

# HOUSE BILL No. 4937

July 2, 2003, Introduced by Reps. Caswell, Nitz, Julian, Hummel, Emmons, Pastor, Byrum, Robertson, Vander Veen, Stahl, Mortimer, Nofs, Taub, Pumford, Ward, Casperson, Elkins, Sheltroun, Rivet, Stakoe, Bradstreet, Brandenburg, Gillard, LaJoy, Shaffer, Minore, Zelenko, Accavitti, Brown and Williams and referred to the Committee on Regulatory Reform.

A bill to amend 1965 PA 290, entitled  
 "Boiler act of 1965,"  
 by amending section 7a (MCL 408.757a), as amended by 1982 PA  
 176.

## THE PEOPLE OF THE STATE OF MICHIGAN ENACT:

HOUSE BILL No. 4937

1       Sec. 7a. (1) ~~Antique~~ **Except as otherwise provided in this**  
 2 **section, antique traction and historical steam boilers preserved,**  
 3 **restored, or maintained for hobby or demonstration use** shall  
 4 comply with the rules promulgated by the board and shall be  
 5 inspected once every 3 years. An owner of an antique traction  
 6 steam boiler may request an inspection more often than every 3  
 7 years. Antique traction **and historical** steam boilers used for  
 8 commercial purposes shall be inspected annually. If the  
 9 inspection is made by a deputy inspector, the fee ~~shall be~~  
 10 ~~\$25.00~~ **is \$45.00.** Fees established in this section ~~shall~~ **are**

1 not ~~be~~ subject to change by rule. A certificate of inspection  
2 shall be issued by the department of ~~labor~~ **consumer and**  
3 **industry services** upon compliance with the applicable rules.

4 (2) This act ~~shall~~ **does** not apply to miniature steam ~~er~~  
5 **engines**, marine engines, or **miniature railroad engines** used as a  
6 hobby and for private use only.

7 (3) The department of consumer and industry services shall  
8 not prohibit the public operation of a historical steam boiler by  
9 an operator certified by the Michigan historical steam engine  
10 association or other similar organization acceptable to the  
11 department of consumer and industry services so long as the  
12 operator provides proof acceptable to the department of consumer  
13 and industry services of both of the following:

14 (a) At least 100 hours of actual operating experience or  
15 training in the operation and care of historical antique traction  
16 steam boilers.

17 (b) Successful completion of a course designed for training  
18 historical boiler operators and the passing of a written or  
19 verbal examination, with a score of 70% proficiency, that the  
20 department of consumer and industry services, with the advice of  
21 the Michigan historical steam engine association, determines  
22 sufficient to test the knowledge and competency for the safe  
23 operation of historical boilers.

24 (4) The standards of the Michigan historical steam engine  
25 association are hereby incorporated by reference as those  
26 standards exist on the effective date of the amendatory act that  
27 added this subsection. The department of consumer and industry

1 services shall accept proof of certification supplied by the  
2 operator that is subject to verification by the certifying  
3 organization.

4 (5) The inspection conducted by the department of consumer  
5 and industry services shall comply with the following conditions  
6 and be conducted under the following circumstances:

7 (a) The owner or operator shall prepare the boiler for a  
8 hydrostatic test at least equal to the maximum allowable working  
9 pressure and up to 1.25 times the maximum allowable working  
10 pressure with water temperature between 60 degrees Fahrenheit and  
11 120 degrees Fahrenheit.

12 (b) The inspector shall provide and use a certified  
13 calibrated pressure test gauge. The maximum allowable operating  
14 pressure shall not exceed the original manufacturer's  
15 recommendation for both lap seam and butt strap seam barrel  
16 construction.

17 (6) After the completion of the hydrostatic test, the  
18 department of consumer and industry services may inspect the  
19 boiler for an internal visual inspection of the crown sheet,  
20 fluesheets, sidesheets, mudleg, and staybolt. Under those  
21 circumstances, the operator shall prepare the boiler for that  
22 internal inspection. The department of consumer and industry  
23 services shall not require an ultrasonic test.

24 (7) Each boiler regulated under this section shall have the  
25 following safety devices:

26 (a) Pressure relief valve, subject to the following  
27 conditions:

1 (i) No valve of any type shall be placed between the boiler  
2 and the pressure relief valve, and no valve of any type shall be  
3 placed in or on the outlet of the pressure relief valve.

4 (ii) The piping between the boiler and the pressure relief  
5 valve shall be at least as large as the pressure relief valve  
6 inlet diameter and as short as practical.

7 (iii) No reduction in pipe diameter is allowed at the  
8 pressure relief valve outlet.

9 (iv) The required pressure relief valve capacity in lbs./hr  
10 shall be calculated by the boiler heating surface area above the  
11 grates. The minimum lbs. steam/hr per square foot of heating  
12 surface shall be 5.

13 (b) Pressure gauge, subject to the following conditions:

14 (i) The pressure gauge shall be operational and proven  
15 accurate within 5 psi at the time of inspection.

16 (ii) The pressure gauge shall have a range at least 1.5 times  
17 the MAWP.

18 (iii) The pressure gauge shall have a siphon or water seal  
19 installed between the pressure gauge and the boiler and shall be  
20 as short as practical.

21 (iv) If a valve is installed between the pressure gauge and  
22 the boiler, the valve shall indicate the open position or be  
23 wired open.

24 (c) Water gauge glass, subject to the following conditions:

25 (i) The gauge glass shall indicate the minimum safe operating  
26 water level and be fully operational with working shut-offs.

27 (ii) The gauge glass shall have a drain valve or petcock that

1 is fully operational.

2 (iii) The gauge glass shall be fitted with 2 external guard  
3 rods or an equivalent to protect the glass.

4 (d) Try cocks, subject to the following conditions:

5 (i) Try cocks shall be fully operational.

6 (ii) Try cocks shall be correctly located in reference to the  
7 minimum required operating water level.

8 (e) Fusible plug, subject to the following conditions:

9 (i) All boilers shall have a fusible plug.

10 (ii) All fusible plugs shall be constructed to meet ASME code  
11 and identified with the ASME nomenclature.

12 (iii) All fireside fusible plugs shall protrude a minimum of  
13 1 inch into the water.

14 (iv) All waterside fusible plugs may not protrude into the  
15 fire area more than 1 inch.

16 (v) At the discretion of the field inspector, the fusible  
17 plug will be removed at every fourth inspection to observe the  
18 ASME marking on filler material in order to inspect the condition  
19 of the threads in crown sheet and fusible plug and to remove any  
20 accumulation of scale.

21 (vi) Fusible plugs shall not be refilled.

22 (f) Piping and fittings, subject to the following  
23 conditions:

24 (i) All steam piping components shall be used in the manner  
25 for which they were designed and shall not exceed the  
26 manufacturer's pressure rating.

27 (ii) Standard schedule 80 black pipe shall be used below the

1 water line from the boiler to the first valve. Seamless pipe is  
2 not required.

3 (iii) Galvanized pipe may be used on cold water feed lines to  
4 injectors and pumps.

5 (iv) Threaded openings shall follow accepted standard  
6 practices.

7 (v) All piping shall be properly supported.

8 (vi) The blow down line or valve shall be plugged off during  
9 the time the boiler is in operation on display or shall be piped  
10 to a safe point of discharge.

11 (vii) The boiler should be equipped with 2 means of supplying  
12 feedwater while the boiler is under pressure. Pumped water shall  
13 be heated.

14 (viii) The owner user is allowed to install readily  
15 replaceable fittings and components, such as piping, threaded  
16 staybolts, flues, rivets, and bracket bolts, in order to maintain  
17 the safe operation and historical antiquity of the boiler.

18 (8) The department of consumer and industry services shall  
19 not promulgate rules regarding certifications, standards, and  
20 inspections that are inconsistent with those contained in this  
21 section.