

BILL

No. 16 of 1929

An Act respecting Boilers and Other Pressure Vessels

(Assented to _____, 1929.)

HIS MAJESTY, by and with the advice and consent of the Legislative Assembly of the Province of Alberta, enacts as follows:

1. This Act may be cited as "The Boilers Act, 1929."

2. In this Act, unless the context otherwise requires—

- (a) "Air receiver" shall mean a vessel used for containing air under pressure, over six inches in diameter, and one and one-half cubic feet in volume, at a pressure of over fifty pounds to the square inch;
- (b) "Boiler" shall mean any boiler in which steam is generated or stored under pressure and having a greater capacity than two horse-power, and includes the engine or engines, all apparatus, appliances, connections and things attached thereto or connected therewith, if any, but does not include a boiler of a heating plant in a private residence occupied by not more than two families;
- (c) "Certificate" means a certificate issued to an engineer or fireman under the provisions of this Act;
- (d) "Chief engineer" shall mean the engineer having the control and direction of a steam plant in which more than one engineer is employed;
- (e) "Department" shall mean the Bureau of Labour;
- (f) "Horse-power" shall mean the unit of capacity of a boiler, calculated at the rate of one horse-power for each ten square feet of the superficial heating surface of such boiler;
- (g) "Inspection certificate" shall mean the certificate issued by an inspector in respect of any pressure vessel;
- (h) "Inspector" shall mean the Chief Inspector and any inspector appointed under the provisions of this Act;
- (i) "Locomotive boiler" shall mean a boiler mounted on wheels and operated on a railway;
- (j) "Minister" shall mean the Minister charged with the administration of this Act.

- (k) "Oil still" shall mean an apparatus for refining oil in commercial quantities by the application of heat, or for evaporating, breaking up, or cracking the constituents thereof,
- (l) "Owner" shall include any person who is the owner or lessee of a pressure vessel, and the manager or other officer in charge of the local business of such person,
- (m) "Person" shall include a body corporate,
- (n) "Portable boiler" shall mean a boiler mounted on wheels, on skids or on a truck or carriage in such a way as to be movable from place to place,
- (o) "Prescribed" shall mean prescribed by regulations made under the provisions of this Act,
- (p) "Pressure vessel" shall mean an air receiver, or a boiler, or an oil still or a refrigerating plant;
- (q) "Refrigerating plant" shall mean the complete installation of machinery, by which refrigerants are vaporized, compressed and liquified in their refrigerating cycle, which has a capacity of at least three tons for every period of twenty-four hours, and includes the liquid receiver connected therewith,
- (r) "Semi-portable boiler" shall mean a boiler mounted on skids or otherwise, so as to enable it to be moved from place to place, and shall include boilers used for any temporary purpose which are not set in blockwork or other permanent setting,
- (s) "Stationary boiler" shall mean any boiler other than a portable boiler, a tractor boiler, a semi-portable boiler or locomotive boiler,
- (t) "Steam plant" shall mean the complete installation of boilers, engines, machinery and appliances of all descriptions operated by steam and under the same management and in the same undertaking;
- (u) "Tractor boiler" shall mean the boiler of a traction engine

APPLICATION

3. This Act shall apply to all steam plants and pressure vessels in the Province of Alberta, which are within, or subject to, the legislative power of the Province.

4.—(1) The Lieutenant Governor in Council may from time to time make regulations not inconsistent with this Act—

- (a) as to the construction, installation, inspection and operation of all pressure vessels, and the registration of their design and specifications;
- (b) as to the examination of all applicants for certificates under this Act and the nature of the examination, the standards of qualification for any certificate and any matter of thing relating or incidental thereto;

- (c) providing for the granting, renewal, suspension or cancellation of any certificate.
- (d) as to the issue and effect of temporary certificates.
- (e) as to penalties for the breach of any regulation, not to exceed one hundred dollars as a maximum,
- (f) fixing the fees payable for any inspection, and for any other service rendered by an inspector under this Act, and for any examination and for the issue of any certificate.
- (g) as to the records to be kept by inspectors;
- (h) as to the times at which inspections of the various classes of pressure vessels shall be made,
- (i) as to the methods of inspection of pressure vessels including the application of tests,
- (j) as to the classification of boilers and other pressure vessels, for the purpose of inspection or otherwise,
- (k) as to the methods of preparing boilers or other pressure vessels for inspection;
- (l) as to the standard of qualification and the examination of welders who may weld pressure vessels,
- (m) generally as to any matter or thing relating to the discharge of any duty or function of any officer appointed under this Act.

(2) All such regulations shall be laid upon the table of the House at the next ensuing session of the Legislative Assembly, and, unless previously disapproved of, shall at the end of such Session be of the same validity as if set out in detail in this Act.

5.—(1) No person shall sell any pressure vessel or any accessory connected therewith, unless the same has been constructed in accordance with the regulations governing design and mode of construction.

(2) No person shall install any steam plant or pressure vessel, unless the same has been constructed in accordance with the regulations governing design and mode of construction.

(3) Any person contravening any of the provisions of this section shall be liable upon summary conviction to a penalty not exceeding two hundred and fifty dollars and costs, and not less than fifty dollars and costs.

INSPECTORS, INSPECTION AND INSPECTION CERTIFICATES

6.—(1) The Lieutenant Governor in Council may appoint a chief inspector of boilers and machinery and inspectors of boilers and machinery and may fix his or their remuneration and may assign to any inspector a particular portion of the Province within which he shall have jurisdiction under this Act.

- (2) No person shall be appointed an inspector unless—
- (a) he is a British subject; and
 - (b) he has had at least five years' experience as a practical machinist or boiler-maker; and
 - (c) he is the holder of a first-class engineer's certificate; and
 - (d) he is not interested directly or indirectly in the sale of pressure vessels or machinery or accessories thereof; and
 - (e) he has passed a satisfactory examination before a board of examiners composed of inspectors or such other persons as the Minister may direct.

7.—(1) No person shall operate or cause or permit to be operated any pressure vessel except during the subsistence of a certificate of inspection with regard to the same.

(2) Any person contravening any of the provisions of this section shall be liable upon summary conviction to a penalty not exceeding two hundred and fifty dollars and costs, and not less than fifty dollars and costs.

8.—(1) The owner of every pressure vessel shall prepare the same or cause it to be prepared for inspection in such manner as may be prescribed by the regulations.

(2) Any person contravening any of the provisions of this section shall be liable upon summary conviction to a penalty not exceeding fifty dollars and costs, and not less than ten dollars and costs.

9. Every inspector making an inspection shall, if he finds the pressure vessel inspected to be in safe working order and properly set up with the prescribed fittings, issue an inspection certificate in respect thereof, and any such certificate shall state the maximum pressure at which the vessel may be operated.

10.—(1) Every such certificate shall subsist until the same is cancelled either by expiration of the period limited therein, if any, or by an inspector upon a visit of inspection or otherwise, as prescribed by the regulations.

(2) Any person in possession of a cancelled certificate, shall immediately deliver it up to an inspector upon request made by him.

(3) Any person contravening subsection (2) shall be liable upon summary conviction to a penalty not exceeding fifty dollars and costs, and not less than ten dollars and costs.

11.—(1) An inspector may at any time inspect any pressure vessel, when he deems inspection thereof necessary or in the interests of safety, and upon making any such inspection, the inspector may make any order as to the

future management and operation of the vessel as he may deem necessary and may forbid the further operation of the vessel until his requirements have been complied with.

(2) Any person disobeying any order made by an inspector under the provisions of subsection (1), or operating any pressure vessel when forbidden so to do by an inspector, shall upon summary conviction be liable to a penalty not exceeding two hundred and fifty dollars and costs, and not less than fifty dollars and costs.

12.—(1) An inspector may at any time give written instructions for the safe operation of any pressure vessel or for the washing out and cleaning of the interior thereof, and upon such written instructions being given, the pressure vessel shall not be operated until such instructions have been complied with.

(2) Any person failing to comply with any such instruction or operating a pressure vessel in contravention of subsection (1), shall upon summary conviction be liable to a penalty not exceeding two hundred and fifty dollars and costs, and not less than fifty dollars and costs.

13. If any person desires a special inspection or test of any pressure vessel, or any other special services in relation thereto, he may make application to an inspector therefor, and such inspector may comply with such application, but the person so applying shall be liable to the Minister for all expense in connection with the making of such inspection or test or performance of such other special services by the inspector.

14.—(1) The inspection certificate shall be placed so as to be easily read, in a conspicuous place in the boiler-room, or engine-room, of every stationary boiler, or refrigerating room, or in the vicinity of an air receiver or oil still, and shall be produced at any time by the owner or operator of any locomotive, traction or portable boiler upon demand of an inspector or upon demand of a member of any police force.

(2) Every owner of and every person in charge of a pressure vessel who contravenes this section by failing to place the inspection certificate in the required position, or to produce such inspection certificate upon demand, shall be liable upon summary conviction to a penalty not exceeding fifty dollars and costs, and not less than ten dollars and costs.

15.—(1) Any inspector may at any time and from time to time enter at any reasonable hour, upon any property for the purpose of inspecting any pressure vessel situated thereon, or for the purpose of ascertaining whether the provisions of this Act are being complied with, and also shall have the right at any reasonable hour to examine pressure vessels in course of construction or undergoing repairs.

(2) Any person refusing admittance to an inspector or in any way obstructing his access to the said property, or in any way preventing him from exercising any of the rights given to him by this section, shall upon summary conviction be liable to a penalty not exceeding two hundred and fifty dollars and costs, and not less than fifty dollars and costs.

16.—(1) Every owner or other person in charge of a boiler shall, if there exists any possibility of steam being turned into such boiler during the whole time such boiler is being examined or tested, keep a man on watch, whose sole duty is to prevent the turning of steam into such boiler.

(2) Any person contravening this section shall upon summary conviction be liable to a penalty not exceeding fifty dollars and costs, and not less than ten dollars and costs.

17. The inspector shall set and seal the safety valve and test every pressure gauge of every pressure vessel and shall see that the whole apparatus is safely installed.

18.—(1) The owner and person in charge of any pressure vessel shall at all times keep the pressure gauge or gauges or water gauge glass on such pressure vessel in such a way as to correctly indicate the pressure or water level and provide that the same can be easily and conveniently read.

(2) Any person contravening any of the provisions of this section shall upon summary conviction be liable to a penalty not exceeding fifty dollars and costs, and not less than ten dollars and costs.

19.—(1) Every person being an engineer in charge of any boiler shall blow or cause to be blown off the safety valve of such boiler at least once in each working day for the purpose of ascertaining that such valve is properly operating; and if he finds it is not so operating he shall report the fact to an inspector forthwith.

(2) Any person contravening any of the provisions of this section shall upon summary conviction be liable to a penalty not exceeding fifty dollars and costs, and not less than ten dollars and costs.

20.—(1) No person shall alter or interfere with or render inoperative or do away with any valve, gauge or appliance upon any pressure vessel which is by this Act or the regulations required to be a part of the equipment of any pressure vessel.

(2) Any person contravening any of the provisions of this section shall upon summary conviction be liable to a penalty not exceeding two hundred and fifty dollars and costs, and not less than ten dollars and costs.

21.—(1) Every person being an engineer in charge of any pressure vessel shall assist the inspector in his examination thereof in any way the inspector may reasonably require; and shall make full disclosure to the inspector of any defects which he knows or has reason to believe to exist in any pressure vessel under inspection.

(2) Any person failing to comply with any of the provisions of this section shall upon summary conviction be liable to a penalty not exceeding fifty dollars and costs, and not less than ten dollars and costs.

CERTIFICATION OF ENGINEERS AND FIREMEN.

22. The Minister shall cause to be issued to persons who have, in accordance with the regulations, shown themselves competent, certificates of competency, and such certificates shall be described as follows, namely: "First Class Engineers' Certificates"; "Second Class Engineers' Certificates"; "Third Class Engineers' (200 h.p.) Certificates"; "Third Class Engineers' (100 h.p.) Certificates"; "Third Class Engineers' (50 h.p.) Certificates"; "Traction Engineers' Certificates"; "Provisional Engineers' Certificates"; "Firemen's Certificates," and "Special Certificates."

23.—(1) No person being the owner of or in charge of any boiler carrying a working pressure of twenty pounds or more shall operate the same or permit or cause the same to be operated unless the same is operated under the immediate continuous supervision of one or more engineers who are the holders of valid certificates under this Act, and unless such engineers and the description of the certificates they hold is as next hereinafter mentioned, namely:

- (a) In the case of a steam plant consisting either wholly or in part of a boiler or boilers of a capacity or an aggregate capacity exceeding 500 h.p. the engineer having general supervision shall hold a First Class Engineer's Certificate and any assistant engineers who are placed in charge shall hold Second Class Engineers' Certificates or better;
- (b) In the case of a steam plant consisting either wholly or in part of a boiler or boilers of a capacity or an aggregate capacity exceeding 200 h.p. and not exceeding 500 h.p., the engineer having general supervision shall hold a Second Class Engineer's Certificate or better; and any assistant engineers who are placed in charge shall hold Third Class Engineers' (200 h.p.) Certificates or better;
- (c) In the case of a steam plant consisting either wholly or in part of a boiler or boilers of a capacity or an aggregate capacity exceeding 100 h.p. and not exceeding 200 h.p., the engineer having general supervision shall hold a Third Class

Engineer's (200 h.p.) Certificate or better, and any assistant engineers placed in charge shall hold Third Class Engineers' (100 h.p.) Certificates or better;

- (d) In the case of a steam plant consisting either wholly or in part of a boiler or boilers of a capacity or an aggregate capacity not exceeding 100 h.p. and exceeding 50 h.p., the engineer having general supervision shall hold a Third Class Engineer's (100 h.p.) Certificate or better, and any assistant engineers placed in charge shall hold Provisional Engineers' (50 h.p.) Certificates or better;
- (e) In the case of a steam plant consisting either wholly or in part of a boiler or boilers of a capacity or an aggregate capacity not exceeding 50 h.p., every engineer in charge shall hold a Provisional Engineer's (50 h.p.) Certificate or better;
- (f) In the case of a steam shovel, a locomotive or tractor boiler, the engineer actually operating the same shall hold a special certificate authorizing him to operate a steam shovel or a locomotive or a tractor boiler, as the case may be;
- (g) In the case of a boiler not exceeding fifty horsepower used for heating purposes which operates at a pressure of twenty pounds and not more than one hundred pounds to the square inch, the operator in charge shall hold a Fireman's Certificate or any class of Engineers' Certificates above mentioned.

(2) Any person contravening any of the provisions of this section shall upon summary conviction be liable to a penalty not exceeding two hundred and fifty dollars and costs, and not less than fifty dollars and costs.

24.—(1) Notwithstanding the provisions of the previous section, an Engineer's Certificate issued under *The Steam Boilers Ordinance* shall entitle the holder thereof to operate any boiler which he would have been entitled to operate under the provisions of that Ordinance or the regulations made thereunder, until such certificate is withdrawn under the provisions of this Act or the regulations made thereunder.

(2) An Engineer's Certificate issued under the provisions of any Act subsequently to the 9th day of May, 1906, shall entitle the holder of the same to operate any boiler which he would have been entitled to operate under the Act entitling him to the certificate until such certificate is withdrawn under the provisions of this Act or the regulations made thereunder.

25.—(1) In the case of a steam plant situated in separate premises which are at such a distance that one engineer cannot satisfactorily take charge of the steam boilers or steam engines of the plant, then whether such premises are buildings or enclosed or open spaces, the owner shall employ

an engineer to take separate charge, under the general supervision of the Chief Engineer, of the steam boilers or steam engines in any subsidiary premises.

(2) Every such engineer in charge shall hold the certificate heretofore prescribed with respect to a steam plant of the same capacity as the aggregate capacity of the boilers in the subsidiary premises or the boilers feeding the engines therein, as the case may be.

(3) No owner or person in charge shall permit any such boiler or engine to be operated or shall operate the same except when the same is in the separate charge of a duly certified engineer.

(4) Any person contravening in any of the provisions of the preceding subsection shall upon summary conviction be liable to a penalty not exceeding fifty dollars and costs, and not less than ten dollars and costs.

(5) In case any question arises as to whether any separate premises are at such a distance that one engineer cannot satisfactorily take charge of the steam boilers or steam engines situated therein, the Chief Inspector shall decide such question subject to the appeal hereinafter provided for.

26.—(1) Upon the request of an owner who is unable to secure the services of the holder of a required certificate the Minister may, without examination, grant to any person recommended by the owner any of the before-mentioned certificates.

(2) Any such certificate shall only be valid as long as the services of a holder of the required certificate are not available, and shall in any event cease to be valid upon the expiry of three months or any less period which may be stated therein.

27.—(1) Nothing in this Act shall prevent an owner from employing a person holding a fireman's certificate to act as a night watchman of a boiler or steam plant during the time when the fires are banked and no steam is being drawn from such boilers, except for the purpose of supplying the boilers with the necessary water.

(2) Any person so employed may within one hour of the commencement of any working shift, spread the fires, and for the purpose only of raising the steam pressure to the normal operating pressure.

28.—(1) The certificate of any engineer in charge of an engine-room or boiler-room shall be posted in a conspicuous place in such room and shall be produced at any time by the operator of any locomotive, traction or portable boiler upon demand of any inspector or upon demand of a member of any police force.

(2) Any engineer failing to post and keep posted his certificate or to produce the same as required by this section shall upon summary conviction be liable to a penalty not exceeding fifty dollars and costs, and not less than ten dollars and costs.

WELDERS.

29.—(1) No person shall weld any pressure vessel unless he is the holder of a prescribed certificate, authorizing him to so do.

(2) Any person welding any pressure vessel, or offering to weld the same, whilst he is not the holder of such certificate, shall be liable upon summary conviction to a penalty not exceeding one hundred dollars and costs, and not less than fifty dollars and costs.

SECOND-HAND PRESSURE VESSELS.

30. No person shall sell, exchange or otherwise dispose of any second-hand pressure vessel until he has sent to the Chief Inspector by registered mail a notice in writing setting forth the names and addresses of all material parties to the intended transaction, and a description of the pressure vessel, and the number placed thereon by the inspector at the time of the initial inspection, and has received permission from an inspector to dispose of the vessel, which may be granted either after an inspection or without any such inspection, and may be given upon such conditions as may seem proper to the inspector.

31. No person shall use any second-hand pressure vessel acquired by him until he is satisfied that the permission required by the previous section has been granted.

32. Any person who brings into the Province any pressure vessel which has been previously used outside the Province shall, before installing the same, notify the Department in writing of the description, design, specifications and make thereof, and shall not install the same unless and until the same has been approved by the Minister as to its description, design, specifications and make; and the same shall not be operated unless and until an inspection certificate has been issued under this Act in respect thereof.

33. Any person contravening any of the provisions of the three preceding sections shall upon summary conviction be liable to a penalty not exceeding two hundred and fifty dollars and costs, and not less than fifty dollars and costs.

INQUIRIES.

34. In any case where in the opinion of the Chief Inspector it is expedient to hold an inquiry as to the manner of operating any pressure vessel, or as to the circumstances of any explosion, or as to any matter connected with the inspection of a pressure vessel, he may proceed to hold such inquiry or may authorize any inspector so to do.

35. The Chief Inspector or the inspector, as the case may be, shall give to the owner or person in charge of the pressure vessel in respect of which the inquiry is to be made, twenty-four hours' notice in writing of the place and time fixed by him for the commencement of the inquiry; and after the inquiry has been opened, the same may be adjourned for such periods and to such places as to the person conducting the inquiry seems proper; and the same may be adjourned *sine die* and resumed later at a date and place to be fixed by him, and in that case twenty-four hours' notice of the time and place of the resumed inquiry shall be given to the owner or person in charge of the premises in respect of which the inquiry is made.

36. The owner or person in charge of the said pressure vessel shall be entitled to appear and be present throughout at any such inquiry.

37. The inspector holding the inquiry may by notice in writing signed by him, require the attendance of any person named therein as a witness at any such inquiry at the time and place mentioned in such notice.

38. The inspector holding the inquiry may examine any person called at the inquiry, upon oath, and shall take down in writing all questions asked of any witness and the answers made by such witness.

39. No person called as a witness at any inquiry shall be excused from answering any question on the ground that the answer may tend to incriminate him, or may tend to establish his liability in any proceedings instituted or taken against him:

Provided that no evidence given on any inquiry shall be used as received against the person giving the same in any proceedings instituted against him other than a prosecution for perjury in relation to such evidence.

EXPLOSIONS.

40.—(1) Every owner and person in charge of any pressure vessel shall in the event of the occurrence of an explosion of any pressure vessel, within twenty-four hours send by registered mail to the Chief Inspector a full report

in writing, setting out the exact place of the explosion, a list of the persons killed or injured, and the cause and particulars of the explosion.

(2) Any person contravening the provisions of this section shall upon summary conviction be liable to a penalty not exceeding two hundred and fifty dollars and costs, and not less than fifty dollars and costs.

41.—(1) Upon the occurrence of any explosion, nothing shall be removed or interfered with, in, on or about the place where the explosion occurred until an inspector has made an inspection thereof, except in so far as may be necessary for the purpose of saving life or limb, or for the removal of the dead.

(2) Any person contravening any of the provisions of this section shall upon summary conviction be liable to a penalty not exceeding two hundred and fifty dollars and costs, and not less than fifty dollars and costs.

42. The Chief Inspector shall report fully to the Minister the facts surrounding any explosion which appears to him to be of a serious nature, and thereupon the Minister may appoint some person or persons to investigate into the facts of the explosion and the person or persons so appointed shall have all the powers which by *The Public Inquiries Act* might be conferred upon him or them.

GENERAL.

43. In any action or other proceeding by any person to recover damages against any person for injuries sustained by reason of the explosion of any pressure vessel, and it appears that at the time of such explosion such pressure vessel was being operated without there being in existence a valid and subsisting inspection certificate authorizing its operation, then the onus of proof that such explosion was not caused by the negligence or improper conduct of the defendant shall be upon the defendant.

44.—(1) An appeal shall lie to the Minister from any order of an inspector which affects the operation of a pressure vessel, from any order cancelling or suspending a certificate, or inspection certificate, and from any decision of an inspector under the provisions of section 25 of this Act.

(2) Any such appeal shall be made within thirty days from the making of the order and the Minister may disallow or modify any such order.

(3) The decision of the Minister upon the appeal shall be final.

45. *The Boilers Act*, being chapter 191 of the Revised Statutes of Alberta, 1922, is hereby repealed.

THIRD SESSION
SIXTH LEGISLATURE
19 GEORGE V
1929

BILL

An Act respecting Boilers and Other
Pressure Vessels

Received and read the

First time.....

Second time.....

Third time.....

HON. MR. McPHERSON.

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1929.

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