

TITLE 14 HOUSING AND CONSTRUCTION
CHAPTER 9 MECHANICAL CODES
PART 4 BOILERS

14.9.4.1 ISSUING AGENCY: The Construction Industries Division of the Regulation and Licensing Department.
[1-1-98; 14.9.4.1 NMAC - Rn, 14 NMAC 9.4 1, 08-01-03]

14.9.4.2 SCOPE:

A. This rule applies to all individuals performing alteration, repair and installation working on boilers in the state of New Mexico.

B. These boiler rules and regulations address the following: permits, insurance requirements and inspections, licensing, licensing of boiler operators and repairmen, installers and repair organizations, the issuing of boiler certificates of inspection, authorization for alterations and enforcement by the mechanical bureau.
[1-1-98; 14.9.4.2 NMAC - Rn, 14 NMAC 9.4.2, 08-01-03]

14.9.4.3 STATUTORY AUTHORITY: Pursuant to Section 60-13-9.(F.) of the Construction Industries Licensing Act (NMSA 1978) the construction industries division has adopted 14 NMAC 9.4 [now 14.9.4 NMAC]. Section 61-13-9. (F.), NMSA 1978 provides as follows: "The division shall adopt all building codes and minimum standards as recommended by the trade bureaus and approved by the commission so that the public welfare is protected, uniformity is promoted and conflicting provision are avoided."
[1-1-98; 14.9.4.3 NMAC - Rn, 14 NMAC 9.4.3, 08-01-03]

14.9.4.4 DURATION: Permanent; until later amended, repealed or replaced.
[1-1-98; 14.9.4.4 NMAC - Rn, 14 NMAC 9.4.4, 08-01-03]

14.9.4.5 EFFECTIVE DATE: January 1, 1998, unless a later date is cited at the end of a section or paragraph.
[1-1-98; 14.9.4.5 NMAC - Rn, 14 NMAC 9.4.5, 08-01-03]

14.9.4.6 OBJECTIVE: The objective of 14 NMAC 9.4 [now 14.9.4 NMAC] is to promote the general welfare of the people of New Mexico by providing for the protection of life and property through standards that, when complied with, will result in an installation essentially free from hazards.
[1-1-98; 14.9.4.6 NMAC - Rn, 14 NMAC 9.4.6, 08-01-03]

14.9.4.7 DEFINITIONS: The following terms shall have the meaning indicated when used in these rules and when referenced in the various codes:

A. "Administrative authority" means the mechanical bureau, construction industries division, regulation and licensing department, state of New Mexico.

B. "Accident" means an unexpected happening which causes physical damage in excess of \$25,000.00, or injury to any person.

C. "Alter/alteration" means any change in the item described on the original manufacturer's data report which affects the pressure-containing capacity of the boiler. Nonphysical changes such as an increase in the maximum allowable working pressure (internal or external) or design temperature of a boiler shall be considered an alteration. A reduction in the minimum temperature which requires additional mechanical tests shall also be considered an alteration.

D. "ANSI" means the American national standards institute, 1430 Broadway, New York, NY 10018.

E. "American petroleum institute (API)" means the American petroleum institute, 1220 L Street, NW, Washington, D.C. 20005.

F. "ASME Code" means the American society of mechanical engineers boiler and pressure vessel code as published by the society, including addenda and code cases approved by its council.

G. "Automatic boiler" when applied to any class of boilers defined below means such boiler shall be equipped with automatic controls and limit devices.

H. "Boiler" means a closed vessel in which water or other liquid is heated, steam or vapor is generated, steam is superheated, or any combination of these functions is accomplished, under pressure, for use external to itself, by the direct application of energy from the combustion of fuels or from electricity or solar energy. The term includes a fired unit for heating and vaporizing liquids other than water where the unit is separate from the processing system and is complete within itself.

I. "Certificate of inspection" means a document issued upon a successful inspection, stating the boiler may be operated.

J. "Certificate of qualification" is a certificate issued by the construction industries division to a qualifying party.

K. "Commission" means the construction industries commission.

L. "Condemned boiler" means a boiler inspected and declared unfit for further service by the mechanical bureau chief inspector, a deputy state inspector, a special inspector or the commission.

M. "Deputy state inspector" means any state employee appointed by the mechanical bureau of the construction industries division.

N. "Director" means the administrative head of the division.

O. "Division" means the construction industries division of the regulation and licensing department.

P. "Existing boiler" means any boiler installed in New Mexico before the adoption of these rules.

Q. "External piping" shall be considered as that piping which begins where the boiler proper terminates at the first circumferential joint for welding end connections; or the face of the first flange in bolted flanged connections; or the first threaded joint in that type of connection including the valve, if required.

R. "High pressure steam boiler" means a boiler in which steam or other vapor is generated at pressures exceeding 15 psi. (See **power steam boiler**).

S. "High temperature water boiler" means a boiler used for heating water or liquid to a pressure exceeding 160 psi or to a temperature exceeding 250 degrees F.

T. Hot-water heating boiler. See **low-pressure hot-water heating boiler**.

U. Hot-water supply boiler means a boiler with volume exceeding 120 gallons or a heat input exceeding 200,000 Btu/hr. or for operation at pressures not exceeding 160 psi and/or temperatures not exceeding 250 degrees F, and that provides hot water to be used externally to itself.

V. Inspection code means the National Board Inspection Code published by the national board of boiler and pressure vessel inspectors, 1055 Crupper Avenue, Columbus, OH 43229, or any other code or standard adopted by Sections 60-13-1.1 or 60-13-2.R of the Construction Industries Licensing Act and LPG Act, NMSA 1978.

W. Inspection Tag means:

(1) **Yellow tag** means the boiler does not meet code requirements, has deficiencies such as a minor leak, deteriorating refractory, and missing or wrong parts, or in poor operating condition (burner calibration). A qualified inspector evaluates whether the deficiencies presently cause an unsafe condition.

(2) **Red tag** means the boiler has major leaks (water, fuel, or combustion gases); the refractory is deteriorated to the point where it could cause overheating to the unit; the safety or safety relief valve is corroded shut, the wrong type, or undersized; there are a lack of controls and safety devices; or there are improper repairs (welding, wrong parts, etc.). A qualified inspector evaluates whether deficiencies that presents danger to persons and/or property.

X. Internal inspection means an inspection made when a boiler is shut down and the handhold, manholes, or other inspection openings are opened for inspection of the interior.

Y. Jurisdiction or jurisdictional authority means any city of the United States of America or any state of the United States that has adopted and administers one or more sections of the ASME Boiler and Pressure Vessel Code as a legal requirement.

Z. Low-pressure hot-water heating boiler means a boiler in which water is heated for the purpose of supplying heat at pressures not exceeding 160 psi and temperatures not exceeding 250 degrees F.

AA. Mechanical bureau means the trade bureau responsible for performing inspections and regulating boilers in the state of New Mexico.

BB. Mechanical bureau chief inspector means the individual who administers the mechanical bureau and makes inspections and is appointed by the construction industries division director.

CC. National board means the national board of boiler and pressure vessel inspectors, whose membership is composed of the chief inspector, or other officials who hold a national board commission and are charged with the enforcement of boiler and pressure vessel inspection regulations of any political subdivision of the United States or Canada which has adopted one or more sections of the ASME Boiler and Pressure Vessel Code.

DD. National board commission means a certificate issued by the national board of boiler and pressure vessel inspectors to an individual who has passed the national board examination, holds a valid certificate of competency and is regularly employed as an inspector by an insurance company.

EE. National board commissioned inspector means an inspector who holds a valid national board commission and is regularly employed as an inspector by an insurance company authorized to write boiler and pressure vessel insurance by the state

of New Mexico. This term is considered synonymous with "special inspector". Such national board commissioned inspector is not granted the authority contained in Sections 60-13-41, 60-13-42 and 60-13-43 of the New Mexico Construction Industries Licensing Act and LPG Act, (NMSA 1978).

FF. New boiler installation means any boiler constructed, installed or re-installed and placed in operation after the adoption of these boiler rules.

GG. Operator certificate of competency means a document issued to a person who has satisfied the minimum competency requirements for boiler operators under Section 60-13-38 of the New Mexico Construction Industries Licensing Act and LPG Act, (NMSA 1978).

HH. Owner-user inspection agency means an owner or user of pressure vessels that maintains a regularly established inspection department, whose organization and inspection procedures meet the requirements of the national board rules and acceptable to the jurisdiction wherein the owner or user is located. It is recommended that either a commissioned national board owner/user inspector or a commissioned API-510 owner/user inspector be assigned the responsibility of establishing and monitoring such agency.

II. Owner-user inspector means an inspector who holds a valid national board owner-user commission and has qualified by written examination under the laws, rules and regulations of a jurisdiction of a state of the United States or a province of Canada, and is regularly employed as an inspector by an owner-user inspection agency. Such inspector is not granted the authority contained in Sections 60-13-41, 60-13-42 or 60-13-43 of the New Mexico Construction Industries Licensing Act and LPG Act, (NMSA 1978).

JJ. Power steam boiler means a boiler in which steam or other vapor is generated at pressures exceeding 15 psi.

KK. Place of public assembly means any place where large numbers of individuals congregate (i.e., schools, hospitals, whether public or private, and other such entities). Place of public assembly shall not be construed as applying to businesses where private industry is in operation (i.e., manufacturing facilities, production facilities, dry cleaners, etc.). The rules in this document for inspections and certificates of inspection apply specifically to this definition.

LL. Publicly owned place of public assembly means the same as **place of public assembly**, except it is owned by the "public" (i.e., public schools, public hospitals, etc.). The rules for qualification and certification of boiler operators contained in Section 29 [now 14.9.4.29 NMAC] (Boiler Operator, Certificate of Competence) of these rules apply specifically to this definition.

MM. Reinstalled boiler means a boiler that has been removed from its original setting and reinstalled at the same location or at a new location.

NN. Repair means the work necessary to restore a boiler or pressure vessel to a safe and satisfactory operating condition provided there is no deviation from the original design.

OO. Repair organization means a holder of a valid national board commission authorizing the use of the "R", "VR" or "NR" stamp; or one that is authorized by the mechanical bureau (the local jurisdiction).

PP. Second-hand boiler means a boiler that has changed ownership and location subsequent to its original installation and use.

QQ. Special inspector means an inspector who holds a national board commission and who is regularly employed by an authorized national board inspection agency authorized to insure against loss from the explosion of a boiler or pressure vessel in New Mexico. Such inspector is not granted the authority contained in Sections 60-13-41, 60-13-42 or 60-13-43 of the New Mexico Construction Industries Licensing Act and LPG Act, (NMSA 1978). Also see **national board commissioned inspector**.
[1-1-98; 14.9.4.7 NMAC - Rn, 14 NMAC 9.4.7, 08-01-03]

14.9.4.8 ADOPTED PUBLICATIONS: The commission has adopted the following publications as the rules for construction, installation, operation, inspection, repair and alterations of all existing boilers.

A. Uniform Plumbing Code, 1991 Edition, 14 NMAC 11.3 (MB-UPC-91-1) [now 14.11.3 NMAC].

B. Uniform Mechanical Code, 1991 Edition, 14 NMAC 9.3 (MB-UMC-91-1) [now 14.9.3 NMAC].

C. NOTE: The above referenced documents are included in the edition adopted by construction industries division and the construction industries commission that is currently on file with the state records and archives center. Future editions will be adopted in the NMAC format. The NMAC reference for the Uniform Plumbing Code is 14 NMAC 11.3 (MB-UPC-91-1) [now 14 11.3 NMAC]. The NMAC reference for the Uniform Mechanical Code is 14 NMAC 9.3 (MB-UMC-91-1) [now 14.9.3 NMAC].
[1-1-98; 14.9.4.8 NMAC - Rn, 14 NMAC 9.4.8, 08-01-03]

14.9.4.9 PERMIT REQUIRED

A. It shall be unlawful to install or reinstall any boiler without first obtaining a permit to do so from the mechanical bureau, subject to all provisions of the construction industries division rules and regulations.

B. Owner/user inspectors are not required to have permits issued for repairs, alterations or installations.

C. Each application for a boiler permit (installation and/or re-installation) may require one set of plans and specifications as determined necessary by the mechanical bureau to describe adequately the proposed installation.

D. It shall be the responsibility of the organization making the installation to provide for a permit, inspection, documentation and certification of the work and to ensure prior acceptance of the procedures for the work.

E. Emergency boiler installation may be performed during non-business hours provided a permit is requested on the next regular business day.
[1-1-98; 14.9.4.9 NMAC - Rn, 14 NMAC 9.4.9, 08-01-03]

14.9.4.10 ANNUAL PERMITS: Section 5, 14 NMAC 5.2 [now 14.5.2.5 NMAC] (permits) of the construction industries division rules and regulations does not apply to boilers.

[1-1-98; 14.9.4.10 NMAC - Rn, 14 NMAC 9.4.10, 08-01-03]

14.9.4.11 VIOLATIONS AND PENALTIES: Violation(s) of this code and/or the technical codes may result in one or more of the following:

A. The construction industries division may assess the licensee an administrative penalty provided under the provisions of the Construction Industries Licensing Act and the LPG Act, (NMSA 1978), or its rules and regulations.

B. The division may require a double permit fee when any work is started prior to acquiring the necessary permit as stated in the provisions of the Construction Industries Licensing Act and LPG Act, (NMSA 1978) or its rules and regulations.

C. Whenever any work is being done contrary to the provisions of these rules or the technical codes, the director may order the work stopped by notice in writing served on a person engaged in doing or causing such work to be done, and that person shall forthwith stop such work until authorized by the director or the mechanical bureau chief to proceed with the work.

D. Pursuant to Section 6 [now 14.9.4.6 NMAC] (inspections) of the construction industries rules and regulations, failure of a licensee to call for final inspection may result in the commission assessing up to a five hundred dollar (\$500.00) penalty for each failure.

E. Pursuant to Section 6 [now 14.9.4.6 NMAC] (inspection[s]) of the construction industries division rules and regulations, failure of a licensee to cure any cited violation within 90 days may result in the commission assessing up to a two hundred fifty dollar (\$250.00) penalty for each such code violation.

F. The alteration of any safety device by a licensee may be subject to a penalty assessed by the commission.

[1-1-98; 14.9.4.11 NMAC - Rn, 14 NMAC 9.4.11, 08-01-03]

14.9.4.12 NEW CONSTRUCTION AND INSTALLATION OF BOILERS:

A. All boiler installations shall conform to minimum requirements for safety from structural and mechanical failure and excessive pressure, as established by the mechanical bureau in accordance with the ASME Boiler and Pressure Vessel Codes, Sections I, IV, and IX, with the addenda and interpretations thereto made, and the National Board of Boiler and Pressure Vessel Inspection Code.

B. All installations after the adoption of the boiler rules shall be designed, constructed, inspected and stamped in accordance with the ASME Code, as adopted herein and the latest addenda thereto, in effect. In addition, all boilers, except cast iron boilers, shall be registered with the national board of boiler and pressure vessel inspectors and be assigned a national board registration number.

C. The mechanical bureau may inspect any boiler installations in the state of New Mexico with sufficient notice to the owners/operators of such equipment. All inspections are to be conducted in accordance with the latest accepted edition of the National Board Inspection Code.

[1-1-98; 14.9.4.12 NMAC - Rn, 14 NMAC 9.4.12, 08-01-03]

14.9.4.13 EXISTING BOILERS:

A. All existing boilers shall be maintained and operated in compliance with the manufacturer's requirements and all existing codes at the time of installation. All existing boilers installed prior to 1973 shall, within two (2) years, meet the minimum

requirements of the Uniform Mechanical Code, 1973. (Reference Appendix B, **Chapter 21**, - Table No. 21-C.)

B. All boilers which are re-located with or without a change of ownership shall be installed in compliance with ASME as a new installation. Following such reinstallation of a boiler, a hydrostatic test in compliance with Section 27 [now **14.9.4.27** NMAC] (preparation of boilers) of these rules may be required by the state mechanical bureau chief inspector, deputy state inspector, city inspector, or an [sic] national board commissioned inspector.

C. Used boilers from within New Mexico, another state or country must be approved by the mechanical bureau. Such boilers shall bear the standard stamping of ASME and the national board registration number.

[1-1-98; **14.9.4.13** NMAC - Rn, **14** NMAC 9.4.13, 08-01-03]

14.9.4.14 EXEMPTIONS: BOILERS NOT SUBJECT TO THE MECHANICAL BUREAU RULES AND REGULATIONS:

A. Listed and approved potable water heaters with a nominal capacity of 120 gallons or less having a heat input of 200,000 Btu/h or less used for hot-water supply at pressures of 160 psi or less and at temperatures not exceeding 250 degrees F, as regulated by the New Mexico Plumbing Code.

B. Tanks connected to sprinkler(s).

C. Portable unfired pressure vessels, which are constructed to D.O.T. and I.C.C. regulations and are used in such service.

D. Containers for liquefied petroleum gases, bulk oxygen and medical gas, which are regulated by the Fire Code or by the New Mexico LPG Act, (NMSA 1978).

E. Unfired pressure vessels having a volume of 5 cubic feet or less and operated at pressures not exceeding 250 psi.]

F. Pressure vessels used in refrigeration systems, which are regulated by the Uniform Mechanical Code.

G. Pressure tanks used in conjunction with coaxial cables, telephone cables, power cables, and other similar humidity-control systems.

H. Any boiler subjected to regular inspection by federal inspectors or licensed by federal authorities.

I. Hydronic panel heating systems as described in the Uniform Mechanical Code, **Chapter 23**.

J. Public utilities, rural electric cooperatives, mining process (administration facilities are NOT exempt), refinery processing, gas processing (administration facilities are NOT exempt) and lumber industries (sawmill only).

[1-1-98; **14.9.4.14** NMAC - Rn, **14** NMAC 9.4.**14**, 08-01-03]

14.9.4.15 CITY AND LOCAL JURISDICTION: Cities that have adopted a boiler code in substantial compliance with the State Boiler Code may enforce the provisions of the city code within their jurisdictions.

[1-1-98; **14.9.4.15** NMAC - Rn, **14** NMAC 9.4.15, 08-01-03]

14.9.4.16 REPAIRS/ALTERATIONS OF BOILERS AND SAFETY/SAFETY RELIEF VALVES:

A. Repair organizations making repairs to boilers shall have an ASME qualified welders certificate or national board "R" stamp.

B. All repairs of boilers shall be in compliance with these rules. A report of welder repair/alteration and the completed work may be subject to the approval of the insurance company insuring the unit. The mechanical bureau may make random field site inspections.

C. Safety valves and safety relief valves shall be repaired only by organizations having a certificate of authorization code symbol stamp, ASME, "V", "HV", "UV", "NV" or a national board "VR" (repair of pressure relief valves) symbol stamp. Additionally, such repair firms when located within or doing business within the state of New Mexico shall be a New Mexico licensed contractor.

D. No repair/alteration by welding shall be made without the approval of the mechanical bureau or by a national board commissioned inspector holding a valid national board commission. If the mechanical bureau or special inspector determine a hydrostatic test is required, such test shall be applied after the repair/alteration have been completed.

E. A boiler shall be removed from service if a lap seam crack is discovered along a longitudinal riveted joint. Repairs are prohibited.
[1-1-98; 14.9.4.16 NMAC - Rn, 14 NMAC 9.4.16, 08-01-03]

14.9.4.17 ACCIDENT REPORTING: In case of boiler accident (fire or waterside) or other serious damage to a boiler, the mechanical bureau and the insurance company shall be notified immediately by the owner/user. No parts or appurtenances shall be removed or their positions changed unless necessary for the protection of life or limb until the state or a national board commissioned inspector has made an investigation.
[1-1-98; 14.9.4.17 NMAC - Rn, 14 NMAC 9.4.17, 08-01-03]

14.9.4.18 CERTIFICATE OF COMPLIANCE/OPERATING PERMIT:

A. All boilers and steam generators as stipulated in Section 26 [now 14.9.4.26 NMAC] (Inspections and fees) of these rules shall be inspected. Upon successful inspection, a certificate of inspection shall be issued by the mechanical bureau or insurance company. Such certificate may take any format approved for use by the mechanical bureau chief.

B. If, upon making the internal and/or external inspection, the Inspector finds the boiler to be in safe working order, provided with the appurtenances necessary for safety, and properly set up, the mechanical bureau or insurance company, upon receipt of an inspection report from the Inspector, shall issue to the owner or user thereof a certificate of inspection. Upon receipt of the certificate of inspection, such owner or user may operate the boiler described in the certificate until the date of expiration unless such certificate shall be withdrawn or revoked.

C. The certificate of compliance shall state the name of the owner or user; location; manufacturer's serial number, and the national board registration number; date of inspection; date of expiration of the certificate of compliance; the maximum allowable working pressure at which the boiler may operate; name of the manufacturer; type of boiler and insurance company with the name and national board commission number of

the national board commissioned inspector or mechanical bureau inspector doing the inspection.

D. The certificate of compliance operating permit or a copy shall be conspicuously placed so it can be readily identified with the boiler and must be posted in the boiler or mechanical room. The certificate of compliance operating permit for a portable boiler shall be attached to the boiler and shall be accessible at all times.

[1-1-98; 14.9.4.18 NMAC - Rn, 14 NMAC 9.4.18, 08-01-03]

14.9.4.19 OPERATION: No individual shall engage in the occupation or trade of boiler operator at a publicly owned place of public assembly unless that person holds a certificate of competence issued by the construction industries division for the occupation or trade of boiler operator.

[1-1-98; 14.9.4.19 NMAC - Rn, 14 NMAC 9.4.19, 08-01-03]

14.9.4.20 ABSENCE FROM BOILER:

A. Constant attendance of a boiler with automatic controls is not required. However, there shall be a properly licensed individual (reference Section 29 [now 14.9.4.29 NMAC], Boiler Operator, Certificate of Competence, of these rules) responsible for the safe operation of such equipment. Such individual shall be responsible for maintaining a daily inspection/tour log.

B. Any boiler that is not considered an automatic boiler and located in a publicly owned place of public assembly shall have a full-time, licensed operator. The boiler operator shall not leave the operating floor for more than 10 minutes at any one time without leaving on duty an operator with the same classification as the boiler operator.

[1-1-98; 14.9.4.20 NMAC - Rn, 14 NMAC 9.4.20, 08-01-03]

14.9.4.21 REPORTS: When a special inspector performs a first inspection of a boiler and finds that the boiler or any of the appurtenances thereof are in such condition that the insurance company refuses to insure such boiler, said inspection agency or said special inspector shall notify the mechanical bureau of that fact in writing, with a list describing the defects so found, within ten (10) days of the inspection date, along with a phone call within twenty-four (24) hours.

[1-1-98; 14.9.4.21 NMAC - Rn, 14 NMAC 9.4.21, 08-01-03]

14.9.4.22 BOILERS FOUND TO BE UNSAFE TO OPERATE; NON-CODE COMPLIANCE CONDITIONS:

A. If, upon inspection, a boiler is found to be in such condition that it is unsafe to operate, a RED tag or the equivalent shall be attached to the boiler and the owner or user shall have an appropriate New Mexico licensed contractor make required repairs.

B. If, upon inspection, a non-code compliance condition is noted, the special inspector may, or a representative of construction industries division may:

(1) shut the vessel down until the condition is corrected and tag the equipment with a RED tag or the equivalent; or

(2) tag the vessel with a YELLOW tag or the equivalent and allow the vessel to operate until the condition is corrected.

(3) An immediate appeal may be made if a boiler is found unsafe to the mechanical bureau before the boiler is stamped as provided in Section 21 [now **14.9.4.21** NMAC] (Reports) of these rules.

(4) The decision of the bureau to shut a vessel down may be appealed to the construction industries commission.

[1-1-98; **14.9.4.22** NMAC - Rn, **14** NMAC 9.4.22, 08-01-03]

14.9.4.23 CONDEMNED BOILERS:

A. Any boiler which comes under these rules and having been inspected and declared condemned by special inspector shall, after notifying the mechanical bureau, be stamped by the special inspector.

B. The condemnation mark shall be a series of capital X's stamped over the boiler identification number (the manufacturer's tag serial number or national board number). Additionally, stamping shall consist of capital X's stamped on the nameplate and on a conspicuous place on the boiler proper; (i.e., NMXXXXXNM, on the drum, shell, tubesheet, etc.)

C. Any person, firm, partnership or corporation using or offering for sale a condemned boiler which comes under these rules for operation within the state shall be subject to the penalty provided in Section 3 [now **14.9.4.3** NMAC] (permits/violations and penalties) of these rules.

[1-1-98; **14.9.4.23** NMAC - Rn, **14** NMAC 9.4.23, 08-01-03]

14.9.4.24 NON-CODE BOILERS:

A. Any boiler which is not constructed and stamped in accordance with the rules of the appropriate ASME Boiler Code shall not be installed or reinstalled to operate at any pressure after the adoption of these rules.

B. Any non-code boiler installed prior to the adoption of these rules and regulations may be operated after a successful inspection.

[1-1-98; **14.9.4.24** NMAC - Rn, **14** NMAC 9.4.24, 08-01-03]

14.9.4.25 INSPECTION METHODS AND FREQUENCY: The owner or user of such inspected equipment shall be responsible for obtaining a certificate of inspection. The method and frequency of boiler inspections shall be as follows:

A. The following equipment shall be inspected internally annually. A certificate inspection may be issued with an external inspection; however, an internal inspection must be made within six (6) months of the external inspection. When the construction does not permit an internal inspection, one external inspection annually is required:

- (1) high-pressure boilers; [and]
- (2) high-pressure steam generators.

B. Every twenty-four (24) months, an external and internal inspection shall be performed on the following:

- (1) direct fire steam jacketed kettles;
- (2) low-pressure steam boiler; [and]

(3) low-pressure hot-water heating boilers.

C. Based upon documentation regarding actual service conditions, the mechanical bureau may, at its discretion, permit variations in the inspection requirements.

D. The inspections herein required, including repair or modification shall be made by the mechanical bureau or by an [sic] special inspector.

E. If, at the discretion of the special inspector, a hydrostatic test shall be deemed necessary, the test shall be performed and the expense shall be borne by the owner or user of the boiler and the test shall be witnessed by the special inspector.

[1-1-98; 14.9.4.25 NMAC - Rn, 14 NMAC 9.4.25, 08-01-03]

14.9.4.26 INSPECTION AND CERTIFICATE FEES:

A. Any insurance company licensed to sell boiler and pressure vessel insurance in this state and insuring a boiler located in the state shall inspect such boiler so insured.

B. Such inspection shall be performed by national board commissioned inspector.

C. Equipment that has been inspected by special inspector may at any time be inspected by the state.

[1-1-98; 14.9.4.26 NMAC - Rn & A, 14 NMAC 9.4.26, 08-01-03]

14.9.4.27 PREPARATION OF BOILERS:

A. After timely notification, it shall be the responsibility of the owner or user to prepare the boiler for inspection. To prepare a boiler for internal inspection, all manhole plates, handhold plates, washout plugs and water column connection plugs shall be removed and the waterside thoroughly washed. Furnace, combustion chambers and tubes must be thoroughly cleaned and grates of internally-fired boilers, brickwork or other insulation material shall be removed to determine the condition of the shell furnace, mud drum, heads or any covered pressure part. The chamber of the low water fuel cutoffs shall be opened and the float or probes removed.

B. Any leakage of steam or hot water into the boiler shall be prevented by disconnecting the pipe or valve at the most convenient point or any appropriate means approved by the special inspector.

[1-1-98; 14.9.4.27 NMAC - Rn, 14 NMAC 9.4.27, 08-01-03]

14.9.4.28 REMOVABLE INSULATION: If upon external inspection there is evidence of a leak or crack, enough of the covering of the boiler shall be removed as the inspector shall deem necessary to determine the safety of the boiler. If the covering cannot be removed at that time, the inspector may order the operation of the boiler suspended until such time as the covering can be removed and proper examination made.

[1-1-98; 14.9.4.28 NMAC - Rn, 14 NMAC 9.4.28, 08-01-03]

14.9.4.29 BOILER OPERATOR/CERTIFICATE OF COMPETENCE:

A. Pursuant to Section 60-13-38 of the New Mexico Construction Industries Licensing Act and LPG Act (NMSA 1978), the New Mexico boiler operator classifications are listed below.

(1) Classification: boiler operator trainee:

(a) Experience: entry level position.
(b) Limitations: shall not operate any devices except under the direct observation of a boiler operator.

(2) Classification: boiler operator low pressure:

(a) Experience: six months operating experience on the type(s) of plant to be licensed on, and pass the low pressure examination.

(b) Limitations: may operate steam boilers and direct-fired pressure vessels up to 15 psi, and hot water boilers up to 160 psi and/or 250 degrees F

(3) Classification: boiler operator high pressure:

(a) Experience: have at least six (6) months verifiable operating experience on the type(s) of plant to be licensed on, and pass the prescribed examination.

(b) Limitations: may operate high-pressure boilers (15 psi and greater), steam boilers and direct-fired pressure vessels up to 15 psi, and hot water boilers up to 160 psi and 250 degrees F, As per manufacture's instructions.

B. No state certificate of competence is required for a boiler operator trainee.

C. A certificate of competence is required for boiler operators.

D. In lieu of experience, alternative methods of training may be approved by the mechanical bureau chief. A certificate of competency will be issued upon successful completion of the appropriate examination.

[1-1-98; 14.9.4.29 NMAC - Rn, 14 NMAC 9.4.29, 08-01-03]

14.9.4.30 BOILERS NOT PROPERLY PREPARED: If a boiler has not been properly prepared for inspection as provided for in these rules, the inspector may decline to make such inspection and the certificate shall be withheld until the boiler has been properly prepared and inspected.

[1-1-98; 14.9.4.30 NMAC - Rn, 14 NMAC 9.4.30, 08-01-03]

14.9.4.31 UNSAFE INSPECTION CONDITIONS: Upon discovering any unsafe inspection conditions, it is the responsibility of the special inspector to decline such inspection and the certificate withheld until such time as the unsafe conditions have been eliminated.

[1-1-98; 14.9.4.31 NMAC - Rn, 14 NMAC 9.4.31, 08-01-03]

14.9.4.32 HYDROSTATIC TEST:

A. Whenever a boiler is subject to hydrostatic test required by these rules, the required test pressure may be at a pressure no more than the maximum allowable working pressure for the installation so tested, at the discretion of the special inspector.

B. Re-rating of a boiler shall be subject to the requirement of the National Board Inspection Code. The test pressure shall be under proper control so that in no case shall the required test pressure be exceeded by more than six (6) percent.

[1-1-98; 14.9.4.32 NMAC - Rn, 14 NMAC 9.4.32, 08-01-03]

14.9.4.33 EMERGENCY EXITS:

A. Boilers shall be so located and so equipped that egress is provided to permit safe and quick escape of any person in case of emergency; this shall include suitable and sufficient permanent stairs or ladders from boiler tops and elevated

appurtenances and appliances which are located more than eight (8) feet above the floor, walkway or platform nearest thereto, except water columns and gauge glasses.

B. Water columns or gauge glasses which are located over ten (10) feet above the floor or a walkway shall be provided with a suitable platform beneath them, which need not be provided with a permanent means of egress.

[1-1-98; 14.9.4.33 NMAC - Rn, 14 NMAC 9.4.33, 08-01-03]

14.9.4.34 REPAIRS BY STATE INSPECTORS PROHIBITED: Boiler inspectors shall not make any of the repairs they order to boilers.

[1-1-98; 14.9.4.34 NMAC - Rn, 14 NMAC 9.4.34, 08-01-03]

14.9.4.35 SALES BY STATE INSPECTORS PROHIBITED: Special inspectors shall not sell or be interested in the sale directly or indirectly of articles or accessories used in the maintenance of boilers and steam equipment, to the owners of the boilers which they inspect.

[1-1-98; 14.9.4.35 NMAC - Rn, 14 NMAC 9.4.35, 08-01-03]

14.9.4.36 NATIONAL BOARD COMMISSIONED INSPECTORS:

A. Special inspectors shall not receive any salary or expenses from the state. Special inspectors shall not be required to use the inspection tags designated in Section 7 [now 14.9.4.7 NMAC], inspection tags. Such special inspectors shall use inspection tags with equivalent information.

B. Special inspectors shall inspect all boilers covered by these rules that are located in publicly owned places of public assembly and places of public assembly and insured by their respective insurance companies, authorized national board inspection agencies. All boilers, when so inspected, shall be exempt from payment to the state for inspection fees.

C. Such special inspectors are not granted the authority contained in the New Mexico Construction Industries Licensing Act (NMSA 1978).

[1-1-98; 14.9.4.36 NMAC - Rn, 14 NMAC 9.4.36, 08-01-03]

14.9.4.37 DEPUTY STATE INSPECTORS: Deputy state inspectors shall be responsible to the state mechanical bureau chief inspector and hold a national board boiler and pressure vessel commission, or pass a mechanical bureau deputy state inspector's examination.

[1-1-98; 14.9.4.37 NMAC - Rn, 14 NMAC 9.4.37, 08-01-03]

14.9.4.38 SAFETY APPLIANCES:

A. No person shall attempt to remove or do any work on any safety appliance prescribed by these rules while the appliance is subject to pressure.

B. Should any safety appliance be removed for repair during an outage of a boiler, it must be reinstalled and in proper working order before the object is again placed in service.

C. No person shall repair/alter any safety or safety relief valve or pressure-relief valves in any manner.

D. Pursuant to Section 3 [now **14.9.4.3** NMAC] (permits/violations and penalties) of these rules, the alteration of any safety device may be subject to a penalty assessed by the construction industries division, with approval by the construction industries commission.

[1-1-98; **14.9.4.38** NMAC - Rn, **14** NMAC 9.4.38, 08-01-03]

14.9.4.39 SEVERABILITY: If any section, paragraph, clause or provision of these rules shall be held to be invalid or unenforceable, the invalidity or unenforceability of such section, paragraph, clause or provision shall not affect any of the remaining sections, paragraphs, or provisions.

[1-1-98; **14.9.4.39** NMAC - Rn, **14** NMAC 9.4.39, 08-01-03]

HISTORY OF 14.9.4 NMAC:

Pre-NMAC History: The material in this part was derived from that previously filed at the state records and archives center under:

CID-90-1 Amendment #6, Section **1400.00** Administrative, Section **14001.01**, Authority, construction industries division rules and regulations, Section 60-13-6 and 60-13-9.K. of the New Mexico Construction Industries Division Licensing Act and LPG Act, 1978, and the Uniform Mechanical Code; Section **1400.02**, Scope, Section **1401.00**, definitions, construction industries division rules and regulations, filed September 16, 1993.