(d) On locomotive engines where there is an opening between ash pan and the foundation ring, protection shall be furnished by a *flare brought up level with the bottom of the foundation ring, such flare being either an integral part of the pan or attached to the body of the pan by bolts, rivets or hinges. Where hinges are used the flare shall have suitable locking devices and the hinges and locking devices shall be so spaced and maintained in such condition as to hold the flare securely in place*, and the opening between the bottom of the foundation ring and flare of pan, measured horizontally, shall not be greater than eight inches at any point; provided, however, that for any distance the flare of pan extends above the bottom of foundation ring, the flare may be extended out horizontally an equal distance in excess of eight inches. Or such opening between ash pan and foundation ring may be protected by deflector plates, provided that any deflector plates used for such purposes shall extend above or below (as the case may be) the opening to be protected a distance at least equal to the width of such opening; and provided further that

any such deflector plate so used shall be closed in at each end thereof.

(e) Openings in ash pans for entry of grate connections must be fully protected; and the openings around the rods where they enter the ash pan must not be greater than *five-sixteenths* of an inch in width, or the grate connections outside the ash pan must be boxed in for their full length so that no sparks or cinders can possibly escape.

(f) Plates and angle irons used in ash pans, including all fire protective devices attached thereto, shall not be less than one-fourth of an inch in thickness, and the ash pans, including all fire protective devices attached thereto, shall be so constructed, and maintained in such condition, that there shall be no opening in excess of five-sixteenth of an inch in width.

Material used in construction or repair of ash pans shall be of iron or steel securely bolted or riveted or welded in place. No cement, putty, asbestos, or other material or substance other than iron or steel shall be applied to, laid on, attached to or used in any way in connection with or made a part of ash pans.

From and after May 1, 1933, the spacing of bolts, rivets, studs and other fastening devices in sheet iron and steel plates whether fastened to other plates, castings, forgings or other parts when used in the construction or repair of ash pans and all fire protective appliances attached thereto, shall not be greater than three and three-fourths inches center to center.

The spacing of bolts, rivets, studs and other fastening devices in castings, used in the construction of ash pans and all fire protective appliances attached thereto, shall be such as to hold the casting securely in place.

(g) Such ash pans shall be equipped with swipes, injector overflow or other sprinkling devices, and ashes and coals therein shall be kept extinguished and dampened at all times between April 15 and October 31, both dates inclusive, of each year, and during such additional period, in any particular territory, as may be specified in writing by the *director*.

(h) Spark *arrester* screens shall be either square mesh wire screen or oblong mesh wire screen or perforated plate, and shall conform to the following specifications:

SQUARE MESH WIRE SCREEN

Mesh per lineal inch in either direction	Least diameter of wire when new	Condemning limit of opening in mesh in either direction
2½ by 2½	0.134 inch	19/64 inch
2-2/3 by 2-2/3	0.134 inch	19/64 inch
3 by 3	0.105 inch	17/64 inch
4 by 4	0.092 inch	0.204 inch
5 by 5	0.072 inch	0.164 inch
6 by 6	0.063 inch	0.1355 inch
7 by 7	0.063 inch	0.1115 inch

Fractional mesh shall not be used except as specified.

OBLONG MESH WIRE SCREENS

Size of opening mesh	Least diameter of wire when new	Condemning limit of opening in mesh
3/16 by 3/4 inch	0.134 inch	1/4 by 13/16 inch
1/8 by 3/4 inch	0.134 inch	3/16 by 13/16 inch

The openings in perforated plates when new shall be oblong, not exceeding *three-sixteenths* of an inch in width nor *three-fourths* of an inch in length, and there shall not be less than *one-eighth* of an inch in width of plate between the meshes, and such plate shall not be less than 0.085 of an inch in thickness. The condemning limit of the openings in perforated plate shall be *one-fourth* of an inch in width and *thirteen-sixteenths* of an inch in length.

(i) The spark *arrester* screen shall have a manhole door with a substantial rigid frame, large enough to allow the entry for purposes of inspection and repair.

(j) All angle irons and plates used for the purpose of attaching or supporting any part of the spark arrester device shall be so placed as to fit closely and continuously to the smoke arch, plates, angle irons, and other parts.

(k) Plates used in the construction or repair of spark *arresters* wherever attached, shall not be less than three-sixteenths of an inch in thickness.

From and after May 1, 1931, angle irons used in spark *arresters* shall be of sections in size not less than one-fourth of an inch by two inches by two inches, on all locomotive engines unless otherwise authorized in writing by the *director*. The spacing of rivets, bolts, studs and other fastening devices used in spark *arresters* shall not be greater than set forth in the following specifications:

Fastening screens—*three and one half* inches center to center.

Fastening angle irons to smoke arch—*eight* inches center to center.

Fastening plates—*five* inches center to center.

Fastening angle irons to flue sheet—*eight* inches center to center.

Material used in the construction or repair of spark *arresters* shall be of iron or steel securely bolted or riveted or welded in place. No cement, putty, asbestos, or other material or substance other than iron or steel shall be applied to, laid on, attached to or used in any way in connection with or made a part of spark *arresters* except upon written approval of the *director*. No opening anywhere in the spark *arresters* device, other than the openings herein specified for wire screen and perforated plate, shall be larger than one-fourth of an inch in width.

(1) Devices and appliances differing from those specified in this subsection may be used for experimental purposes only by written permission of the *director* during such limited periods and upon such terms and conditions as he may prescribe. Such written permission shall be subject to revocation by the *director* at any time, and such experimental devices or appliances shall not be permanently adopted unless authorized by law.

(m) *Permission is hereby given to use as a spark arrester on all types of engines using wood, coal, oil or other fuels the so-called "Cyclone Spark Arrester." Such arrester shall consist primarily of a drum with entrance so arranged that the products of combustion shall be given a rotary motion within the drum to the extent that all sparks shall be sufficiently cooled before leaving the stack as to preclude such sparks reaching the ground alive. The drum shall be constructed of iron or steel at least one-fourth inch in thickness. The number of fastenings shall be such as to hold the plates and other parts securely in position, and all parts of the spark arrester which are essential to its proper operation shall be maintained in a safe and serviceable condition at all times.*

Permission is hereby given to use as a spark arrester on all types of engines using wood, coal, oil and other fuels the so-called "Anderson Spark Eliminator". Such spark eliminator shall consist primarily of a top ring set horizontally and attached to the extension stack, a bottom ring set horizontally and attached to the exhaust pipe, deflector plates set vertically in between the two rings, such deflector plates being arranged

suitably around the exhaust nozzle. Plates used in the construction of the spark eliminator shall be of iron or steel at least one-fourth inch in thickness and the number of fastenings shall be such as to hold the plates and other parts securely in position. All parts of the spark eliminator which are essential to its operation shall be maintained in a safe and suitable condition at all times.

Subsection (2). A record shall be kept of all examinations required by this section, in a book to be furnished by every person operating a railroad for any purpose, showing:

(a) The place and number of each engine inspected.

(b) The date and hour of day of such inspection.

(c) A detailed statement signed by the *employee* making the inspection, giving location and size of openings greater than permitted by this act and of any and all defects found in the ash pan or spark arrester device, and of the condition thereof.

(d) A detailed statement, signed by the employee making the same, of any and all repairs, replacements or renewals made at any time on or in connection with the ash pan or spark arrester device.

The said book shall always be open for inspection by the *director* or other authorized officer appointed by him.

Subsection (3) (a). The master mechanic or corresponding *employee* shall be held responsible for the good condition of the ash pan and spark arrester device, but without relieving the person owning or operating such locomotive engine from his responsibility hereunder.

(b) Any locomotive inspector appointed by the *director* is authorized to inspect any locomotive engine operated in the vicinity of forest, brush, peat or grass lands, and to enter upon any property for such purpose whenever he may deem it necessary in order to see that all the provisions of this act and of other acts relating to the subject matter hereof are duly complied with. *When the inspector requests the person in immediate charge of such locomotive that he be accompanied while making the inspection by a representative of the person owning or operating such locomotive such request shall be immediately complied with and either the roundhouse foreman, assistant roundhouse foreman, boiler foreman or corresponding employee shall accompany the inspector during the time he is making such inspection.* Such inspector shall have access

to the records of every person operating a railroad for any purpose, and authority to make copies thereof, showing the locations and movements of all locomotive engines within this state, and is authorized to use such methods as he may deem advisable in making up his records and substantiating his findings. No locomotive shall be operated in the vicinity of forest, brush, peat or grass lands after being found defective by such inspector and after notice of such condition has been given to the person in charge thereof, until the repairs specified by the inspector have been made, except where locomotive is found defective on line it may proceed to the first terminal or point where repairs can be made.

(c) Any violation of the provisions of this subsection shall be a gross misdemeanor; provided, *however*, that the provisions of this subsection shall not relieve anyone from any duty or liability under any provision of this act or any other statute.

Subsection (4). Every person operating a railroad for any purpose shall keep its right-of-way clear of grass, brush, combustible materials, logs, poles, lumber and wood, except ties and material for shipment and other material necessary for the maintenance and operation of the road, from March 15 to December 1. During particularly dry and dangerous periods the forester may prohibit any and all burning along part or all of any railroad right-of-way for a definite period.

Subsection (5). Every person operating a railroad for any purpose shall establish and maintain such firebreaks along the route of its railway as can be constructed and maintained at *not excessive expense*. The intention shall be to adjust the protective measures to the local conditions, and to make the expense proportionate to the fire risk and the possible damage.

Subsection (6) (a). Except when the ground is covered with snow, no donkey engine, tractor engine, saw mill engine, threshing engine, steam shovel, railroad ditcher, railroad wrecker, or portable engine or other engine or boiler (except any locomotives conforming to all the requirements of this act) shall be operated in the vicinity of forest, brush, peat or grass lands, unless and until the same is provided with a practical and efficient spark arrester device.

(b) No gas tractor or internal combustion engine shall be operated in the vicinity of peat roads or loose peat lands, unless and until the same is provided with a practical and efficient spark arrester device.

(c) The person in charge of such engine or boiler shall be held responsible for the good condition of the spark arrester device, but without relieving the person owning or operating such engine from his responsibility hereunder. Any locomotive inspector appointed by the *director* is authorized to inspect any donkey engine, tractor engine, saw mill engine, threshing engine, steam shovel, railroad ditcher, railroad wrecker, or portable engine or other engine or boiler operated in the vicinity of forest, brush, peat or grass lands and also gas tractors and internal combustion engines operated in the vicinity of peat roads or peat lands and to enter upon any property for such purpose whenever he may deem it necessary in order to see that all the provisions of this act and of other acts relating to the subject matter hereof are duly complied with and is authorized to use such methods as he may deem necessary in making up his records and substantiating his findings.

(d) No donkey engine, tractor engine, saw mill engine, threshing engine, steam shovel, railroad ditcher, railroad wrecker, or portable engine or other engine or boiler shall be operated in the vicinity of forest, brush, peat or grass lands, and no gas tractor or internal combustion engine shall be operated in the vicinity of peat roads or loose peat lands, after being found defective by such inspector and after notice of such condition has been given the person in charge thereof, until the repairs specified by the inspector have been made. Any violation of the provisions of this paragraph shall be a gross misdemeanor; provided, that the provisions of this paragraph shall not relieve anyone of any duty or liability under any other provisions of this act or any other statute.

(e) No person operating a donkey engine, tractor engine, saw mill engine, threshing engine, steam shovel, railroad ditcher, railroad wrecker, or portable engine or other engine or boiler shall leave a deposit of fire, live coals or ashes in the immediate vicinity of forest lands or lands liable to be overrun by fire.

Subsection (7). No person operating a railroad for any purpose shall leave a deposit of fire, live coals or ashes in the immediate vicinity of forest land or lands liable to be overrun by fire; and every engineer, conductor or trainman discovering a fire adjacent to the track shall report the same promptly to the agent at the first telegraph or telephone station reached by him, whose duty it shall be, as representative of such company, at once to take necessary steps to put out such fire.

Subsection (8). Every person operating a railroad for

any purpose shall give its *employees* particular instructions for the prevention and extinguishment of fires, and shall cause warning placards such as are approved by the *director* to be conspicuously posted at every station in the vicinity of forest, peat, brush and grass lands, and when a fire occurs on the right-of-way of its road, shall immediately concentrate such help and adopt such measures as shall be available for its extinguishment.

Subsection (9). Any person operating a railroad for any purpose shall make written report to the *director*, in such form as the *director* may prescribe, covering each fire in the open on or adjacent to the right-of-way of such railroad—within one week after the occurrence of such fire, unless such time shall be extended by written permission of the *director*, provided, that the provisions of this subsection shall not be construed to relieve any person from the duty of reporting such fire as required by any other law.

Subsection (10). Whenever any combustible material shall be left in proximity to any railroad, either without proper protection or so as to constitute a fire menace, it shall be the duty of the owner of such material, upon being notified in writing by the *director* or any forest ranger, as to the nature and extent of the protection required, forthwith to comply with all the terms of such notice so as properly to protect such material, or remove the same; and upon default of the owner, such protection or removal may be accomplished under the direction of the *director* and the expense thereof collected from such owner.

Subsection (11). Every person operating a railroad for any purpose who shall fail to equip and use upon each locomotive engine a practical and efficient ash pan and spark arrester device, constructed and operated in conformity with all the specifications and requirements set forth in this act, shall be liable to a penalty of \$500.00 per day for each and every day on which such defective locomotive is run within this state. Upon receipt of duly verified information disclosing that a violation has occurred, the attorney general may bring suit in the district court of Ramsey County, or of any other county at his election, for the recovery of such penalties, which when so collected shall be credited to the general revenue fund of the state.

Subsection (12). *All forms, records, placards and notices of any kind, required to be printed by the companies under this act shall be "approved" by the director every two years, beginning May 1, 1939, and said forms can be ordered changed.*

at such periods. Any new forms, records, placards and notices of any kind so ordered shall be put in use at once unless written permission is given by the director for the use of the old form until the supply then on hand is exhausted."

Approved April 22, 1939.

CHAPTER 428—H. F. N. 547

An act to appropriate money from the general revenue fund of this state, not otherwise appropriated, to the Minnesota State Agricultural Society to be used to equip the 4-H building on the Minnesota State Fair Grounds.

Be it enacted by the Legislature of the State of Minnesota:

Section 1. **Appropriation for 4-H Club building.**—There is hereby appropriated out of the General Revenue Fund of this state, not otherwise appropriated, the sum of \$20,000 to the Minnesota State Agricultural Society for the purchase of the necessary furniture and furnishings for the 4-H Club Building on the Minnesota State Fair Grounds, consisting, principally, of demonstration and exhibit equipment, platforms, tables, chairs and benches, cots, bedding, tableware, kitchen utensils, and other similar articles required for the proper showing of 4-H Club activities, for the boarding and lodging, the health and the general care of the 4-H Club boys and girls during the presentations of their project achievements while assembled on the Minnesota State Fair Grounds.

Approved April 22, 1939.

CHAPTER 429—H. F. No. 791

An act relating to the hours of sale of intoxicating liquor in cities of the first class; and to amend the 1938 Supplement to Mason's Minnesota Statutes of 1927, Section 3200-28.

Be it enacted by the Legislature of the State of Minnesota:

Section 1. **Law amended.**—The 1938 Supplement to Mason's Minnesota Statutes of 1927, Section 3200-28, is hereby amended so as to read as follows:

"3200-28. **Hours of sale of intoxicating liquors in certain cities.**—No sale of intoxicating liquor shall be made on Sunday