HOUSE BILL No. 6569

December 5, 2002, Introduced by Reps. Vear and Raczkowski and referred to the Committee on Commerce.

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:

Sec. 7a. (1) ~~Antique~~ EXCEPT AS OTHERWISE PROVIDED IN THIS SECTION, ANTIQUE traction steam boilers shall comply with the rules promulgated by the board and shall be inspected once every 3 years. An owner of an antique traction steam boiler may request an inspection more often than every 3 years. Antique traction steam boilers used for commercial purposes shall be inspected annually. If the inspection is made by a deputy inspector, the fee ~~shall be $25.00~~ IS $45.00. Fees established in this section ~~shall~~ ARE not ~~be~~ subject to change by rule. A certificate of inspection shall be issued by the department of

HOUSE BILL No. 6569

~~labor~~ CONSUMER AND INDUSTRY SERVICES upon compliance with the applicable rules.

(2) This act ~~shall~~ DOES not apply to miniature steam or marine engines used as a hobby AND FOR PRIVATE USE ONLY.

(3) THE DEPARTMENT SHALL NOT PROHIBIT THE PUBLIC OPERATION OF AN ANTIQUE TRACTION STEAM BOILER BY AN OPERATOR CERTIFIED BY THE MICHIGAN HISTORICAL STEAM ENGINE ASSOCIATION OR OTHER SIMILAR ORGANIZATION ACCEPTABLE TO THE DEPARTMENT SO LONG AS THE OPERATOR PROVIDES PROOF ACCEPTABLE TO THE DEPARTMENT OF BOTH OF THE FOLLOWING:

(A) AT LEAST 100 HOURS OF ACTUAL OPERATING EXPERIENCE OR TRAINING IN THE OPERATION AND CARE OF HISTORICAL ANTIQUE TRACTION STEAM BOILERS.

(B) SUCCESSFUL COMPLETION OF A COURSE DESIGNED FOR TRAINING HISTORICAL BOILER OPERATORS AND THE PASSING OF A WRITTEN OR VERBAL EXAMINATION, WITH A SCORE OF 80% PROFICIENCY, THAT THE DEPARTMENT DETERMINES SUFFICIENT TO TEST THE KNOWLEDGE AND COMPETENCY FOR THE SAFE OPERATION OF HISTORICAL BOILERS.

(4) THE STANDARDS OF THE MICHIGAN HISTORICAL STEAM ENGINE ASSOCIATION ARE HEREBY INCORPORATED BY REFERENCE AS THOSE STANDARDS EXIST ON THE EFFECTIVE DATE OF THE AMENDATORY ACT THAT ADDED THIS SUBSECTION. THE DEPARTMENT SHALL ACCEPT PROOF OF CERTIFICATION SUPPLIED BY THE OPERATOR THAT IS SUBJECT TO VERIFICATION BY THE CERTIFYING ORGANIZATION.

(5) THE INSPECTION CONDUCTED BY THE DEPARTMENT SHALL COMPLY WITH THE FOLLOWING CONDITIONS AND BE CONDUCTED UNDER THE FOLLOWING CIRCUMSTANCES:

(A) THE OPERATOR SHALL PREPARE THE BOILER FOR A HYDROSTATIC TEST AT LEAST EQUAL TO THE MAXIMUM ALLOWABLE WORKING PRESSURE AND UP TO 1.25 TIMES THE MAXIMUM ALLOWABLE WORKING PRESSURE, BUT NOT TO EXCEED THE ORIGINAL MANUFACTURER'S RECOMMENDED OPERATING PRESSURE, WITH WATER TEMPERATURE BETWEEN 60 DEGREES FAHRENHEIT AND 120 DEGREES FAHRENHEIT.

(B) THE INSPECTOR SHALL PROVIDE AND USE A CERTIFIED CALIBRATED PRESSURE TEST GAUGE.

(6) AFTER THE COMPLETION OF THE HYDROSTATIC TEST, THE DEPARTMENT MAY INSPECT THE BOILER FOR AN INTERNAL VISUAL INSPECTION OF THE CROWNSHEET, FLUESHEETS, SIDESHEETS, MUDLEG, AND STAYBOLT. UNDER THOSE CIRCUMSTANCES, THE OPERATOR SHALL PREPARE THE BOILER FOR THAT INTERNAL INSPECTION. THE DEPARTMENT SHALL NOT REQUIRE AN ULTRASONIC TEST REGARDING THE THICKNESS OF THE BOILER WALLS. THE DEPARTMENT MAY PROVIDE FOR AN ULTRASONIC TEST SO LONG AS THICKNESS OF THE BOILER WALLS IS NOT DETERMINATIVE OF THE MAXIMUM ALLOWABLE WORKING PRESSURE.

(7) EACH BOILER REGULATED UNDER THIS SECTION SHALL HAVE THE FOLLOWING SAFETY DEVICES MEETING THE STANDARDS ESTABLISHED BY RULE OF THE DEPARTMENT:

(A) PRESSURE RELIEF VALVE. THE RULES ARE SUBJECT TO THE FOLLOWING CONDITIONS:

(*i*) THE PRESSURE RELIEF VALVE MUST HAVE A "V" OR "VR" (ASME) STAMP; MUST BE SEALED AND UNALTERED; AND MUST HAVE A TEST LEVER.

(*ii*) THE PRESSURE RELIEF VALVE'S OPERATION SHALL BE DEMONSTRATED ONLY WITH THE USE OF STEAM.

(*iii*) NO VALVE OF ANY TYPE SHALL BE PLACED BETWEEN THE BOILER AND THE PRESSURE RELIEF VALVE AND NO VALVE OF ANY TYPE SHALL BE PLACED IN, OR ON, THE OUTLET OF THE PRESSURE RELIEF VALVE.

(*iv*) THE PIPING BETWEEN THE BOILER AND THE PRESSURE RELIEF VALVE SHALL BE AT LEAST AS LARGE AS THE PRESSURE RELIEF VALVE INLET DIAMETER AND AS SHORT AS PRACTICAL.

(*v*) NO REDUCTION IN PIPE DIAMETER IS ALLOWED AT THE PRESSURE RELIEF VALVE OUTLET.

(*vi*) THE REQUIRED PRESSURE RELIEF VALVE CAPACITY IN LBS./HR SHALL BE CALCULATED BY THE BOILER HEATING SURFACE AREA ABOVE THE GRATES. THE MINIMUM LBS. STEAM/HR PER SQUARE FOOT OF HEATING SURFACE SHALL BE 5.

(*vii*) IN THE CASE OF A BOILER OF SUCH PHYSICAL SIZE AND CONSTRUCTION THAT AN ASME RATED PRESSURE RELIEF VALVE CANNOT BE PURCHASED, THE PERFORMANCE OF THE INSTALLED DEVICE WILL BE DEMONSTRATED TO AND APPROVED BY THE FIELD INSPECTOR.

(B) PRESSURE GAUGE. THE RULES ARE SUBJECT TO THE FOLLOWING CONDITIONS:

(*i*) THE PRESSURE GAUGE SHALL BE OPERATIONAL AND PROVEN ACCURATE WITHIN 5 PSI AT THE TIME OF INSPECTION.

(*ii*) THE PRESSURE GAUGE SHALL HAVE A RANGE AT LEAST 1.5 TIMES THE MAWP.

(*iii*) THE PRESSURE GAUGE SHALL HAVE A SIPHON OR WATER SEAL INSTALLED BETWEEN THE PRESSURE GAUGE AND THE BOILER AND SHALL BE AS SHORT AS PRACTICAL.

(*iv*) IF A VALVE IS INSTALLED BETWEEN THE PRESSURE GAUGE AND THE BOILER, THE VALVE SHALL INDICATE THE OPEN POSITION OR BE WIRED OPEN.

(C) WATER GAUGE GLASS. THE RULES ARE SUBJECT TO THE FOLLOWING CONDITIONS:

(*i*) THE GAUGE GLASS SHALL INDICATE THE MINIMUM SAFE OPERATING WATER LEVEL AND BE FULLY OPERATIONAL WITH WORKING SHUT-OFFS.

(*ii*) THE GAUGE GLASS SHALL HAVE A DRAIN VALVE OR PETCOCK THAT IS FULLY OPERATIONAL.

(*iii*) THE GAUGE GLASS SHALL BE FITTED WITH 2 EXTERNAL GUARD RODS OR AN EQUIVALENT TO PROTECT THE GLASS.

(D) TRY COCKS. THE RULES ARE SUBJECT TO THE FOLLOWING CONDITIONS:

(*i*) TRY COCKS SHALL BE FULLY OPERATIONAL.

(*ii*) TRY COCKS SHALL BE CORRECTLY LOCATED IN REFERENCE TO THE MINIMUM REQUIRED OPERATING WATER LEVEL.

(E) FUSIBLE PLUG. THE RULES ARE SUBJECT TO THE FOLLOWING CONDITIONS:

(*i*) ALL BOILERS SHALL HAVE A FUSIBLE PLUG UNLESS EQUIPPED WITH AND OPERATED WITH AUTOMATIC CONTROLS.

(*ii*) ALL FUSIBLE PLUGS SHALL BE CONSTRUCTED TO MEET ASME CODE AND IDENTIFIED WITH THE ASME NOMENCLATURE.

(*iii*) ALL FIRESIDE FUSIBLE PLUGS SHALL PROTRUDE A MINIMUM OF 1 INCH INTO THE WATER.

(*iv*) ALL WATERSIDE FUSIBLE PLUGS MAY NOT PROTRUDE INTO THE FIRE AREA MORE THAN 1 INCH.

(*v*) AT THE DISCRETION OF THE FIELD INSPECTOR, THE FUSIBLE PLUG WILL BE REMOVED AT EVERY OTHER INSPECTION TO OBSERVE THE ASME MARKING ON FILLER MATERIAL IN ORDER TO INSPECT THE CONDITION OF THE THREADS IN CROWN SHEET AND FUSIBLE PLUG AND TO REMOVE ANY ACCUMULATION OF SCALE.

(*vi*) FUSIBLE PLUGS SHALL NOT BE REFILLED.

(F) PIPING AND FITTINGS. THE RULES ARE SUBJECT TO THE FOLLOWING CONDITIONS:

(*i*) ALL STEAM PIPING COMPONENTS SHALL BE USED IN THE MANNER FOR WHICH THEY WERE DESIGNED AND SHALL NOT EXCEED THE MANUFACTURER'S PRESSURE RATING.

(*ii*) SCHEDULE 80 BLACK PIPE SHALL BE USED FROM THE BOILER TO THE FIRST VALVE.

(*iii*) GALVANIZED PIPE MAY BE USED ON COLD WATER FEED LINES TO INJECTORS AND PUMPS.

(*iv*) THREADED OPENINGS SHALL FOLLOW ACCEPTED STANDARD PRACTICES.

(*v*) ALL PIPING SHALL BE PROPERLY SUPPORTED.

(*vi*) THE BLOW DOWN LINE OR VALVE SHALL BE PLUGGED OFF DURING THE TIME THE BOILER IS IN OPERATION ON DISPLAY OR SHALL BE PIPED TO A SAFE POINT OF DISCHARGE.

(*vii*) THE BOILER SHOULD BE EQUIPPED WITH 2 MEANS OF SUPPLYING FEEDWATER WHILE THE BOILER IS UNDER PRESSURE. PUMPED WATER SHALL BE HEATED.

(*viii*) THE OWNER USER IS ALLOWED TO INSTALL READILY REPLACEABLE FITTINGS AND COMPONENTS, SUCH AS PIPING, STAYBOLTS, FLUES,

AND RIVETS, IN ORDER TO MAINTAIN THE SAFE OPERATION AND HISTORICAL ANTIQUITY OF THE BOILER.

(8) THE DEPARTMENT SHALL NOT PROMULGATE RULES REGARDING CERTIFICATIONS, STANDARDS, AND INSPECTIONS THAT ARE INCONSISTENT WITH THOSE CONTAINED IN THIS SECTION.