

Minnesota Attorney General: Administrative Rules Proceedings

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Version 3
August 20, 2018

STATE OF MINNESOTA

DEPARTMENT FILE NO. 460
Attorney General

Office Memorandum

TO : Jon K. Murphy
Special Assistant
Attorney General

DATE: September 7, 1978

FROM : Lee E. Sheehy
Special Assistant
Attorney General

PHONE: 296-1288

SUBJECT: Rules as Approved -Department of Labor & Industry/Rules of Steamfitting Standards Division, Department of Labor and Industry Governing Steamfitting Standards

Enclosed herewith are the rules you have submitted for approval. These rules have been approved by this office and filed with the Secretary of State. Note that they have NOT been filed with the State Register; this must be done promptly by your agency.

Upon receipt and before transmittal to your agency, however, it is important that you recheck these rules as to:

1. Affixation of the stamps of the Attorney General and Secretary of State to the last page of the rules;

2. Coverage by these stamps of all rules submitted; and

3. Inclusion of all pages of the rules in the approved set.

Directly following the approved rules is a complete set of required documents and transcript which must be retained with the rules by you or your agency.

If you have any questions in this regard, please contact me.

LES/dw
Enclosure

cc: Duane Harves

#460

RULES REVIEW CHECKLIST

DATE RULES RECEIVED 8-18 Temporary Rule _____

Resubmitted and Received _____

DUE DATE ~~9-6~~ 9-7

a. Returned to Agency w/o filing w/Secy of State _____
b. Approved 9/9 Date Sent Back to Agency _____

- -

1. Rules as Adopted ✓
2. Rules as Proposed ✓
3. Certificate of Board's Authorizing Resolution, where applicable N.A.
4. Order for Hearing ✓
5. Notice of Hearing ✓
   (i) Sufficiency ✓
6. Secretary of State's List ✓
7. Certificate of Acquisition of Secretary of State's List ✓
8. Affidavit of Mailing ✓
   (i) At least 30 days prior to hearing ✓
9. Statement of Need and Evidence ✓
10. Hearing Examiner's Report ✓
11. Agency's Findings of Fact ✓
12. Certificate of Board's Resolution Adopting Rules, where applicable N.A
13. Order Adopting ✓
14. Report of Chief Hearing Examiner ✓
    (i) Finding of No Substantial Change ✓
    (ii) Permission to Incorporate by Reference, where applicable N.A.
15. Certificate of Compliance with Rulemaking Procedures ✓
16. Copy of Notice of Intent to Solicit Outside Opinion, where applicable N.A
17. Petition by Public, where applicable N.A.

STATE OF MINNESOTA
OFFICE OF THE ATTORNEY GENERAL
ST. PAUL 55155

WARREN SPANNAUS
ATTORNEY GENERAL

TELEPHONE
(612) 296-6196

August 17, 1978

RECEIVED
AUG 18 1978
ATTORNEY GENERAL
ADMINISTRATIVE AGENCIES

Lee Sheehy
Special Assistant Attorney General
G19K Administration Building
St. Paul, Minnesota 55155

Re: Rules Relating to Steamfitting

Dear Lee:

Enclosed please find documents for this matter as follows:

A. Originals

1. Rules as Adopted
2. Rules as Proposed
3. Order for Hearing
4. Notice of Hearing
5. State of Need
6. Affidavit of Employee
7. Certificate of Secretary of State
8. Affidavit of Mailing
9. Statement of Evidence
10. Secretary of State's List
11. Record
12. Report of Hearing Examiner
13. Findings and Order
14. Report of Chief Hearing Examiner
15. Certificate of Compliance

B. Two copies of the above except items 10 and 11.

Should you have any questions, please advise.

Very truly yours,

JON K. MURPHY
Special Assistant
Attorney General

JKM/ci
Enclosures

AN EQUAL OPPORTUNITY EMPLOYER

STATE OF MINNESOTA

DEPARTMENT OF LABOR AND INDUSTRY

IN THE MATTER OF THE PROPOSED ADOPTION OF RULES OF THE STEAMFITTING STANDARDS DIVISION, DEPARTMENT OF LABOR AND INDUSTRY, GOVERNING STEAMFITTING STANDARDS (8 MCAR § 1.6300, et seq.)

CERTIFICATE OF COMPLIANCE

I, Jon K. Murphy, Special Assistant Attorney General for the State of Minnesota, do hereby declare that I have examined the proposed rules and all related documents and that, based on them and my personal familiarity with the applicable procedures, the Manual of Rule Making Procedures has been followed.

Dated:

JON K. MURPHY
Special Assistant
Attorney General

DEPARTMENT OF LABOR AND INDUSTRY

A. Proposed Rules amending Department of Labor and Industry Rules and Regulations Relating to Steamfitting Standards Division.

B. The following Rules are amended pursuant to the authority contained in M.S. §§ 326.46 & M.S. §§ 326.48.

SRLI8300 ORGANIZATION AND DUTIES OF ~~BOARD OF EXAMINERS~~ ADVISORY COUNCIL FOR STEAMFITTING EXAMINATIONS

(a) The ~~Board of Steamfitting Examiners~~ Council shall organize by electing from its members a chairman and a secretary, which elections must be confirmed by the ~~Industrial Commission~~ Commissioner, Department of Labor & Industry before becoming effective.

(b) The ~~Board of Steamfitting Examiners~~ Council shall meet not less than two times a year for examinations and shall meet at such other times as it deems necessary of when called by the secretary. ~~to carry out the provisions of the registration act or Code of Minimum Standards.~~

(c) The ~~board~~ Council shall examine all applicants for contracting or journeymen steamfitters' licenses, and after being satisfied of an applicant's qualifications and passage of the examination, ~~it~~ shall certify ~~him~~ the applicant to the ~~secretary~~ Department for issuance of a license.

(d) Upon information coming to the ~~board~~ Council of any licensee having obtained his license through error, misrepresentation or fraud, or of his incompetency, or of a wilful violation of any of the rules and regulations applicable to the work of steamfitting or of the adopted Code of Minimum Standards, ~~it~~ the Council shall make an investigation as to the probable truth of such information. If the facts elicited by such investigation appear to warrant a suspension or revocation of the licensee's license, the ~~board~~ Council shall file with the commissioner written charges against the licensee and a recommendation for the suspension for a stated length of time or revocation of the license. Thereupon the commissioner shall ~~notify the licensee in writing of the charges against him, the time and place of hearing the charges and his right to produce testimony of himself and witnesses and to be represented by counsel. The commission may appoint a referee to take the testimony of all the proceedings, upon a transcript of which it shall render a decision.~~ proceed in accordance with the provisions of Minnesota's Administrative Procedures Act. If the license is suspended, it shall be reinstated at the end of the period of suspension, and if it is revoked an application for a new license cannot be made within one year from the date of revocation.

(e) If any person whose license has been suspended or revoked has adjusted the cause for the suspension or revocation in a manner satisfactory to the ~~board~~ council, or if the period of suspension has elapsed, the ~~board~~ council shall so certify to the commissioner ~~and it~~ who may reinstate the suspended license or reissue the revoked license to such person, as the case may be, for the remainder of the license year.

(f) The ~~board~~ council shall notify ~~employees of the division~~ the Department of any misbehavior, neglect of duty or incompetency, ~~and report the same to the Industrial Commission~~ with ~~the~~ a recommendation for dismissal if it deems the charge to be of sufficient gravity.

(g) The ~~board~~ council shall recommend to the ~~Industrial Commission~~ Department any changes it deems advisable ~~in the registration act~~, to these rules or the Code of Minimum Standards.

(h) The ~~board~~ council shall keep a record of all meetings, hearings and examinations.

(i) The ~~board~~ council shall determine questions of interpretation of provisions of the Code of Minimum Standards, which determinations shall be subject to ~~appeal~~ review ~~to~~ by the ~~Industrial Commission~~ Department, ~~but~~ and shall submit questions of interpretation of the law or of these rules directly to the ~~commission~~ Department.

(j) The ~~board~~ council shall faithfully perform duties outlined by the ~~registration act,~~ the Code of Minimum Standards, and these rules.

(k) ~~No~~ A member of the ~~board~~ council ~~shall~~ may be removed during his term of office ~~except for reasons considered sufficient therefor by the Industrial Commission Department of Labor and Industry, nor without the privilege of a hearing~~ in accordance with Minn.Stat.§ 15.059, subd. 4.

SRLI8301 DUTIES OF THE SECRETARY

The secretary of the ~~board~~ council ~~may~~ shall be an employee of the ~~Industrial Commission~~ Department and have general charge of the office of the Steamfitting division and its books and records, including those of the ~~board~~ council. ~~If he is not a full-time employee of the commission department he shall retain in his possession the books and records of the board of examiners~~ ~~Advisory Council for Steamfitting Examinations.~~ Specifically, his duties shall include the following:

(a) Maintain a record of all proceedings of the ~~board~~ council, together with the necessary registers pertaining to applications for examinations and licenses, showing thereon, for each, the date of application, name, qualifications, place of business, place of residence, and whether the license was granted or not.

(b) To receive all moneys derived for examination fees and remit same to ~~the cashier of~~ the ~~Industrial Commission~~ Department.

(c) To ~~sign and~~ issue all licenses upon receipt of certification from the ~~board,~~council, and approved by the commissioner, that the applicant has qualified and has successfully passed the examination. He shall sign and issue renewals of licenses without such certification.

(d) To call meeting of the ~~board~~ council whenever he deems the same to be necessary, or when requested by a majority of the ~~board~~ council or by the commissioner.

(e) To issue notices and summons to licensees, complainants and witnesses of hearings by the ~~board~~ council on charges of violations of the law or the Code of Minimum Standards.

(f) To issue notices to applicants for licenses of the time and place of examination.

(g) To keep complete and detailed records of complaints and evidence pertaining thereto and have the same at hearings of the ~~board~~ council thereon.

(h) To furnish to the ~~board~~ council such information in his possession as may be necessary for the proper performance of its duties or as it may from time to time require.

(i) To prepare, with the advice and assistance of the ~~board~~ council, a budget of expenses quarterly and transmit a copy thereof to the ~~Industrial Commission~~ Department.

~~(j) To approve, before payments, all expense vouchers pertaining to the Division of Steamfitting Standards.~~

~~(k)~~ (j) To supervise the duties of inspectors and employees of the division and notify the ~~board~~ council of any incompetence, misbehavior or neglect of duty by them.

~~The secretary of the board shall receive such compensation as the Industrial Commission shall determine, subject to the rules of the Civil Service Commission.~~

SRLI8302 QUALIFICATIONS AND DUTIES OF INSPECTORS

Inspectors shall be ~~directly~~ responsible ~~to the secretary of the board~~ for the fulfillment of their duties, which shall include the following:

(a) They shall report to the secretary of the ~~board~~ council or the ~~Industrial Commission~~ Department all violations of the law or Code of Minimum Standards, with recommendation for action on such violations.

(b) They shall inspect the installation of all high pressure steam piping and appurtenances when requested or when deemed advisable to determine if such installation meets code requirements. They shall also inspect high pressure steam piping underground and overhead or in any building at any time to determine the safety operations of such steam piping and appurtenances.

(c) They shall at all times be alert in ascertaining whether persons engaging in the business or occupation of high pressure steam piping are complying with the provisions of the registration act and Code of Minimum Standards, and especially as to whether or not such persons are licensed.

(d) They shall be thoroughly conversant with all provisions of the registration act, the Code of Minimum Standards, and these rules.

(e) They shall at all times be courteous in the conduct of their duties and shall acquaint the persons engaged in the business of high pressure steam piping with the provisions of the registration act and Code of Minimum Standards.

(f) They shall be furnished with a badge or certificate of identification and shall display the same whenever requested when on duty.

(g) They shall refrain from debating any question of disputes where violations are found, but shall be empowered to inform violators of the provisions of the code.

(h) They shall not divulge any of their opinions or findings pertaining to their duties as inspectors to any person not connected with the Division of Steamfitting Standards unless instructed to do so by their superior officers, nor shall they divulge to the public any matters of a private nature in the possession of the division.

(i) They shall not have authority to start any action or legal proceeding pertaining to the enforcement of the registration act or Code of Minimum Standards unless instructed by their superior officers to do so.

(j) They shall have authority to give notice to installers or the property owner by attaching a tag to the steam piping or

equipment advising that the piping installation does not meet the Minnesota code requirements or that it was installed by persons not licensed to make such installation, and that the equipment shall not be put into operation until the law and code are complied with and the tag removed by an authorized person.

SRLI8303 DEFINITIONS

(a) High pressure steam shall mean a pressure in excess of 15 pounds per square inch.

(b) A contracting steamfitter is any person engaged in the planning, superintending and practical installation of high pressure steam piping and appurtenances, and otherwise lawfully qualified to construct high pressure steam piping installations and make replacements to existing plants, who is also qualified to conduct the business of high pressure steam piping installations and who is familiar with the laws, rules, regulations and minimum standards governing same.

(c) A journeyman steamfitter is any person other than a contracting steamfitter who, as his principal occupation, is engaged in the practical installation of high pressure steam piping and appurtenances in the employ of a contracting steamfitter.

(d) A steamfitter's apprentice is any person other than a contracting or journeyman steamfitter, who, as his principal occupation, is engaged in learning and assisting in the installation of high pressure steam piping and appurtenances under the supervision of a licensed steamfitter.

SRLI8304 LICENSING AND REGISTRATION

(a) No person, firm, corporation or association shall engage in the business or work at the occupation of high pressure steam piping in the State of Minnesota without first obtaining a license and being registered as a contracting or journeyman steamfitter, as the case may be, and no licensed contractor shall employ a journeyman steamfitter, to install high pressure steam piping unless such journeyman is a licensed steamfitter; and no person shall work as a steamfitter's apprentice for more than thirty days without being registered as such, nor longer than ~~five years~~ four years without making application for examination and license as a steamfitter.

(b) Licenses shall be granted as contracting or journeyman steamfitters upon proof of qualifications therefor as hereinafter provided, and no apprentice shall be registered as such who is not at least sixteen years of age.

(c) An applicant for a contractor's license to do business in the name of a firm or partnership shall be a bona fide member or employe of such firm or partnership. An applicant for a contractor's license to do business in the name of a corporation shall be a regular employe or member in such corporation.

SRLI8305 APPLICATIONS FOR REGISTRATION

(a) Application for a contractor's license and registration shall be made to the secretary of the Division of Steamfitting Standards at least thirty days prior to the next scheduled examination on blanks provided for that purpose by the division. ~~accompanied by the examination fee.~~ Application for a journeyman's license shall be filed with the division at least ten days prior to the next examination. The ~~board~~ council may waive the rule applying to journeymen examinations in emergency cases. If the statements made by the applicant in said application form indicate that he possesses the necessary qualifications to take an examination, the secretary shall notify him of the time and place of examination. If, on examination, the applicant fully qualifies, the ~~board~~ council shall so certify to the ~~commission~~ department, which shall thereupon issue to him a license as a contracting or journeyman steamfitter, as the case may be, for the remainder of the calendar year. If an applicant fails to qualify at an examination, the ~~board~~ council shall so certify to the secretary, who shall notify the applicant of his failure to pass.

(b) Any applicant who fails to pass the first examination may be re-examined at the next regular examination of which he is notified without the payment of another fee, but thereafter all applications for re-examination shall be accompanied by the regular statutory fee.

SRLI8306 QUALIFICATIONS FOR CONTRACTING STEAMFITTER LICENSE - Applicants for license as a contracting steamfitter shall:

(a) Be at least twenty-one years of age.

(b) Possess sufficient education to read and comprehend blueprints, specifications and terms of contracts, and to compute the cost of installing high pressure steam piping and equipment.

(c) Have worked at the trade of steamfitting for at least five years.

(d) Be examined as to their knowledge of high pressure steamfitting, the requirements of the laws and regulations and minimum standards for the installation of high pressure steam piping in the state of Minnesota, their ability to lay out a plan of high pressure steam piping, and their knowledge of the physics and mechanics applicable to high pressure steam piping.

(e) Generally demonstrate to the ~~board~~ council their fitness to properly, intelligently and lawfully carry on the business of a contracting and employing steamfitter in the state of Minnesota.

(f) Be of good moral character.

(g) Pay an examination fee. ~~of $40.~~

(h) Pass the required examination by at least 70 per cent.

SRLI8307 JOURNEYMAN STEAMFITTER QUALIFICATIONS

(a) Applicants for license shall - Be at least ~~twenty-one~~ twenty years of age.

(b) Possess sufficient education to read and comprehend blueprints and specifications for the installation of high pressure steam piping.

(c) Be of good moral character.

(d) Have been a registered apprentice or journeyman steamfitter for at least ~~five~~ four years.

(e) Pay an examination fee. ~~of $15.~~

(f) Pass the required examination by at least 70 per cent.

SRLI8308 EXAMINATION OF APPLICANTS FOR LICENSES

(a) Examinations shall consist of written ~~and~~ or oral questions and drawings or plans and sketches, except that when an applicant is handicapped for a written examination his examination may be entirely oral. All questions and sketches shall pertain to practical experience and knowledge of steamfitting and be standard, byt may be changed from time to time.

(b) Examination papers shall be reviewed by at least two members of the ~~beard~~ council. Each answer or sketch shall be graded on the basis of 100 for perfect. The ~~beard~~ council may grant up to ~~25~~ 10 per cent for experience in the trade or to persons who are certified welders based upon actual experience on high pressure steamfitting as shown on the application. An average of at least 70 percent shall constitute the passing mark.

(c) Applicants shall be notified of the outcome of their examination after their papers have been graded. The notice to those sho failed to pass shall inform them of their privilege of re-examination without the payment of another fee at the next examination held of which they are notified.

SRLI8309 FEES FOR EXAMINATIONS AND LICENSES

(a) ~~Examination fees for contracting steamfitters shall be $40, and for journeymen steamfitters $10. Such fees~~ Fees shall be for the examination and to cover the cost of a license for the remainder of the calendar year in which the examination is taken or for which the application is made if the applicant qualifies for a license.

~~(b) The annual renewal fee shall be $30 for contracting steamfitters and $4 for journeymen steamfitters.~~

~~(c)~~ (b) ~~All licenses shall expire on December 31 of each year, but may be renewed at any time during the month of December or the following January upon payment of the regular annual renewal fee. For renewals made during the following February the fee for contracting steamfitters shall be $10 and for journeymen steamfitters $2 in addition to the regular annual renewal fee.~~ After February a license may be reinstated upon payment of the regular examination fee; however, the board may at its discretion require the applicant to be re-examined and pass an examination before being reinstated as a licensed steamfitter.

SRLI3810 REGISTRATION OF APPRENTICES

(a) All steamfitters' apprentices who are at least sixteen years of age shall be registered with the Division of Steamfitting Standards, unless they are indentured through some recognized Apprenticeship training program. Each registration shall give the name, address and age of the apprentice and the date of commencement of his term of apprenticeship, and also the name and address of his present and past employers as such apprentice. The registration shall be good until the completion of the term of apprenticeship, provided that when an apprentice is thereafter transferred from one contracting steamfitter to another, a notice of such transfer shall be filed with the Division of Steamfitting Standards or the Division of Voluntary Apprenticeship. Upon completion of the term apprenticeship, which shall consist of ~~five~~ four years, the apprentice shall make application for examination and license as a journeyman or contracting steamfitter.

(b) All contracting steamfitters shall within ten days of the employment of an apprentice inform the Division of Steamfitting Standards of the employment of such apprentice, giving his name, address, age and date of employment, unless such apprentice is indentured by some plan recognized by the Division of Voluntary Apprenticeship.

(c) All registered apprentices shall inform the Division of Steamfitting Standards of changes of employment and of their address.

SRLI8311 GENERAL PROVISIONS

(a) A contracting steamfitter's license shall entitle him to work as a journeyman steamfitter under rules and regulations applicable to journeyman steamfitters, but a journeyman steamfitter's license shall not entitle the holder therof to do business as a contracting steamfitter.

(b) A contracting steamfitter employing a journeyman steamfitter or an apprentice steamfitter shall comply with all the laws, rules, regulations and minimum standards of the State of Minnesota.

1. Paying promptly for labor and material furnished an owner;

2. Reporting income tax and conforming to the laws governing the relationship of master and servant, including the carrying of workmen's compensation insurance, paying the Social Security tax, paying wages when due, furnishing written contracts of employment, and employing licensed steamfitters on high pressure pipe work.

(c) All certificates of licenses of a contracting steamfitter shall be posted in a conspicuous place in the office of the contractor's place of business, and license cards issued to persons shall at all times be in possession of the licensee during business hours and shall be displayed when required by a representative of the Division of Steamfitting Standards or the ~~Industrial Commission~~ Department. Such card shall at no time be in the possession of

any other person than the licensee to whom it was issued. Licenses issued hereunder shall not be transferable.

(d) The right of any firm, corporation or association to do business under a license issued to a member therof shall depend upon the holder's active continuance in the business of such firm, corporation or association.

(e) If the member of a firm, corporation or association holding a license for it shall sever his connection with such concern, the concern shall have no right to continue the business of high pressure steamfitting without procuring another license.

(f) Changes in the name or place of business of a firm, corporation or association for which an individual is holding a license and the removal of the residence of a licensed journeyman from one city to another shall be reported immediately to the secretary of the Division of Steamfitting Standards by the licensee.

(g) When a steamfitter's license is revoked, the licensee shall at once surrender his certificate and identification card to the secretary of the Division of Steamfitting Standards.

(h) Duplicate licenses and identification cards may be issued by the secretary upon proof that the original is lost or mutilated.

(i) When a license has for any cause been suspended for a stated time, it shall automatically be again in force on the expiration of the period of suspension if such period is within the time for which the license was issued; provided, that if the cause for

suspension has been adjusted in a manner satisfactory to the ~~board~~ council, it may recommend to the ~~commission~~ department a reduction of the period of suspension or immediate reinstatement of the license.

(j) When a license has for any cause been revoked it cannot be renewed without the procedure for an original license; provided, that where a license has been revoked for some cause other than incompetency the ~~commission~~ department may in its discretion waive the requirement of an examination if an application for a new license is made within one year from the date of revocation, but not thereafter.

SRLI8312 MINNESOTA CODE FOR HIGH PRESSURE STEAM PIPING AND ITS COMPONENT PARTS

1 thru 4 - remain as previously adopted.

5. GENERAL REQUIREMENTS - MATERIALS

(a) - remains as previously adopted.

(b) Should it be desired to use any materials or methods of manufacture not now covered by this code or which may be developed in the future, it is intended that the manufacturer shall provide details of design and construction which will be as safe as otherwise provided by the rules in the code. Where it is desired to use materials not included in Table I, written application shall be made to the ~~Industrial Commission~~ Department fully describing the proposed material and the contemplated use, requesting that an allowable stress (S value) be assigned. Such materials shall not be used until the stress values have been approved.

Note: Table I refers to American Standard Code for Pressure Piping and is not printed in this code book.

6 thru 17 - remain as previously adopted.

18. DRAINS, DRIPS, AND STEAM TRAPS

(a) thru (d) remain as previously adopted.

(e) The discharge of a high pressure trap shall not empty into a low pressure receiver unless first run through a flash tank or there is an ample sized vent so a trap failure could not increase the pressure in low pressure receiver tank.

19 thru 43 - remain as previously adopted.

44. BOILER FEED SYSTEMS AND OTHER WATER PIPING NOT OTHERWISE COVERED

(a) thru (b) - remain as previously adopted.

(c) Boiler feed piping systems shall be designed for the highest pressure exerted by the boiler feed pumps at any load under normal operation and on the highest corresponding temperature, actually existing. Where water passes through heaters in series, the temperature rating of the piping shall conform to the actual temperatures produced by the heaters in each part of the system; but in no case shall pipe or fitting be rated less than 1.25 times the safety valve setting on the boiler.

45. BOILER FEED PIPING

~~(a) On power boilers that have over 500 square feet of heating surface, at least two means of feeding the boiler shall be provided using two different apparatuses for feeding. If pumps are used, one should be steam actuated where solid fuel is used.~~

(a) Boilers having more than 500 sq. ft. of water heating-surface shall have at least two means of feeding water. Each source shall be capable of supplying water to the boiler at a pressure of 6% higher than the highest setting of any safety valve on the boiler. For boilers that are fired with solid fuel, not in suspension, one source of feeding shall be steam operated.

(b) - remains as previously adopted.

(c) All valves and fittings on the feed water piping from the pump to the boiler ~~to and~~ including the stop and check valves shall be equal at least to the requirement of the American Standards for a pressure 1.25 times the maximum allowable working pressure of the boiler or 1.25 times the lowest set pressure of any safety valve in the boiler drum, except as otherwise provided in the A.S.M.E. Boiler Code or American Standards Association.

(d) thru (g) - remain as previously adopted.

46. BLOWOFF PIPING AND TANKS

(a) - remain as previously adopted.

(b) Design. Blowoff piping shall be designed as for saturated steam in accordance with the following table but all fittings shall be of steel.

(1)&(2) - remain as previously adopted.

(3) The outlet opening shall be connected with internal pipe or baffle extending downwards to within a few inches of the bottom of the tank. A 3/4 inch syphon ~~breader~~ breaker shall connect the outlet piping with the vent pipe.

(c) RECOMMENDED PIPE SIZES FOR BLOW-OFF SYSTEMS UP TO 450 POUNDS Table - remain as previously adopted.

(1) The blow-down from any boiler shall not be connected directly to any sanitary sewer system. The blow-down must first pass through a blow-off tank or other apparatus that will reduce the

the pressure to not more than 5 pounds and the temperature to not more than ~~150~~ 180 degrees F.

(3) thru (7) - remain as previously adopted.

(8) ~~Section 150 of~~ The State Plumbing Code provides: "The exhaust, blow-off, sediment or drip pipe from any steam boiler or steam trap shall not be connected directly to any sewer, drain, soil waste, or vent pipe. The water or steam of condensation from such pipe before it shall enter any sewer or drain shall be discharged into a suitable catch basin or condenser." The foregoing section is adopted and made a part of this Code.

47. WATER COLUMN

(a) Crosses shall be used on all right angle turns on the piping to the water column. The minimum size pipe connecting the water column to the boiler shall be not less than one inch in diameter.

~~(b) Cast iron fittings designed for allowable working pressure of 125 pounds be used on piping to the water column when the maximum steam pressure allowed on the boiler does not exceed 100 psi.~~

~~(c) The above rules are in accordance with the recommendations of the Power Boiler Code of the American Standards Association, i.e., the maximum allowable working pressure on the pipe and fittings to the water column shall not exceed 80 per cent of the maximum working pressure recommended by the manufacturer of such piping or fittings.~~

(b) No pipe connections may be made on the water column piping except those connected to equipment or appurtenances used to measure, record or regulate. This would include steam guages, low water cut-off, pressure controls, pump controls, etc. Not included would be such equipment as whistle's or soot blowers.

~~(d)~~ (c) Cast iron plugs shall not be used in ~~corsses~~ Mosses. Galvanized pipe or galvanized fittings shall not be used on any connection directly to the boiler.

~~(e)~~ (d) If any valves are used between the water column and boiler, they shall be of the straight way type with either a lever or rising stem and shall be sealed open.

~~(f)~~ (e) On power boilers where pressures exceed 100 pounds, two valves shall be used on the blow-off pipe on the water column, one of which shall be of the plug type with gland and shall be installed as close to the water column as possible.

48 thru 54 - remain as previously adopted.

55. EXPANSION AND FLEXIBILITY

(a) thru (d)(2) - remain as previously adopted.

(d)(3) LINEAR EXPANSION OF PIPING

Constants per 100 Ft.		Formula:
Metal		E = expansion in inches per 100 ft. of pipe
Steel	.00804	F = starting temperature
Wrought Iron	.00816	T = final temperature
Cast Iron	.00780	~~G = constant~~
Copper and Brass	.01140	E = constant x (T - F)

~~T-----F-x-G-x-E-=-Expansion-of-Pipe~~

(d)(4) thru 62 - remain as previously adopted.

APPROVED AS TO FORM AND LEGALITY

SEP. 4 1978 19____

WARREN SPANNAUS, ATTORNEY GENERAL

BY Lee E. Shuly

SPECIAL ASSISTANT ATTORNEY GENERAL

STATE OF MINNESOTA
DEPARTMENT OF STATE
FILED
SEP - 5 1978
Joan Anderson Growe
Secretary of State

1:10 PM

STATE OF MINNESOTA
OFFICE OF HEARING EXAMINERS

FOR THE DEPARTMENT OF LABOR AND INDUSTRY

IN THE MATTER OF THE PROPOSED ADOPTION OF RULES OF STEAMFITTING STANDARDS DIVISION, DEPARTMENT OF LABOR AND INDUSTRY, GOVERNING STEAMFITTING STANDARDS. (8MCAR § 1.6300, et seq.)	REPORT OF THE CHIEF HEARING EXAMINER

WHEREAS, a hearing was held on June 13, 1978, before Harry Seymour Crump, a Hearing Examiner of the State Office of Hearing Examiners, on the above-entitled matter in compliance with Minn. Stat. § 15.0412, Subd. 4; and

WHEREAS, the Report of Hearing Examiner made pursuant to Minn. Stat. § 15.052, Subd. 3, was issued to the Department of Labor and Industry on July 11, 1978; and

WHEREAS, the Department of Labor and Industry has now determined to adopt rules pursuant to Minn. Stat. § 15.0412, Subd. 4; and

WHEREAS, the Department of Labor and Industry has submitted said rules to the Chief Hearing Examiner for review pursuant to Minn. Stat. § 15.052, Subd. 4, and Rule HE 107; and

WHEREAS, the Chief Hearing Examiner finds that the final proposed rules are not substantially different from those proposed at the public hearing and that the Department of Labor and Industry has met all requirements of Minn. Stat. § 15.0412, Subd. 4.

NOW, THEREFORE, upon receipt of this Report, the Department of Labor and Industry has the responsibility of submitting the complete hearing record and the rules as adopted by the Department to the Attorney General and to publish in the State Register, all pursuant ot Minn. Stat. § 15.0412, Subd. 4.

Dated this 4th day
of August, 1978.

DUANE R. HARVES
Chief Hearing Examiner

STATE OF MINNESOTA

DEPARTMENT OF LABOR AND INDUSTRY

In the Matter of the Proposed Adoption of Rules of the Steamfitting Standards Division, Department of Labor and Industry, governing Steamfitting Standards (8 MCAR § 1.6300, et seq.)

FINDINGS OF FACT AND ORDER ADOPTING RULES

A public hearing in the above-entitled matter having been held at 9:00 a.m. on June 13, 1978, in Room 81, State Office Building in St. Paul, Minnesota, after proper notice required by Minn. Stat. § 15.0412 was served upon all persons, associations, and other interested groups registered with the Secretary of State for that purpose and published in the State Register, which hearing continued until all persons had opportunity to be heard; and the record having been kept open for a period of time to allow all interested persons to file additional written statements;

NOW, THEREFORE, E. I. Malone, Commissioner, Minnesota Department of Labor and Industry, having considered all the evidence and the records, files and proceedings herein, including the Report of Hearing Examiner issued July 11, 1978, and having confirmed the need for the above-captioned rules and reasonableness thereof, does make the following findings and order with respect to this matter;

FINDINGS OF FACT

The Report of the Hearing Examiner dated July 11, 1978 is hereby

adopted and incorporated by reference herein as the Findings of Fact in this matter.

ORDER

IT IS HEREBY ORDERED, that the rules as originally proposed and as published in the State Register at 2 State Register 1976 and approved in the Report of the Hearing Examiner dated July 11, 1978 are adopted in their entirety this 27 day of July, 1978, pursuant to authority vested in me by Minn. Stat. §§ 326.46 and 326.48.

STATE OF MINNESOTA

Division of Steamfitting Standards

E. I. Malone

E. I. Malone, Commissioner
Department of Labor and Industry

DEPARTMENT OF LABOR AND INDUSTRY

A. Proposed Rules amending Department of Labor and Industry Rules and Regulations Relating to Steamfitting Standards Division.

B. The following Rules are amended pursuant to the authority contained in M.S. §§ 326.46 & M.S. §§ 326.48.

SRLI8300 ORGANIZATION AND DUTIES OF ~~BOARD OF EXAMINERS~~ ADVISORY COUNCIL FOR STEAMFITTING EXAMINATIONS

(a) The ~~Board of Steamfitting Examiners~~ Council shall organize by electing from its members a chairman and a secretary, which elections must be confirmed by the ~~Industrial Commission~~ Commissioner, Department of Labor & Industry before becoming effective.

(b) The ~~Board of Steamfitting Examiners~~ Council shall meet not less than two times a year for examinations and shall meet at such other times as it deems necessary of when called by the secretary. ~~to carry out the provisions of the registration act or Code of Minimum Standards.~~

(c) The ~~board~~ Council shall examine all applicants for contracting or journeymen steamfitters' licenses, and after being satisfied of an applicant's qualifications and passage of the examination, ~~it~~ shall certify ~~him~~ the applicant to the ~~secretary~~ Department for issuance of a license.

(d) Upon information coming to the ~~board~~ Council of any licensee having obtained his license through error, misrepresentation or fraud, or of his incompetency, or of a wilful violation of any of the rules and regulations applicable to the work of steamfitting or of the adopted Code of Minimum Standards, ~~it~~ the Council shall make an investigation as to the probable truth of such information. If the facts elicited by such investigation appear to warrant a suspension or revocation of the licensee's license, the ~~board~~ Council shall file with the commissioner written charges against the licensee and a recommendation for the suspension for a stated length of time or revocation of the license. Thereupon the commissioner shall ~~notify the licensee in writing of the charges against him, the time and place of hearing the charges and his right to produce testimony of himself and witnesses and to be represented by counsel. The commission may appoint a referee to take the testimony of all the proceedings, upon a transcript of which it shall render a decision.~~ proceed in accordance with the provisions of Minnesota's Administrative Procedures Act. If the license is suspended, it shall be reinstated at the end of the period of suspension, and if it is revoked an application for a new license cannot be made within one year from the date of revocation.

(e) If any person whose license has been suspended or revoked has adjusted the cause for the suspension or revocation in a manner satisfactory to the ~~board~~ council, or if the period of suspension has elapsed, the ~~board~~ council shall so certify to the commissioner ~~and it~~ who may reinstate the suspended license or reissue the revoked license to such person, as the case may be, for the remainder of the license year.

(f) The ~~board~~ council shall notify ~~employees of the division~~ the Department of any misbehavior, neglect of duty or incompetency, ~~and report the same to the Industrial Commission~~ with ~~the~~ a recommendation for dismissal if it deems the charge to be of sufficient gravity.

(g) The ~~board~~ council shall recommend to the ~~Industrial Commission~~ Department any changes it deems advisable ~~in the registration act~~, to these rules or the Code of Minimum Standards.

(h) The ~~board~~ council shall keep a record of all meetings, hearings and examinations.

(i) The ~~board~~ council shall determine questions of interpretation of provisions of the Code of Minimum Standards, which determinations shall be subject to ~~appeal~~ review ~~to~~ by the ~~Industrial Commission~~ Department, ~~but~~ and shall submit questions of interpretation of the law or of these rules directly to the ~~commission~~ Department.

(j) The ~~board~~ council shall faithfully perform duties outlined by the ~~registration act,~~ the Code of Minimum Standards, and these rules.

(k) ~~No~~ A member of the ~~board~~ council ~~shall~~ may be removed during his term of office ~~except for reasons considered sufficient therefor by the Industrial Commission Department of Labor and Industry, nor without the privilege of a hearing~~ in accordance with Minn.Stat.§ 15.059, subd. 4.

SRLI8301 DUTIES OF THE SECRETARY

The secretary of the ~~board~~ council ~~may~~ shall be an employee of the ~~Industrial Commission~~ Department and have general charge of the office of the Steamfitting division and its books and records, including those of the ~~board~~ council. ~~If he is not a full-time employee of the commission department he shall retain in his possession the books and records of the board of examiners~~ Advisory Council for Steamfitting Examinations. Specifically, his duties shall include the following:

(a) Maintain a record of all proceedings of the ~~board~~ council, together with the necessary registers pertaining to applications for examinations and licenses, showing thereon, for each, the date of application, name, qualifications, place of business, place of residence, and whether the license was granted or not.

(b) To receive all moneys derived for examination fees and remit same to ~~the cashier of~~ the ~~Industrial Commission~~ Department.

(c) To ~~sign and~~ issue all licenses upon receipt of certification from the ~~board~~,council, and approved by the commissioner, that the applicant has qualified and has successfully passed the examination. He shall sign and issue renewals of licenses without such certification.

(d) To call meeting of the ~~board~~ council whenever he deems the same to be necessary, or when requested by a majority of the ~~board~~ council or by the commissioner.

(e) To issue notices and summons to licensees, complainants and witnesses of hearings by the ~~board~~ council on charges of violations of the law or the Code of Minimum Standards.

(f) To issue notices to applicants for licenses of the time and place of examination.

(g) To keep complete and detailed records of complaints and evidence pertaining thereto and have the same at hearings of the ~~board~~ council thereon.

(h) To furnish to the ~~board~~ council such information in his possession as may be necessary for the proper performance of its duties or as it may from time to time require.

(i) To prepare, with the advice and assistance of the ~~board~~ council, a budget of expenses quarterly and transmit a copy thereof to the ~~Industrial Commission~~ Department.

~~(j) To approve, before payments, all expense vouchers pertaining to the Division of Steamfitting Standards.~~

~~(k)~~ (j) To supervise the duties of inspectors and employees of the division and notify the ~~board~~ council of any incompetence, misbehavior or neglect of duty by them.

~~The secretary of the board shall receive such compensation as the Industrial Commission shall determine, subject to the rules of the Civil Service Commission.~~

SRLI8302 QUALIFICATIONS AND DUTIES OF INSPECTORS

Inspectors shall be ~~directly~~ responsible ~~to the secretary of the board~~ for the fulfillment of their duties, which shall include the following:

(a) They shall report to the secretary of the ~~board~~ council or the ~~Industrial Commission~~ Department all violations of the law or Code of Minimum Standards, with recommendation for action on such violations.

(b) They shall inspect the installation of all high pressure steam piping and appurtenances when requested or when deemed advisable to determine if such installation meets code requirements. They shall also inspect high pressure steam piping underground and overhead or in any building at any time to determine the safety operations of such steam piping and appurtenances.

(c) They shall at all times be alert in ascertaining whether persons engaging in the business or occupation of high pressure steam piping are complying with the provisions of the registration act and Code of Minimum Standards, and especially as to whether or not such persons are licensed.

(d) They shall be thoroughly conversant with all provisions of the registration act, the Code of Minimum Standards, and these rules.

(e) They shall at all times be courteous in the conduct of their duties and shall acquaint the persons engaged in the business of high pressure steam piping with the provisions of the registration act and Code of Minimum Standards.

(f) They shall be furnished with a badge or certificate of identification and shall display the same whenever requested when on duty.

(g) They shall refrain from debating any question of disputes where violations are found, but shall be empowered to inform violators of the provisions of the code.

(h) They shall not divulge any of their opinions or findings pertaining to their duties as inspectors to any person not connected with the Division of Steamfitting Standards unless instructed to do so by their superior officers, nor shall they divulge to the public any matters of a private nature in the possession of the division.

(i) They shall not have authority to start any action or legal proceeding pertaining to the enforcement of the registration act or Code of Minimum Standards unless instructed by their superior officers to do so.

(j) They shall have authority to give notice to installers or the property owner by attaching a tag to the steam piping or

equipment advising that the piping installation does not meet the Minnesota code requirements or that it was installed by persons not licensed to make such installation, and that the equipment shall not be put into operation until the law and code are complied with and the tag removed by an authorized person.

SRLI8303 DEFINITIONS

(a) High pressure steam shall mean a pressure in excess of 15 pounds per square inch.

(b) A contracting steamfitter is any person engaged in the planning, superintending and practical installation of high pressure steam piping and appurtenances, and otherwise lawfully qualified to construct high pressure steam piping installations and make replacements to existing plants, who is also qualified to conduct the business of high pressure steam piping installations and who is familiar with the laws, rules, regulations and minimum standards governing same.

(c) A journeyman steamfitter is any person other than a contracting steamfitter who, as his principal occupation, is engaged in the practical installation of high pressure steam piping and appurtenances in the employ of a contracting steamfitter.

(d) A steamfitter's apprentice is any person other than a contracting or journeyman steamfitter, who, as his principal occupation, is engaged in learning and assisting in the installation of high pressure steam piping and appurtenances under the supervision of a licensed steamfitter.

SRLI8304 LICENSING AND REGISTRATION

(a) No person, firm, corporation or association shall engage in the business or work at the occupation of high pressure steam piping in the State of Minnesota without first obtaining a license and being registered as a contracting or journeyman steamfitter, as the case may be, and no licensed contractor shall employ a journeyman steamfitter, to install high pressure steam piping unless such journeyman is a licensed steamfitter; and no person shall work as a steamfitter's apprentice for more than thirty days without being registered as such, nor longer than ~~five years~~ four years without making application for examination and license as a steamfitter.

(b) Licenses shall be granted as contracting or journeyman steamfitters upon proof of qualifications therefor as hereinafter provided, and no apprentice shall be registered as such who is not at least sixteen years of age.

(c) An applicant for a contractor's license to do business in the name of a firm or partnership shall be a bona fide member or employe of such firm or partnership. An applicant for a contractor's license to do business in the name of a corporation shall be a regular employe or member in such corporation.

SRLI8305 APPLICATIONS FOR REGISTRATION

(a) Application for a contractor's license and registration shall be made to the secretary of the Division of Steamfitting Standards at least thirty days prior to the next scheduled examination on blanks provided for that purpose by the division. ~~accompanied by the examination fee.~~ Application for a journeyman's license shall be filed with the division at least ten days prior to the next examination. The ~~board~~ council may waive the rule applying to journeymen examinations in emergency cases. If the statements made by the applicant in said application form indicate that he possesses the necessary qualifications to take an examination, the secretary shall notify him of the time and place of examination. If, on examination, the applicant fully qualifies, the ~~board~~ council shall so certify to the ~~commission~~ department, which shall thereupon issue to him a license as a contracting or journeyman steamfitter, as the case may be, for the remainder of the calendar year. If an applicant fails to qualify at an examination, the ~~board~~ council shall so certify to the secretary, who shall notify the applicant of his failure to pass.

(b) Any applicant who fails to pass the first examination may be re-examined at the next regular examination of which he is notified without the payment of another fee, but thereafter all applications for re-examination shall be accompanied by the regular statutory fee.

SRLI8306 QUALIFICATIONS FOR CONTRACTING STEAMFITTER LICENSE - Applicants for license as a contracting steamfitter shall:

(a) Be at least twenty-one years of age.

(b) Possess sufficient education to read and comprehend blueprints, specifications and terms of contracts, and to compute the cost of installing high pressure steam piping and equipment.

(c) Have worked at the trade of steamfitting for at least five years.

(d) Be examined as to their knowledge of high pressure steamfitting, the requirements of the laws and regulations and minimum standards for the installation of high pressure steam piping in the state of Minnesota, their ability to lay out a plan of high pressure steam piping, and their knowledge of the physics and mechanics applicable to high pressure steam piping.

(e) Generally demonstrate to the ~~board~~ council their fitness to properly, intelligently and lawfully carry on the business of a contracting and employing steamfitter in the state of Minnesota.

(f) Be of good moral character.

(g) Pay an examination fee. ~~of $40.~~

(h) Pass the required examination by at least 70 per cent.

SRLI8307 JOURNEYMAN STEAMFITTER QUALIFICATIONS

(a) Applicants for license shall - Be at least ~~twenty-one~~ twenty years of age.

(b) Possess sufficient education to read and comprehend blueprints and specifications for the installation of high pressure steam piping.

(c) Be of good moral character.

(d) Have been a registered apprentice or journeyman steamfitter for at least ~~five~~ four years.

(e) Pay an examination fee. ~~of $15.~~

(f) Pass the required examination by at least 70 per cent.

SRLI8308 EXAMINATION OF APPLICANTS FOR LICENSES

(a) Examinations shall consist of written ~~and~~ or oral questions and drawings of plans and sketches, except that when an applicant is handicapped for a written examination his examination may be entirely oral. All questions and sketches shall pertain to practical experience and knowledge of steamfitting and be standard, but may be changed from time to time.

(b) Examination papers shall be reviewed by at least two members of the ~~board~~ council. Each answer or sketch shall be graded on the basis of 100 for perfect. The board may grant up to ~~25~~ 10 per cent for experience in the trade or to persons who are certified welders based upon actual experience on high pressure steamfitting as shown on the application. An average of at least 70 percent shall constitute the passing mark.

(c) Applicants shall be notified of the outcome of their examination after their papers have been graded. The notice to those who have failed to pass shall inform them of their privilege of re-examination without the payment of another fee at the next examination held of which they are notified.

SRLI8309 FEES FOR EXAMINATIONS AND LICENSES

(a) ~~Examination-fees-for-contracting-steamfitters-shall-be-$40, and-for-journeymen-steamfitters-$10.--Such-fees~~ Fees shall be for the examination and to cover the cost of a license for the remainder of the calendar year in which the examination is taken or for which the application is made if the applicant qualifies for a license.

~~(b)-The-annual-renewal-fee-shall-be-$30-for-contracting-steam-fitters-and-$4-for-journeymen-steamfitters.~~

~~(c)~~ (b) ~~All-licenses-shall-expire-on-December-31-of-each-year, but-may-be-renewed-at-any-time-during-the-month-of-December-or the-following-January-upon-payment-of-the-regular-annual-renewal-fee.--For-renewals-made-during-the-following-February-the-fee-for contracting-steamfitters-shall-be-$10-and-for-journeymen-steam--fitters-$2-in-addition-to-the-regular-annual-renewal-fee.~~ After February a license may be reinstated upon payment of the regular examination fee; however, the board may at its discretion require the applicant to be re-examined and pass an examination before being reinstated as a licensed steamfitter.

SRLI3810 REGISTRATION OF APPRENTICES

(a) All steamfitters' apprentices who are at least sixteen years of age shall be registered with the Division of Steamfitting Standards, unless they are indentured through some recognized Apprenticeship training program. Each registration shall give the name, address and age of the apprentice and the date of commencement of his term of apprenticeship, and also the name and address of his present and past employers as such apprentice. The registration shall be good until the completion of the term of apprenticeship, provided that when an apprentice is thereafter transferred from one contracting steamfitter to another, a notice of such transfer shall be filed with the Division of Steamfitting Standards or the Division of Voluntary Apprenticeship. Upon completion of the term apprenticeship, which shall consist of ~~five~~ four years, the apprentice shall make application for examination and license as a journeyman or contracting steamfitter.

(b) All contracting steamfitters shall within ten days of the employment of an apprentice inform the Division of Steamfitting Standards of the employment of such apprentice, giving his name, address, age and date of employment, unless such apprentice is indentured by some plan recognized by the Division of Voluntary Apprenticeship.

(c) All registered apprentices shall inform the Division of Steamfitting Standards of changes of employment and of their address.

SRLI8311 GENERAL PROVISIONS

(a) A contracting steamfitter's license shall entitle him to work as a journeyman steamfitter under rules and regulations applicable to journeyman steamfitters, but a journeyman steamfitter's license shall not entitle the holder therof to do business as a contracting steamfitter.

(b) A contracting steamfitter employing a journeyman steamfitter or an apprentice steamfitter shall comply with all the laws, rules, regulations and minimum standards of the State of Minnesota.

1. Paying promptly for labor and material furnished an owner;

2. Reporting income tax and conforming to the laws governing the relationship of master and servant, including the carrying of workmen's compensation insurance, paying the Social Security tax, paying wages when due, furnishing written contracts of employment, and employing licensed steamfitters on high pressure pipe work.

(c) All certificates of licenses of a contracting steamfitter shall be posted in a conspicuous place in the office of the contractor's place of business, and license cards issued to persons shall at all times be in possession of the licensee during business hours and shall be displayed when required by a representative of the Division of Steamfitting Standards or the ~~Industrial Commission~~ Department. Such card shall at no time be in the possession of

any other person than the licensee to whom it was issued. Licenses issued hereunder shall not be transferable.

(d) The right of any firm, corporation or association to do business under a license issued to a member therof shall depend upon the holder's active continuance in the business of such firm, corporation or association.

(e) If the member of a firm, corporation or association holding a license for it shall sever his connection with such concern, the concern shall have no right to continue the business of high pressure steamfitting without procuring another license.

(f) Changes in the name or place of business of a firm, corporation or association for which an individual is holding a license and the removal of the residence of a licensed journeyman from one city to another shall be reported immediately to the secretary of the Division of Steamfitting Standards by the licensee.

(g) When a steamfitter's license is revoked, the licensee shall at once surrender his certificate and identification card to the secretary of the Division of Steamfitting Standards.

(h) Duplicate licenses and identification cards may be issued by the secretary upon proof that the original is lost or mutilated.

(i) When a license has for any cause been suspended for a stated time, it shall automatically be again in force on the expiration of the period of suspension if such period is within the time for which the license was issued; provided, that if the cause for

suspension has been adjusted in a manner satisfactory to the ~~board~~ council, it may recommend to the ~~commission~~ department a reduction of the period of suspension or immediate reinstatement of the license.

(j) When a license has for any cause been revoked it cannot be renewed without the procedure for an original license; provided, that where a license has been revoked for some cause other than incompetency the ~~commission~~ department may in its discretion waive the requirement of an examination if an application for a new license is made within one year from the date of revocation, but not thereafter.

SRLI8312 MINNESOTA CODE FOR HIGH PRESSURE STEAM PIPING AND ITS COMPONENT PARTS

1 thru 4 - remain as previously adopted.

5. GENERAL REQUIREMENTS - MATERIALS

(a) - remains as previously adopted.

(b) Should it be desired to use any materials or methods of manufacture not now covered by this code or which may be developed in the future, it is intended that the manufacturer shall provide details of design and construction which will be as safe as otherwise provided by the rules in the code. Where it is desired to use materials not included in Table I, written application shall be made to the ~~Industrial Commission~~ Department fully describing the proposed material and the contemplated use, requesting that an allowable stress (S value) be assigned. Such materials shall not be used until the stress values have been approved.

Note: Table I refers to American National Standard Code for Pressure Piping and is not printed in this code book.

6 thru 17 - remain as previously adopted.

18. DRAINS, DRIPS, AND STEAM TRAPS

(a) thru (d) remain as previously adopted.

(e) The discharge of a high pressure trap shall not empty into a low pressure receiver unless first run through a flash tank or there is an ample sized vent so a trap failure could not increase the pressure in low pressure receiver tank.

19 thru 43 - remain as previously adopted.

44. BOILER FEED SYSTEMS AND OTHER WATER PIPING NOT OTHERWISE COVERED

(a) thru (b) - remain as previously adopted.

(c) Boiler feed piping systems shall be designed for the highest pressure exerted by the boiler feed pumps at any load under normal operation and on the highest corresponding temperature, actually existing. Where water passes through heaters in series, the temperature rating of the piping shall conform to the actual temperatures produced by the heaters in each part of the system; but in no case shall pipe or fitting be rated less than 1.25 times the safety valve setting on the boiler.

45. BOILER FEED PIPING – ? where did 6% come from ? ——

~~(a) On power boilers that have over 500 square feet of heating surface, at least two means of feeding the boiler shall be provided using two different apparatuses for feeding. If pumps are used, one should be steam actuated where solid fuel is used.~~

(a) Boilers having more than 500 sq. ft. of water heating-surface shall have at least two means of feeding water. Each source shall be capable of supplying water to the boiler at a pressure of 6% higher than the highest setting of any safety valve on the boiler. For boilers that are fired with solid fuel, not in suspension, one source of feeding shall be steam operated.

(b) - remains as previously adopted.

(c) All valves and fittings on the feed water piping from the pump to the boiler ~~to and~~ including the stop and check valves shall be equal at least to the requirement of the American Standards for a pressure 1.25 times the maximum allowable working pressure of the boiler or 1.25 times the lowest set pressure of any safety valve in the boiler drum, except as otherwise provided in the A.S.M.E. Boiler Code or American Standards Association.

(d) thru (g) - remain as previously adopted.

46. BLOWOFF PIPING AND TANKS

(a) - remain as previously adopted.

(b) Design. Blowoff piping shall be designed as for saturated steam in accordance with the following table but all fittings shall be of steel.

(1)&(2) - remain as previously adopted.

(3) The outlet opening shall be connected with internal pipe or baffle extending downwards to within a few inches of the bottom of the tank. A 3/4 inch syphon ~~breader~~ breaker shall connect the outlet piping with the vent pipe.

(c) RECOMMENDED PIPE SIZES FOR BLOW-OFF SYSTEMS UP TO 450 POUNDS Table - remain as previously adopted.

(1) The blow-down from any boiler shall not be connected directly to any sanitary sewer system. The blow-down must first pass through a blow-off tank or other apparatus that will reduce the

the pressure to not more than 5 pounds and the temperature to not more than ~~150~~ 180 degrees F.

(3) thru (7) - remain as previously adopted.

(8) ~~Section 150 of~~ The State Plumbing Code provides: "The exhaust, blow-off, sediment or drip pipe from any steam boiler or steam trap shall not be connected directly to any sewer, drain, soil waste, or vent pipe. The water or steam of condensation from such pipe before it shall enter any sewer or drain shall be discharged into a suitable catch basin or condenser." The foregoing section is adopted and made a part of this Code.

47. WATER COLUMN

(a) Crosses shall be used on all right angle turns on the piping to the water column. The minimum size pipe connecting the water column to the boiler shall be not less than one inch in diameter.

~~(b) Cast iron fittings designed for allowable working pressure of 125 pounds be used on piping to the water column when the maximum steam pressure allowed on the boiler does not exceed 100 psi.~~

Steam Setting requirement to thought water columns Am Nat Standard Code 33.11 For Pressure Piping should follow

~~(c) The above rules are in accordance with the recommendations of the Power Boiler Code of the American Standards Association, i.e., the maximum allowable working pressure on the pipe and fittings to the water column shall not exceed 80 per cent of the maximum working pressure recommended by the manufacturer of such piping or fittings.~~

RM

(b) No pipe connections may be made on the water column piping except those connected to equipment or appurtenances used to measure, record or regulate. This would include steam guages, low water cut-off, pressure controls, pump controls, etc. Not included would be such equipment as whistle's or soot blowers.

~~(d)~~ (c) Cast iron plugs shall not be used in ~~corsses~~ masses. Galvanized pipe or galvanized fittings shall not be used on any connection directly to the boiler.

~~(e)~~ (d) If any valves are used between the water column and boiler, they shall be of the straight way type with either a lever or rising stem and shall be sealed open.

~~(f)~~ (e) On power boilers where pressures exceed 100 pounds, two valves shall be used on the blow-off pipe on the water column, one of which shall be of the plug type with gland and shall be installed as close to the water column as possible.

48 thru 54 - remain as previously adopted.

55. EXPANSION AND FLEXIBILITY

(a) thru (d)(2) - remain as previously adopted.

(d)(3) LINEAR EXPANSION OF PIPING

Constants per 100 Ft.		Formula:
Metal		E = expansion in inches per 100 ft. of pipe
Steel	.00804	F = starting temperature
Wrought Iron	.00816	T = final temperature
Cast Iron	.00780	~~C = constant~~
Copper and Brass	.01140	E = constant x (T - F)

~~T - F x C x E = Expansion of Pipe~~

(d)(4) thru 62 - remain as previously adopted.

STATE OF MINNESOTA

DEPARTMENT OF LABOR AND INDUSTRY

In the Matter Of The Proposed
Adoption of Rules of the
Steamfitting Standards Division,
Department of Labor and Industry,
Governing Steamfitting Standards.

ORDER FOR HEARING

IT IS HEREBY ORDERED, that a public hearing on the above-captioned rules be held in the State Office Building, Room 81, St. Paul, Minnesota, 55155, on June 13, 1978, commencing at 9:00 a.m., and continuing until all persons have had an opportunity to be heard.

IT IS FURTHER ORDERED, that a Notice of Hearing be mailed to all persons or representatives of associations or other interested groups who registered their names with the Secretary of State for that purpose.

IT IS FURTHER ORDERED, that the Notice of Hearing be published in the State Register.

Dated: 4-18-78

E. I. Malone

E. I. MALONE, Commissioner

STATE OF MINNESOTA

DEPARTMENT OF LABOR AND INDUSTRY

In the Matter Of The Proposed
Adoption of Rules of the
Steamfitting Standards Division,
Department of Labor and Industry,
Governing Steamfitting Standards.

NOTICE OF HEARING

NOTICE IS HEREBY GIVEN, that a public hearing in the above-entitled matter will be held in the State Office Building, Room 81, St. Paul, Minnesota, 55155, on June 13, 1978, commencing at 9:00 a.m., and continuing until all representatives of associations or interested groups or persons have had an opportunity to be heard concerning the adoption of the proposed rules captioned above by submitting either oral or written data, statements or arguments. Statements may be made orally and written materials may be submitted at the hearing. In addition, written materials may be submitted by mail to Mr. Harry Crump, State Office of Hearing Examiners, 1745 University Avenue, St. Paul, Minnesota, 55104 (296-8111), the Hearing Examiner appointed to hear this matter, either before the hearing or within five (5) working days after the close of the hearing unless the Hearing Examiner orders a longer period of time which may not exceed twenty (20) days.

The proposed rules, if adopted, would amend the existing rules relating to high pressure steam piping and appertenances. Present rules have not been changed or revised since May, 1963. The purpose of the proposed rules is to clarify existing language to correspond with the present statutory language contained in Minnesota's

Steamfitters Licensing Law, Minn. Stat. § 326.46-326.52; to update the present minimum standards which pertain to steamfitting work; and to shorten the length of time necessary to serve as a steamfitter's apprentice from five years to four years. The specific subject matters and nature of the proposed rules are as follows:

1) Minn. Stat. § 326.49 provides for the formation of an "Advisory Council for Steamfitting Examinations". Prior law and rules adopted thereunder provide for a "Board of Steamfitting Examiners". The proposed rules change the identification of this organization wherever its name appears in the rules;

2) The proposed rules delete language which is no longer applicable to the present personnel structure of the Department and which does not assist in the overall interpretation or application of the rules;

3) The proposed rules delete the provisions of Rule SRLI 8300 which describe the steps to be taken prior to the suspension or revocation of a steamfitter's license and provide that such hearings shall proceed in accordance with the provisions of Minnesota's Administrative Procedures Act;

4) Rule SRLI 8301 is proposed to be amended to provide that the Secretary of the Advisory Council be an employee of the Department and that language be deleted which pertains to the compensation received by the Secretary;

5) Rule SRLI 8304 is proposed to be amended by changing the term for a steamfitter's apprentice from five years to four years;

6) Rule SRLI 8306 is proposed to be amended by deleting the dollar amounts provided for examination fees;

7) Rule SRLI 8307 is proposed to be amended by changing the age qualification for journeyman from 21 years to 20 years; and that such journeyman serve a four-year term of apprenticeship rather than a five-year term presently provided for;

8) Rule SRLI 8308 is proposed to be amended to change the amount of credit given on examination papers for experience in the trade from 25% to 10%;

9) Rule SRLI 8309 is proposed to be amended by deleting the specified fees for examinations, renewals and language which pertains to the expiration of licenses;

10) Rule SRLI 8310 is proposed to be amended to change the term of apprenticeship from five years to four years;

11) Rule SRLI 8312 which consists of the Minnesota Code for High Pressure Piping is proposed to be amended as follows:

Subpart No. 18 entitled "drains, drips and steam traps" amended to provide that the discharge of a high pressure trap shall not empty into a low pressure receiver unless certain criteria are met;

Subpart No. 44, "boiler feed systems" amended to provide that in no case shall pipe or fitting be rated less than 1.25 times the safety valve setting on the boiler;

Subpart No. 45, "boiler feed piping" amended to require that where two means of feeding water are required for a boiler, each source shall be capable of supplying water at a pressure of 6% higher than the highest setting of any safety valve on the boiler;

Subpart No. 46, "blow off piping and tanks" amended to change the temperature at which blow-downs must pass through a blow off tank to not more than 180°;

Subpart No. 47, "water column" amended to delete the cast iron fitting requirements for piping to the water column and language which pertains to the power boiler code of the American Standards Association. Proposed language will restrict the pipe connections which may be made on the water column piping;

Subpart No. 55, "expansion and flexibility" amended to delete the formula defining the expansion of pipe and adding a definition of "E" utilized in the rule's formula.

Copies of the proposed rules in their entirety are now available and one free copy may be obtained by writing to the Department of Labor and Industry, Space Center Building, 444 Lafayette Road, St. Paul, Minnesota, 55101. Additional copies of the rules will be available at the door on the day of the hearing.

These rules are proposed pursuant to the authority vested in the Department of Labor and Industry by the provisions of Minn. Stat. § 326.46 (1976) which empowers the Department to prescribe minimum standards for high pressure steam piping, and Minn. Stat. § 326.48 (1976) which empowers the Department to prescribe rules and regulations for the examination and licensing of steamfitters. A "Statement of Need" explaining why the agency feels the proposed rules are necessary and a "Statement of Evidence" outlining the testimony that will be introduced will be filed with the Hearing Examiner's Office at least 25 days prior to the hearing and will be available there for public inspection.

Please be advised that pursuant to Minn. Stat. § 10A.01, subd. 11 (1976) any individual engaged for pay or other consideration for the purpose of representing persons or associations attempting to influence administrative action, such as the promulgation of these rules, must register at the State Ethics Commission as a lobbyist within five (5) days of the commencement of such activity by the individual.

Dated: 4/18/78

E. I. Malone

E. I. MALONE, Commissioner

STATE OF MINNESOTA

COUNTY OF RAMSEY

MINNESOTA DEPARTMENT

OF LABOR AND INDUSTRY

In the Matter of the Proposed Adoption of Rules of the Steamfitting Standards Division, Department of Labor and Industry, Governing Steamfitting Standards.

AFFIDAVIT OF ACQUISITION OF MAILING LIST

Lloyd Willie, being duly sworn on oath deposes and says:

1. I am a representative for the Department of Labor and Industry, State of Minnesota.

2. On the 5th day of May, 1978, I went to the Secretary of State's office for the State of Minnesota and requested a current list of all representatives of associations or other interested groups or persons who had registered their names with the Secretary of State for the purpose of obtaining notices of public hearings relating to the promulgation of rules pursuant to M.S. § 15.0412.

3. That on the 5th day of May, 1978, in response to the above request, the Secretary of State provided me with such a list, a copy of which is attached hereto and incorporated by reference.

Further affiant sayeth not.

Lloyd E. Willie

Subscribed and sworn to before me this 22nd day of May, 1978.

Notary Public

STATE OF MINNESOTA
COUNTY OF RAMSEY

CERTIFICATE

In the matter of the Proposed Adoption of Rules of Steamfitting Division Governing Steamfitting Standards.

I hereby certify that the attached 484 labels, 7 sheets constitute the complete list of persons, associations, and other interested groups who as of 10:45 o'clock A .M, this 5th day of May, 1978, have requested pursuant to M.S. 1976, 15.0421, that their names be placed on file with the Secretary of State for the purpose of receiving notice of public hearing on proposed rules on the subject captioned above.

Secretary of State

Joan Anderson Growe

By Cheri L. Mattson

STATE OF MINNESOTA)
) ss.
COUNTY OF RAMSEY)

In the matter of the Proposed Adoption of Rules of the Steamfitting Standards Division, Department of Labor and Industry, Governing Steamfitting Standards.

AFFIDAVIT OF MAILING

Georgiann Henning, being first duly sworn, deposes and says:

That on the 9th day of May, 1978, at the City of St. Paul, County of Ramsey, State of Minnesota, he served the attached Notice of Hearing by depositing in the United States mail at said City of St. Paul, true and correct copies thereof, properly enveloped, with postage prepaid, to all persons and associations at the addresses listed on the attached Certificate of the Secretary of State.

Georgiann Henning

Subscribed and sworn to before me this 9th day of May, 1978.

Jacalyn K. Brueggeman
Notary Public

STATE OF MINNESOTA

DEPARTMENT OF LABOR AND INDUSTRY

IN THE MATTER OF THE PROPOSED
ADOPTION OF RULES OF THE
STEAMFITTING STANDARDS DIVISION,
DEPARTMENT OF LABOR AND INDUSTRY,
GOVERNING STEAMFITTING STANDARDS.

STATEMENT OF NEED

The above-captioned rules are amendments to existing rules governing high pressure steam piping and the licensing of steamfitters and are proposed pursuant to the authority provided the department under Minn. Stat. § 326.46 and Minn. Stat. § 326.48 (1976). The last time rules were promulgated on this subject matter was in May, 1963. Since that time, amendments have been made to the applicable statutory provisions and the department has, therefore, found it necessary to clarify existing language contained in the rules. The amendments as proposed compliment the amended statutory provisions.

The department's regulations relating to the installation of high pressure steam piping were last adopted in 1963. In 1967, the Industrial Commission was abolished and the Department of Labor and Industry was created in its place. Therefore, the words "Industrial Commission", wherever they appear in the rules must be changed to "Department of Labor and Industry".

In 1975, the legislature, by statute, specified the amount of fees to be charged for steamfitting licenses and examinations. Therefore, the fee amounts specified in the rules must be deleted.

In 1976, the legislature changed the name of the "Board of Steamfitting Examiners" to the "Advisory Council for Steamfitting Examinations". Therefore, the term "Board" wherever it appears in the rules must be changed to "Advisory Council".

The U. A. International Apprenticeship Committee has recently changed the apprenticeship training period for journeymen steamfitting from five to four years. The department agrees with this change and finds it necessary to change the apprenticeship period provided for in the rules so that it is concurrent with the apprenticeship period provided by the International Committee.

In sum, the amendments to the existing rules are necessary to update the regulations and to make them consistent with statutory changes and industry practices which have occurred since 1963.

Dated: 5-15-78

E. I. Malone

E. I. Malone, Commissioner

STATE OF MINNESOTA

DEPARTMENT OF LABOR AND INDUSTRY

IN THE MATTER OF THE PROPOSED
ADOPTION OF RULES OF THE
STEAMFITTING STANDARDS DIVISION,
DEPARTMENT OF LABOR AND INDUSTRY,
GOVERNING STEAMFITTING STANDARDS.

STATEMENT OF EVIDENCE

In addition to the "Statement of Need" which is available for inspection or purchase at the Office of Hearing Examiners, Room 300, 1745 University Avenue, St. Paul, Minnesota, 55104, and in support of that statement, the Department of Labor and Industry will call the following witness to testify to the reasonableness and need of the proposed amendments:

Lloyd Willie, Director, Division of Steamfitting Standards, Department of Labor and Industry, State of Minnesota.

A summary of the subject matters which will be presented through the testimony of Mr. Willie is contained on the attached Exhibit 1 which is incorporated herein by reference.

The Department intends to cite the following laws and present testimony with respect to the following authorities:

1. Minn. Stat. § 326.01 et seq. (1976);
2. Steamfitting Standard Divisions Regulations SRLI 8300 through 8312;
3. The American Standard Code for pressure piping;
4. Records of the U.A. International Apprenticeship Committee.

Dated: 5-15-78

E. I. Malone

E. I. Malone, Commissioner

EXHIBIT 1

JUSTIFICATION AND REASONABLENESS OF PROPOSED RULES

A. The American Standard Code for Pressure Piping was used as a guide in formulating the Minnesota Code and parts of the American Standard Code (ASA B.31.1-1955) for Minnesota Code for High Pressure Steam Piping and its component Parts. The laws for Steamfitting Standards Division, Department of Labor and Industry are Statute 326.01-326.53, Rules and Regulations SRLI-8300 to 8312-62-(C)-(2)

B. The minimum requirements for the installation of high pressure steam piping and its component parts, coincide with the minimums of the American Standards Association (ASA B31.1-1955) but in some instances the Minnesota Code may provide for higher minimum standards than that provided by the National Code.

C. The Minnesota Regulations Relating to the Installation of High Pressure Steam Piping and Appurtenances was last revised in 1963. In 1967 the Industrial Commission was abolished and the 1967 Legislature amended the law effecting the Department of Labor and Industry. Therefore, the words, "Industrial Commission", wherever it appears in the rules should be changed to, "Department of Labor and Industry".

D. On July 1, 1975, the Legislature paseed bill to increase fees from $4.00 to $8.00 for Journeyman Renewal, and from $30.00 to $45.00 for Contractor's Renewal and examination fees for Journeyman from $10.00 to $15.00 and for Contractor's Examination from $45.00 to $50.00. As fees are subject to change periodically; mention of specific fee amounts should be deleted.

E. In 1976 the Legislature passed a bill changing the name of "Board of Steamfitting Examiners" to "Advisory Council for Steamfitting Examinations", and increased the membership from three members to seven members. The word "Board" as it appears should read "Advisory Council.

F. The U. A. International Apprenticeship Committee has changed the apprenticeship training period for Journeyman Steamfitter from five to four years. This should be concurrent.

G. Various changes in code as deemed necessary to meet current building standards should be implemented.

H. In view of the fact that the code has not been changed since 1963 the Division feels that the adoption of these proposals are necessary to update the regulations and make them consistent with changes.

STATE OF MINNESOTA
OFFICE OF HEARING EXAMINERS

In the Matter of the Proposed Adoption of Rules of Steamfitting Standards Division, Department of Labor and Industry, Governing Steamfitting Standards. (8 MCAR § 1.6300, et seq.)

REPORT OF HEARING EXAMINER

The above-entitled matter came on for hearing before Harry Seymour Crump, Hearing Examiner from the State Office of Hearing Examiners at 9:00 a.m. on June 13, 1978, in Room 81 of the State Office Building in Saint Paul, Minnesota.

This proceeding is a rules hearing held pursuant to Minn. Stat. Ch. 15 to determine whether the proposed rules should be adopted and given the force of law.

Members of the agency panel appeared at the hearing session included: Clifford Mykkanen, Steamfitting Standards Representative, Steamfitting Division of the Department of Labor and Industry; Jon K. Murphy, Special Assistant Attorney General, representing the Department of Labor and Industry.

Four public witnesses appeared and spoke at the hearing. Two timely written comments were received concerning the proposed rules and made a part of the record.

Based upon all the testimony, exhibits and written comments, the Hearing Examiner makes the following:

FINDINGS OF FACT

1. On April 7, 1978, the Department filed the following documents with the Chief Hearing Examiner:

(a) A copy of the proposed rules;
(b) A proposed Order for Hearing; and
(c) A proposed Notice of Hearing.

2. On May 8, 1978, a Notice of Hearing and a copy of the proposed rules were published at 2 State Register 1976.

3. On May 9, 1978, the Department mailed the Notice of Hearing to all persons and associations who had registered their

names with the Secretary of State for the purpose of receiving such notice.

4. On May 18, 1978, the Department filed the following documents:

(a) The Order for Hearing;
(b) The Notice of Hearing as mailed;
(c) A Memorandum regarding the Affidavit of Receipt of the Secretary of State's list;
(d) The Affidavit of Mailing;
(e) The Secretary of State's Certificate and list;
(f) The Statement of Need;
(g) The Statement of Evidence, including the names of witnesses to be called; and
(h) The names of Department personnel who will represent the agency.

The Memorandum indicated that the person who obtained the document from the Secretary of State was presently ill and that the list would be submitted.

The documents were available for inspection at the Office of Hearing Examiners from the date of filing to the date of the hearing.

5. On May 24, 1978, the Department filed the Affidavit of Receipt of the Secretary of State's list.

6. The record remained open through June 20, 1978, for the receipt of written comments and statements.

7. The Department cites Minn. Stat. § 326.46 and Minn. Stat. § 326.48 (1976) as the statutory authority to promulgate the proposed amendments relating to steamfitting standards. The statutes provide in relevant part as follows:

(a) Minn. Stat. § 326.46.

> DEPARTMENT OF LABOR AND INDUSTRY TO SUPERVISE STEAM PIPING. The department of labor and industry shall supervise all high pressure steam piping in connection with all building in this state and may prescribe minimum standards which shall be uniform.

(b) Minn. Stat. § 326.48.

* * *

> The department of labor and industry shall prescribe rules and regulations, not inconsistent herewith, for the examination and licensing of steamfitting.

The above-cited statutes provide for the regulation of persons and operations relating to high pressure steamfitting standards.

8. The purpose of the proposed rules is to amend existing Minnesota Regulations for High Pressure Steam Piping and Appurtenances (hereinafter the "existing rules" or code of "Minimum Standards") Minn. Rule SRLI 8300, et seq. (8 MCAR § 1.6300, et seq.) governing high pressure steam piping and the licensing of steamfitters so that it corresponds with the present language contained in Minnesota's Steamfitters Licensing Law (see, Minn. Stat. § 326.46 through Minn. Stat. § 326.52). The existing rules were promulgated in 1963. Since 1963, amendments were made to the applicable statutory provisions. The Department, therefore, found it necessary to clarify language contained in the existing rules. The proposed amendments, as contained in the proposed rules herein, complement the amended statutory provisions (see, the Statement of Need).

9. At the hearing, the representative from the Department of Labor and Industry (hereinafter "Department") proposed that the words "industrial commission" wherever they appear in the rules be changed to "department of labor and industry". The Department requested that the Examiner take administrative notice of Minn. Stat. § 175.001 through Minn. Stat. § 175.005 (1976). These Sections of the law provided for the creation of and the organization of the Department of Labor and Industry. Section 175.005 specifically provides for the abolishment of the former Department of Labor and Industry and the Industrial Commission. This proposed amendment is both reasonable and needed to make the wording within the existing rules conform to that of the state statutes. The proposed amendment will eliminate confusion and maintain consistency within the rules.

10. At the hearing, the Department proposed that the word "board" as it appears in the existing rules should read "advisory council". The Department requested the Examiner to take also administrative notice of Minn. Stat. § 326.49 (1976), which provides for the changing of the name of the "Board of Steamfitting Examiners" to "Advisory Council for Steamfitting Examinations". The rule is reasonable and needed to ensure that they are properly

entitled in order to prevent confusion (see, the Statement of Evidence).

11. SRLI 8300 - Organization and Duties of Advisory Council for Steamfitting Examinations. Proposed rule SRLI 8300(d) provides for the procedure for the suspension or revocation of the license of a licensee by the Commissioner of the Department. The proposed rule deletes the provision of the current rule which describe the steps to be taken prior to the suspension or revocation of a steamfitter's license and provides that such hearings shall proceed in accordance with the provisions of Minnesota's Administrative Procedures Act. At the hearing, the Department commented that Minn. Stat. §§ 15.0418 through 15.0426, and the rules of the Office of Hearing Examiners apply to all contested proceedings. Thus, the proposed amendment for license revocation proceedings, a contested matter, will comply with the Minnesota Administrative Procedures Act. (See also, Department Ex. 10)

12. Proposed rule SRLI 8300 (k) provides for the removal of council members during their term of office. The proposed rule provides for the procedure to be in accordance with Minn. Stat. § 15.059, subd. 4 (1976). Part of the language in the existing rules under subsection (k) is deleted, which is no longer applicable to the removal procedures (see, Minn. Laws 1976, ch. 149, § 55). This rule is reasonable and needed to update the rules and make them consistent with statutory changes which are in effect.

13. Proposed rule SRLI 8301 provides that the secretary of the advisory council shall be an employee of the Department and that language be deleted which pertains to compensation received by the secretary and under subdivision (j), the language which deals with the secretary's approval of expenditures. This rule is both reasonable and needed to clarify the duty description and status of the secretary of the counsil and to delete language no longer applicable. The proposed rule drew no comments.

14. Proposed rule SRLI 8304 provides that the term of the apprenticeship training be amended from five to four years. The U.A. International Apprenticeship Committee has changed the term of the apprenticeship for journeyman steamfitter from five to four years. At the hearing, Dale E. Nyberg, Advisory Council member

and business representative, Pipe Fitters Local Union No. 539, commented that local training institutions relative to the steamfitting industry have modified their course hours and curriculum by increasing the number of class hours from 180 to 210 hours to compensate for the reduction of year in the apprenticeship training term. The training term under the committee's standard and the proposed rules should be concurrent and is needed and reasonable. (See, the Statement of Justification and Reasonableness of proposed rules, subsection (f))

15. Proposed rule SRLI 8306(g) deals with striking out the "dollar amounts" for examination fees in the existing rule which are already spelled out in Minn. Stat. § 326.51 (1976) and is needed and reasonable.

16. Proposed rule SRLI 8307 provides for the changing of the age qualification for journeymen from 21 years to 20 years and that such journeymen serve a four-year term of apprenticeship training, rather than a five-year term as presently provided for in the existing rules. At the hearing and by written comments, the Department relied on the child labor standards act, specifically Minn. Rule CLS 15, as the minimum age for employment.(see, Minn. Stat. § 181A.01, et seq.) CLS 15(e) requires that no minor under the age of 16 may be employed to do welding of any kind. Thus, the minimum of age, plus a four-year apprenticeship period as required by the International Union, meets the proposed 20-year minimum age qualification for applicants for licensing. Further, the United Association of International Apprenticeship Committees of the International Union established uniform guidelines for all union qualifications. The proposed rule is reasonable and needed to be consistent with the four-year term of apprenticeship within the industry (see also, Department Ex. 10). This rule drew no comments.

17. Proposed rule SRLI 8307(e) provides for the deletion of "the dollar amounts" for examination fees as indicated in the above Finding No. 15, and is needed and reasonable. This rule drew no comments.

18. Proposed rule SRLI 8308(a) provides for examination of applicants for licenses to consist of written or oral questions rather than both written and oral as indicated in the existing rules. (See, proposed rules SRLI 8308(a)) This proposed rule is reasonable and needed to provide for the administration of examinations by the council. This rule drew no comments.

19. Proposed rule SRLI 8308 provides for the reduction in the amount of credit given on examinations for related welding experience in the trade from 25 percent to 10 percent. At the hearing, the Department stated that this change in the proposed rule is to place appropriate emphasis on welding experience which is only one aspect of steamfitting operation. Bill Nyberg concurred with the Department's position. For the above reasons, the Examiner finds this rule is both needed and reasonable. This rule drew no adverse comments.

20. Proposed rule SRLI 8309 provides for the deletion of specific fees for examinations, renewals and language which pertains to the expiration of licenses as they have already been spelled out in Minn. Stat. § 326.50 (1976). This rule drew no comments and is both reasonable and needed.

21. Proposed rule SRLI 8310(a) provides for a four-year term of apprenticeship, as indicated in Finding No. 15.

22. Existing rule SRLI 8312 consists of the Minnesota Code for High Pressure Piping. The American Standard Code for Pressure Piping was used as a guide in formulating the Minnesota Code and parts of the American Standard Code (ASA B.31.1-1955) for Minnesota Code for High Pressure Steam Piping and its component Parts. (See, the Statement of Evidence) The proposed rules are to amend the following six subdivisions of the Minnesota Code:

(a) DRAINS, DRIPS, AND STEAM TRAPS. Proposed rule subdivision 18(e) provides that the discharge of high pressure trap shall not empty into a low pressure receiver unless certain safety criteria are met such as a flash tank or there is ample sized vent. The high pressure trap is defined as a device coming off of the

steam head or main pipe which passes water or condensate but not steam. The low pressure receiver means a device attached to the low pressure main on the return side to the boiler which receives the condensate. The flash tank operates as a step down condenser to reduce high pressure steam to low pressure steam for heating and other uses as an energy saving mechanism. It also operates as a safety factor to avoid injury to workers. High pressure condensate flashes to steam as soon as it hits atmospheric pressure and causes severe injuries unless the flash tank or adequate safety mechanisms are used. The proposed rule is both needed and reasonable to ensure safety for the above-mentioned reasons.

(b) BOILER FEED SYSTEMS AND OTHER WATER PIPING NOT OTHERWISE COVERED. Proposed rule subdivision 44(c) requires that in no case shall pipe or fitting be rated less than 1.25 times the safety valve setting on the boiler. This rule is both reasonable and needed to clarify the intent of the pipe fitting feedwater system. The proposed rule drew no comments.

(c) BOILER FEED PIPING. Proposed rule subdivision 45(a) requires that where two means of feeding water are required for a boiler, each source shall be capable of supplying water at a pressure of six percent (6%) higher than the highest setting of any safety valve on the boiler. The proposed rule reads boilers having more than 500 square feet of water heating-surface shall have at least two means of feeding water. The proposed rule requires, at least, one source of feed be steam operated for boilers fired with solid fuel. At the hearing, the Department stated that a boiler fired with solid fuel would become a bomb if an electrical operated pump supplying water to the boiler shut off because of electrical failure. However, a steam activated pump would always operate as a means of supplying water into the boiler as long as there was fire in the boiler. At the hearing, James Holden, Steamfitting Inspector from Minneapolis, asked the Department where the six percent figure in this rule originated. Matthew P. Winkel, Assistant Vice President, Twin Cities Piping Industry Association,

submitted a written comment regarding this subsection which recommended that the three percent (3%) figure be used since the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (hereinafter "ASME") calls for a pressure of three percent. Mr. Winkel also proposed the following amendment to this subsection:

> A boiler fired by gases, liquid, or solid fuel in suspension may be equipped with a single means of feeding water provided means or furnished for the shutoff of its heat input prior to the water level reaching the lowest permissible level established by ASME boiler code.

The Department commented that ASME boiler code provided for a three percent figure; however, they proposed a utilization of a six percent (6%) figure to provide an additional element of safety and to provide a built-in allowance for variations which may occur or exist from design specifications. Further, the general industry practice is to follow the allowances provided under ASME code for the capacity of safety release valves. Section PG-67.2 of the ASME code provides that such valves will discharge without allowing the pressure to raise more than six percent (6%) above the highest pressure at which any valve is set and in no case to more than six percent (6%) above the maximum allowing the pressure. For illustration, there is presumed a boiler of maximum working capacity of 100 units. The safety valve is set at 100 units. This standard allows a maximum allowance of six percent. Thus, the valve should discharge without allowing the pressure to rise higher than 106 units. In that event, the Department believes the pressure of the pump should be consistent with the maximum tolerance. In the event the valve did not discharge until 106 units, should the feed pipe provide a pressure less than that, a backup could occur in the feed pipe prior to the point where the valve would discharge. The Examiner finds that this proposed rule is not unreasonable. It is necessary to provide adequate safety standards in regard to (a) differences and design specifications, and (b) requirement of steam activated pumps as one means of supplying

adequate water to a boiler fired with solid fuel.

(d) Proposed rule subsection 45(c) is proposed to be amended by inserting the words "the pump to" after the word "from" and before the words "the boiler", and also, deleting after the word "boiler" the words "to and". This proposed change is reasonable and needed as a grammatical correction to the existing rule.

(e) BLOW OFF PIPING AND TANKS. Proposed rule 46(b)(3) is proposed to be amended by striking the word "breader" and inserting "breaker" to correct a grammatical error and it is needed and reasonable.

(f) BLOW OFF PIPING AND TANKS. Proposed rule subsection 46(c). The Department proposed to amend this rule by changing the temperature at which blow-downs must pass through a blow-off tank to not more than 180°. The blow-down means an opening valve on the return side to clear unwanted sediments out of the boiler. This proposed rule is reasonable and needed to facilitate the cooling of boiler liquids to a point for discharge into any sanitary sewer system and to conform to the state plumbing code.

(g) Subsection 47, entitled WATER COLUMN. Proposed rule subsections 47(b) and (c) were deleted and a new subsection 47(b) was inserted and the remaining paragraphs were lettered accordingly from (c) through (e). The Department proposed to amend this subsection by deleting the cast iron fittings requirements for piping to the water column and language which pertains to the power boiler code of the American Standards Association (ASA). The proposed language will restrict the pipe connections which may be made on the water column piping.

At the hearing, two public participants suggested that this subsection be reworded to allow for installation on said water columns in accordance with the American National Standard Institute Code (ANSI). Thus, the proposed rule should have less detailed requirements and should offer more flexibility and

uniformity with other related industry codes including the water departments'. (The participants, however, do not point out specific conflicts within other existing codes and the proposed rules.) James Holden, who spoke in support of the rules, recommended that an amendment to this subsection, entitled subsection 46(1), to incorporate the existing language in subsection 46(4) requiring that discharge piping of safety valves extend up and out of the building at least seven feet above adjacent walkways.

The Department submitted a written comment that stated:

> "The department's present rules provide, inter alia, for proper pitch and draining of the discharge pipe (subpart 48(d)), and support for vertical pipes (subpart 48(e)). In addition, provision is made for walkways or platforms and possible back pressure on the safety valve (subpart 48(d)). Thus, at present, Rule 8312, subpart 48, is consistent with the American Society of Mechanical Engineers Boiler and Pressure Vessel Code (A.S.M.E.), Section I, part PG-71.3 (1977) which provides in part:
>
> > All safety valve or safety relief valve discharges shall be so located or piped as to be carried clear from running boards or platforms. Ample provision for gravity drain shall be made in the discharge pipe at or near each safety valve or safety relief valve, and where water of condensation may collect. Each valve shall have an open gravity drain through the casing below the level of the valve seat. . . .
> >
> > Discharge piping from safety relief valves on high temperature water boilers shall be provided with adequate provisions for water drainage as well as the steam venting.
>
> The American National Standard Code For Pressure Piping, B31.1, Power Piping, § 122.6.2 (1977) contains similar requirements:
>
> > . . . .
> >
> > [B] When discharging directly to the atmosphere, discharge shall not impinge on other piping or equipment and shall be directed away from platforms and other areas used by personnel.
> >
> > . . . .
> >
> > [D] Discharge lines from pressure-relieving safety devices within the scope of this Code shall be designed to facilitate drainage.

> While recognizing that some specific instances would dictate the reasonableness of a discharge pipe extending up and beyond the roofline, the department, as the above-cited codes provide, does not believe that requirement should be absolute. In many situations this requirement would not be necessary since other means can be utilized to adequately provide for a safe point of discharge. In addition, the department could foresee the potential problem of such a discharge pipe 'freezing up' in cold weather through condesate [sic] formation, creating a restriction and a potentially dangerous condition. Thus, the department does not believe that this proposal, which would require all safety valves to discharge above the roofline, is justified or reasonable."

At the hearing, the Department stated that cast iron fittings do not have high enough strength to withstand higher steam pressures and will therefore crack when used with certain high pressure steam systems. However, deleting the words "cast iron" were, in effect, removing certain restrictions and also conflicts with other relevant codes. The Department also stated the reason no pipe connections are made on the water column is because the steam will cause the gauges to fluctuate and give an inaccurate reading. Department Exhibit 6, subpart 47 indicated that deleted parts regarding fittings on the water column should (now) read the same as ASME boiler code which was changed some time back and added new wording to clarify allowable connections on a water column. The Examiner finds this proposed subsection to be reasonable and needed for the above-stated reasons.

(h) Subsection 55, EXPANSION AND FLEXIBILITY. Subsection 55(d)(3) is proposed to be amended to delete the formula defining the expansion of pipe and adding a definition for "E" utilized in the proposed rules formula. The proposed formula will correct an error in the existing formula to allow for expansion space in the installation of said piping. Heated piping will expand once installed and pop off if expansion space is not accounted for during installation. This proposed rule drew no comment, and is reasonable and needed.

23. The Examiner finds that all other provisions of the existing rules, not deleted or amended herein, remained as previously adopted.

Based upon the foregoing Findings of Fact, the Hearing Examiner makes the following:

CONCLUSIONS

1. The Department of Labor and Industry gave proper notice of the promulgation of the proposed rules.

2. The Department has statutory authority to take the action proposed, to wit, the promulgation and amendment of the proposed rules.

3. The Department has fulfilled all relevant, substantive and procedural requirements of law or rule.

4. That the Department has demonstrated the need for and reasonableness of the proposed rules by an affirmative presentation of facts in the record.

Based upon the foregoing Conclusions, the Hearing Examiner makes the following:

RECOMMENDATION

It is recommended that the proposed rules by adopted by the Steamfitting Standards Division, Department of Labor and Industry, as set out in the Findings of Fact, herein.

Dated: July 11, 1978.

HARRY SEYMOUR CRUMP
Hearing Examiner

N O T I C E

Pursuant to Minn. Stat. § 15.0412, subd. 4, this Report shall be available for review to all affected individuals upon request for at least five days.

The Department shall, if it proposes to adopt the rules as originally proposed or amended, submit the complete hearing record, including its Findings and Order, to the Chief Hearing Examiner no earlier than five days subsequent to the receipt of this Report. This submission shall clearly indicate any changes made to the rules as originally proposed, preferably in the format that will be submitted to the State Register for publication. The Chief Hearing Examiner shall complete his review and submit his report to the

Department on the issues of substantial changes in the rule and compliance with Minn. Stat. § 15.0412 within ten calendar days. Thereafter, the Department shall be responsible for filing the rules with the Attorney General and for notifying persons who have indicated that they wish to be notified of such filing.