ARTICLE 10-07 FIRE MARSHAL

Chapter

10-07-01 Fire Prevention

CHAPTER 10-07-01 FIRE PREVENTION

Section

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10-07-01-01. Fire prevention rules - Intent.

It is the intent of this chapter to prescribe regulations consistent with nationally recognized good practice for the safeguarding of life and property from the hazards of fire and explosions. Repealed January 1, 2024

History: Effective November 1, 1983.
General Authority: NDCC 18-01-04
Law Implemented: NDCC 18-01-02

10-07-01-02. Fire prevention rules - Scope.

- 1. This chapter supplements all laws defined within the North Dakota Century Code relating to fire safety and applies to all persons without restrictions, unless specifically exempted.
- 2. This chapter applies to existing conditions, as well as to conditions arising after the adoption of this chapter, except that conditions legally in existence at the time of adoption of this chapter and, not in strict compliance with this chapter, shall be permitted to continue only if, in the opinion of the state fire marshal, they do not constitute a distinct hazard to life or property.
- 3. Where there is a conflict between this chapter and those provisions of the North Dakota Century Code, the provisions of the North Dakota Century Code shall prevail. Repealed January 1, 2024

History: Effective November 1, 1983.

General Authority: NDCC 18-01-04, 18-01-33

Law Implemented: NDCC 18-01-02

10-07-01-03. Definitions.

The following definitions shall be used when referred to in the content of this chapter:

- 1. "Authority having jurisdiction", "bureau of fire prevention", "chief", "chief of the fire department", "chief of the fire prevention bureau", "fire chief", "fire code official", "fire department", "fire marshal", "fire marshal's office", "fire prevention bureau", "fire prevention engineer", "fire prevention inspector", "fire protection engineer", "inspector", or "office of the fire marshal" refers to the state fire marshal or any representative of the state fire marshal's office.
- 2. "City or "jurisdiction" refers to the state of North Dakota.
- 3. "Fire prevention code", "fire prevention rules", or "state fire code" refers to the rules provided for within this chapter.

4. "Local jurisdiction" refers to any agency of local or state government which has a defined responsibility for any population, group of persons, land area, occupancy type, class of persons, or municipality located within this state which is less than the entire land area, population or geographical makeup of this state. Repealed January 1, 2024

History: Effective November 1, 1983; amended effective January 1, 2015.

General Authority: NDCC 18-01-04, 18-01-33 Law Implemented: NDCC 18-01-04, 18-01-33

10-07-01-04. Fire prevention rules.

The fire prevention rules for this state include, but are not limited to, the following:

Fire code. The State Fire Code includes:

- 1. The provisions of the State Building Code, effective January 1, 2020, providing for fire-safe construction and operation, as provided for in North Dakota Century Code section 54-21.3-03.
- 2. The provisions of the International Fire Code (IFC), 2018 edition International Code Council (ICC), with the following exceptions and modifications:
 - a. Chapter 1. Scope and Administration:
 - 101.1 Title. The words "[NAME OF JURISDICTION]" are replaced with "North Dakota".
 - 102.1 Construction and design provisions. Subsection 3 does not apply.
 - **102.4 Application of building code.** Insert "as amended by the State of North Dakota" after the words "International Building Code" in both instances.
 - 102.6 Historic buildings. Does not apply.
 - **105.1.1 Permits required.** The words "obtain the required permit" are replaced with "may be required to obtain a permit".
 - 110.4 Violation penalties. Does not apply.
 - b. Chapter 2. Definitions.
 - Fireworks, 1.4G. After "1507" insert "1 or otherwise listed and defined in North Dakota Century Code section 23-15-01".
 - [BG] Group E, day care facilities. The word "five" is replaced with "twelve".
 - [BG] Five or fewer children. The word "five" is replaced with "twelve" in both instances in this paragraph.
 - [BG] Five or fewer children in a dwelling unit. The word "five" is replaced with "twelve" in both instances in this paragraph.
 - [BG] Institutional Group I-4, day care facilities. The word "five" is replaced with "twelve".
 - Classification as Group E. The word "five" is replaced with "twelve".
 - **[BG] Five or fewer occupants receiving care.** The word "five" is replaced with "twelve" in both instances in this paragraph.

[BG] Five or fewer occupants receiving care in a dwelling unit. The word "five" is replaced with "twelve" in both instances in this paragraph.

[BG] Care facilities within a dwelling. The word "five" is replaced with "twelve" and the words "provided an automatic sprinkler system is installed in accordance with Section 903.3.1.3 or Section P2904 of the International Residential Code" are deleted.

c. Chapter 3. General Requirements

308.1.4 Open-flame cooking devices. Exception 3. The words "2⁴/₂ pounds [nominal 1 pound (0.454 kg) LP-gas capacity]" is replaced with "20 pounds (9.07 kg)".

308.1.3 Sky lanterns. Does not apply.

308.3 Group A occupancies. Exception 1. The following is added: "1.4 Open-flame devices for food warming."

d. Chapter 5. Fire Service Features.

510.1 Emergency responder radio coverage in new buildings. In the first sentence, replace "New" with "Where required by the fire code official, new".

e. Chapter 9. Fire Protection and Life Safety Systems.

The following is added:

"905.1.1 Standpipe hose. The installation of fire hose on standpipes may be omitted when approved by the fire code official. Approved standpipe hose valves and connections shall be provided where required."

907.2.10.2 Groups R-2, R-3, R-4, and I-1. The following subsection is added:

"4. In dwelling units where the ceiling height of a room open to the hallway serving the sleeping rooms exceeds that of the hallway by twenty-four inches [610 mm] or more, smoke detectors must be installed in the hallway and in the adjacent room."

f. Chapter 10. Means of Egress.

1010.1.9.4 Locks and Latches. The following is added:

"7. Egress doors from occupied roofs, or doors used to gain access to the interior of the building may be locked from the outside if all of the following are provided:

7.1 Compliance with all aspects of Section 1010.1.9.4 subsection 2.

7.2 Compliance with section 1009.8.

7.3 The door locks must unlock on actuation of the automatic sprinkler system and automatic fire detection system and the door locking system must be installed to have the capability of being unlocked by a switch located at the fire command center."

1011.1 General. The following is added as an Exception:

"Stairways used only to attend equipment or private stairways serving an occupant load of ten or fewer persons and which are not accessible to the public need not comply with sections 1011 .2 through 1011.13."

1030.3. Maximum height from floor. The words "44 inches (1118 mm)" are replaced with "48 inches (1219.2 mm)".

g. Chapter 61. Liquefied Petroleum Gases.

6103.2.1.6 Use with self-contained torch assemblies. The words "2.7 pounds (1.2 kg)" are replaced with "12 pounds (5.44 kg)". Repealed January 1, 2024

History: Effective November 1, 1983; amended effective January 1, 2015; July 1, 2020.

General Authority: NDCC 18-01-04, 18-01-33, 18-09-02, 23-15-03

Law Implemented: NDCC 18-01-02, 18-01-04, 18-01-33, 18-09-02, 23-15-03

10-07-01-05. Availability of standards.

The standards listed in section 10-07-01-04 are available from:

1. National Fire Protection Association Batterymarch Park Quincy, Massachusetts 02269 (617) 328-9290

2. International Code Council, Inc.
4051 West Flossmoor Road
Country Club Hills, IL 60478-5795
(800) 214-4321 Repealed January 1, 2024

History: Effective November 1, 1983; amended effective January 1, 2015.

General Authority: NDCC 18-01-04, 18-01-33, 18-09-02, 23-15-03

Law Implemented: NDCC 18-01-02, 18-01-04, 18-01-33, 18-09-02, 23-15-03

ARTICLE 45-01 GENERAL ADMINISTRATION

Chapter

45-01-01 Organization of Department

CHAPTER 45-01-01 ORGANIZATION OF DEPARTMENT

Section

45-01-01 Organization of Insurance Department

45-01-01. Organization of insurance department.

- 1. History and functions. Section 12 of article V of the Constitution of North Dakota provides for the office of insurance commissioner. North Dakota Century Code title 26.1 contains statutes pertaining to the commissioner and the department. Besides administering and regulating all matters pertaining to insurance, the commissioner manages the state bonding fund, administers the state fire and tornado fund, and manages the state fire marshal administers the petroleum tank release compensation fund, and administers the unsatisfied judgment fund.
- State fire marshal. The state fire marshal is appointed by the insurance commissioner and supervises the operation of the fire marshal division. The division is responsible for enforcing state laws for prevention of fires; coordinating resources for large rural wild-land fires; storage, sale, and use of combustibles and explosives; installation and maintenance of fire alarms and fire extinguishing equipment; adequacy of exits from public buildings; investigation of arson and the cause and origin of fires and education on hazards of fire. The division also has responsibility for the state's emergency response to hazardous materials incidents and hazardous materials training.
- <u>3.</u> **Inquiries**. Inquiries regarding the insurance department may be addressed to the commissioner:

Commissioner Insurance Department 600 East Boulevard Avenue Bismarck, North Dakota 58505

History: Amended effective January 1, 1982; August 1, 1983; March 1, 1986; January 1, 1992; February 1, 1993; April 1, 1994; June 1, 2003; January 1, 2009; October 1, 2019, <u>January 1, 2024</u>.

General Authority: NDCC 28-32-02.1 Law Implemented: NDCC 28-32-02.1

CHAPTER 45-03-15 ACCOUNTING PRACTICES AND PROCEDURES

Section	
45-03-15-01	Accounting Practices and Procedures
45-03-15-02	Reporting of Financial Information
45-03-15-03	Annual Statement Filing
45-03-15-04	Acceptable Media for Annual Statement Filing

45-03-15-01. Accounting practices and procedures.

Every insurance company doing business in this state shall file with the commissioner, pursuant to North Dakota Century Code section 26.1-03-07, the appropriate national association of insurance commissioners annual statement blank, prepared in accordance with the national association of insurance commissioners instructions handbook and following the accounting procedures and practices prescribed by the March 2019 2023 version of the national association of insurance commissioners accounting practices and procedures manual for property and casualty and life and health insurance.

History: Effective January 1, 1992; amended effective January 1, 2000; December 1, 2001; March 1, 2004; January 1, 2006; January 1, 2008; April 1, 2010; July 1, 2012; April 1, 2014; January 1, 2016;

October 1, 2019; <u>January 1, 2024.</u> **General Authority:** NDCC 28-32-02

Law Implemented: NDCC 26.1-03-07, 26.1-03-11.1, 26.1-02-26

45-03-15-02. Reporting of financial information.

Every insurance company licensed to do business in this state shall transmit to the commissioner and to the national association of insurance commissioners its most recent financial statements compiled on a quarterly basis, within forty-five days following the calendar quarters ending March thirty-first, June thirtieth, and September thirtieth. The financial statements must be prepared and filed in the form prescribed by the commissioner and in accordance with the national association of insurance commissioners instructions handbook and following the accounting procedures and practices prescribed by the March 2019 2023 version of the national association of insurance commissioners accounting practices and procedures manual for property and casualty and life and health insurance. The commissioner may exempt any company or category or class of companies from the filing requirement.

History: Effective January 1, 1992; amended effective January 1, 2000; December 1, 2001; March 1, 2004; January 1, 2006; January 1, 2008; April 1, 2010; July 1, 2012; April 1, 2014; January 1, 2016;

October 1, 2019; <u>January 1, 2024</u> **General Authority:** NDCC 28-32-02

Law Implemented: NDCC 26.1-02-03, 26.1-03-07, 26.1-03-11.1, 26.1-02-26

45-03-15-03. Annual statement filing.

Every insurance company operating in more than one state shall file all annual and quarterly statements with the national association of insurance commissioners, through media acceptable to the commissioner, unless the commissioner makes a specific finding that an insurer, or type of insurer, is exempt from this filing requirement.

History: Effective October 1, 1995; amended effective April 1, 1996; December 1, 1998.

General Authority: NDCC 28-32-02

Law Implemented: NDCC 26.1-03-07, 26.1-03-11.1

45-03-15-04. Acceptable media for annual statement filing.

The filing of annual and quarterly statements with the national association of insurance commissioners and every insurance company subject to the requirements of section 45-03-15-03 shall use the national association of insurance commissioners internet filing website in making the filings required by that section.

History: Effective December 1, 1998; amended effective October 1, 2019.

General Authority: NDCC 28-32-02

Law Implemented: NDCC 26.1-03-07, 26.1-03-11.1

CHAPTER 45-06-06.1 REGULATION TO IMPLEMENT THE SMALL EMPLOYER HEALTH INSURANCE AVAILABILITY ACT

Section

45-0	06-06.	1-01	Definitions

45-06-06.1-02 Applicability and Scope

45-06-06.1-03 Establishment of Classes of Business

45-06-06.1-04 Transition for Assumptions of Business from Another Carrier

45-06-06.1-05 Restrictions Relating to Premium Rates

45-06-06.1-06 Requirement to Insure Entire Groups

45-06-06.1-07 Consideration of Industry

45-06-06.1-08 Application to Reenter State

45-06-06.1-09 Qualifying Previous and Qualifying Existing Coverage [Repealed]

45-06-06.1-10 Restrictive Riders

45-06-06.1-11 Rules Related to Fair Marketing

45-06-06.1-12 Status of Carriers as Small Employer Carriers

45-06-06.1-13 Restoration of Coverage

45-06-06.1-14 Special Enrollment Periods

45-06-06.1-01. Definitions.

As used in this chapter:

- 1. "Associate member of an employee organization" means any individual who participates in an employee benefit plan (as defined in 29 U.S.C. 1002(1)) that is a multiemployer plan (as defined in 29 U.S.C. 1002(37A)), other than the following:
 - a. An individual, or the beneficiary of such individual, who is employed by a participating employer within a bargaining unit covered by at least one of the collective bargaining agreements under or pursuant to which the employee benefit plan is established or maintained: or
 - b. An individual who is a present or former employee, or a beneficiary of such employee, of the sponsoring employee organization, of an employer who is or was a party to at least one of the collective bargaining agreements under or pursuant to which the employee benefit plan is established or maintained, or of the employee benefit plan or of a related plan.
- 2. "New entrant" means an eligible employee, or the dependent of an eligible employee, who becomes part of an employer group after the initial period for enrollment in a health benefit plan.
- 3. "Preexisting condition exclusion" means a limitation or exclusion of benefits relating to a condition based on the fact that the condition was present before the effective date of coverage, whether or not any medical advice, diagnosis, care, or treatment was recommended or received before such date.
- 4. "Risk characteristic" means the health status, claims experience, duration ofcoverage, health status-related factor, or any similar characteristic related to the health status or experience of a small employer group or of any member of a small employer group.
- "Risk load" means the percentage above the applicable base premium rate that is charged by a small employer carrier to a small employer to reflect the risk characteristics of the small employer group.

6. "Waiting period" means, with respect to a group health benefit plan and an individual who is a potential participant or beneficiary in the plan, the period that must pass with respect to the individual before the individual is eligible to be covered for benefits under the terms of the plan.

History: Effective August 1, 1994; amended effective December 1, 1997.

General Authority: NDCC 26.1-01-08 Law Implemented: NDCC 26.1-36.3

45-06-06.1-02. Applicability and scope.

- 1. Except as provided in section 45-06-06.1-13, this chapter applies to any health benefit plan, whether provided on a group or individual basis, which:
 - a. Meets one or more of the conditions set forth in subdivisions a, b, and c of subsection 1 of North Dakota Century Code section 26.1-36.3-02; and
 - b. Provides coverage to one or more employees of a small employer located in this state, without regard to whether the policy or certificate was issued in this state.
- 2. a. A carrier that provides individual health insurance policies to one or more of the employees of a small employer shall be considered a small employer carrier and is subject to the provisions of the Act and this chapter with respect to such policies if the small employer contributes directly or indirectly to the premiums for the policies and the carrier is aware or should have been aware of such contribution.
 - b. In the case of a carrier that provides individual health insurance policies to one or more employees of a small employer, the small employer carrier is subject to subdivision b of subsection 1 of North Dakota Century Code section 26.1-36.3-06, relating to guaranteed issue of coverage, if:
 - (1) The small employer has at least two employees;
 - (2) The small employer contributes directly or indirectly to the premiums charged by the carrier; and
 - (3) The carrier is aware or should have been aware of the contribution by the employer.
- 3. The provisions of the Act and this chapter apply to a health benefit plan provided to a small employer or to the employees of a small employer without regard to whether the health benefit plan is offered under or provided through a group policy or trust arrangement of any size sponsored by an association or discretionary group.
- 4. An individual health insurance policy is not subject to the provisions of the Act and this chapter solely because the policyholder elects a deduction under section 162(1) of the Internal Revenue Code.
- 5. a. If a small employer is issued a health benefit plan under the terms of the Act, the provisions of the Act and this chapter continue to apply to the health benefit plan in the case that the small employer subsequently employs less than two or more than fifty eligible employees. Within sixty days of becoming aware that the employer has less than two or more than fifty eligible employees but no later than the anniversary date of the employer's health benefit plan, a carrier providing coverage to such an employer shall notify the employer that the protections provided under the Act and this chapter shall cease to apply to the employer if such employer fails to renew its current health benefit plan or elects to enroll in a different health benefit plan.

- b. (1) If a health benefit plan is issued to an employer that is not a small employer as defined in the Act, but subsequently the employer becomes a small employer, due to the loss or change of work status of one or more employees, the terms of the Act shall not apply to the health benefit plan. The carrier providing a health benefit plan to such an employer shall not become a small employer carrier under the terms of the Act solely because the carrier continues to provide coverage under the health benefit plan to the employer.
 - (2) Within sixty days of becoming aware that the employer is a "small employer" as that term is defined in subsection 35 of North Dakota Century Code section 26.1-36.1-01, a carrier providing coverage to an employer described in paragraph 1 shall notify the employer of the options and protections available to the employer under the Act, including the employer's option to purchase a small employer health benefit plan from any small employer carrier.
- 6. a. (1) If a small employer has employees in more than one state, the provisions of the Act and this chapter shall apply to a health benefit plan issued to the small employer if:
 - (a) The majority of eligible employees of such small employer are employed in this state; or
 - (b) If no state contains a majority of the eligible employees of the small employer, the primary business location of the small employer is in this state.
 - (2) In determining whether the laws of this state or another state apply to a health benefit plan issued to a small employer described in paragraph 1, the provisions of the subdivision shall be applied as of the date the health benefit plan was issued to the small employer for the period that the health benefit plan remains in effect.
 - b. If a health benefit plan is subject to the Act and this chapter, the provisions of the Act and this chapter shall apply to all individuals covered under the health benefit plan, whether they reside in this state or in another state.
- 7. A carrier that is not operating as a small employer carrier in this state shall not become subject to the provisions of the Act and this chapter solely because a small employer that was issued a health benefit plan in another state by that carrier moves to this state.

History: Effective August 1, 1994; amended effective September 12, 1994; December 1, 1997.

General Authority: NDCC 26.1-01-08 Law Implemented: NDCC 26.1-36.3

45-06-06.1-03. Establishment of classes of business.

- 1. A small employer carrier that establishes more than one class of business pursuant to the provisions of North Dakota Century Code section 26.1-36.3-03 shall maintain on file for inspection by the commissioner the following information with respect to each class of business so established:
 - a. A description of each criterion employed by the carrier or any of its agents for determining membership in the class of business;
 - b. A statement describing the justification for establishing the class as a separate class of business and documentation that the establishment of the class of business is intended to reflect substantial differences in expected claims experience or administrative costs related to the reasons set forth in North Dakota Century Code section 26.1-36.3-03; and

- c. A statement disclosing which, if any, health benefit plans are currently available for purchase in the class and any significant limitations related to the purchase of such plans.
- 2. A carrier may not directly or indirectly use group size as a criterion for establishing eligibility for a health benefit plan or for a class of business.

History: Effective August 1, 1994.

General Authority: NDCC 26.1-01-08, 26.1-36.3-03

Law Implemented: NDCC 26.1-36.3-03

45-06-06.1-04. Transition for assumptions of business from another carrier.

- 1. a. A small employer carrier shall not transfer or assume the entire insurance obligation or risk of a health benefit plan covering a small employer in this state unless:
 - (1) The transaction has been approved, to the extent required by law, by the insurance supervisory official of the state of domicile of the assuming carrier;
 - (2) The transaction has been approved to the extent required by law by the insurance supervisory official of the state of domicile of the ceding carrier; and
 - (3) The transaction otherwise meets the requirements of this section.
 - b. A carrier domiciled in this state that proposes to assume or cede the entire insurance obligation or risk of one or more small employer health benefit plans from another carrier shall make a filing for approval with the commissioner at least sixty days prior to the date of the proposed assumption. The commissioner may approve the transaction if the commissioner finds that the transaction is in the best interests of the individuals insured under the health benefit plans to be transferred and is consistent with the purposes of the Act and this chapter. The commissioner shall not approve the transaction until at least thirty days after the date of the filing; except that, if the ceding carrier is in hazardous financial condition, the commissioner may approve the transaction as soon as the commissioner deems reasonable after the filing.
 - c. (1) The filing required under subdivision b shall:
 - (a) Describe the class of business, including any eligibility requirements, of the ceding carrier from which the health benefit plans will be ceded;
 - (b) Describe whether the assuming carrier will maintain the assumed health benefit plans as a separate class of business pursuant to subsection 3 or will incorporate them into an existing class of business pursuant to subsection 4. If the assumed health benefit plans will be incorporated into an existing class of business, the filing shall describe the class of business of the assuming carrier into which the health benefit plans will be incorporated;
 - (c) Describe whether the health benefit plans being assumed are currently available for purchase by small employers;
 - (d) Describe the potential effect of the assumption, if any, on the benefits provided by the health benefit plans to be assumed;
 - (e) Describe the potential effect of the assumption, if any, on the premiums for the health benefit plans to be assumed;

- (f) Describe any other potential material effects of the assumption on the coverage provided to the small employers covered by the health benefit plans to be assumed: and
- (g) Include any other information required by the commissioner.
- (2) A domestic small employer carrier required to make a filing under subdivision b shall also make an informational filing with the commissioner of each state in which there are small employer health benefit plans that would be included in the transaction. The informational filing to each state shall be made concurrently with the filing made under subdivision b and shall include at least the information specified in paragraph 1 for the small employer health benefit plans in that state.
- d. A small employer carrier shall not transfer or assume the entire insurance obligation or risk of a health benefit plan covering a small employer in this state unless it complies with the following provisions:
 - (1) The carrier has provided notice to the commissioner at least sixty days prior to the date of the proposed assumption. The notice shall contain the information specified in subdivision c for the health benefit plans covering small employers in this state.
 - (2) If the assumption of a class of business would result in the assuming small employer carrier being out of compliance with the limitations related to premium rates contained in subdivision a of subsection 1 of North Dakota Century Code section 26.1-36.3-04, the assuming carrier shall make a filing with the commissioner pursuant to subsection 3 of North Dakota Century Code section 26.1-36.3-04 seeking suspension of the application of subdivision a of subsection 1 of section 26.1-36.3-04.
 - (3) An assuming carrier seeking suspension of the application of subdivision a of subsection 1 of North Dakota Century Code section 26.1-36.3-04 shall not complete the assumption of health benefit plans covering small employers in this state unless the commissioner grants the suspension requested pursuant to paragraph 2.
 - (4) Unless a different period is approved by the commissioner, a suspension of the application of subdivision a of subsection 1 of North Dakota Century Code section 26.1-36.3-04, with respect to an assumed class of business, shall be for no more than fifteen months and, with respect to each individual small employer, shall last only until the anniversary date of such employer's coverage, except that the period with respect to an individual small employer may be extended beyond its first anniversary date for a period of up to twelve months if the anniversary date occurs within three months of the date of assumption of the class of business.
- 2. a. Except as provided in subdivision b, a small employer carrier shall not cede or assume the entire insurance obligation or risk for a small employer health benefit plan unless the transaction includes the ceding to the assuming carrier of the entire class of business which includes such health benefit plan.
 - b. A small employer carrier may cede less than an entire class of business to an assuming carrier if:
 - (1) One or more small employers in the class have exercised their right under contract or state law to reject, either directly or by implication, the ceding of their health benefit plans to another carrier. In that instance, the transaction shall include each health benefit plan in the class of business except those health benefit plans for which a small employer has rejected the proposed cession; or

- (2) After a written request from the transferring carrier, the commissioner determines that the transfer of less than the entire class of business is in the best interest of the small employers insured in that class of business.
- 3. Except as provided in subsection 4, a small employer carrier that assumes one or more health benefit plans from another carrier shall maintain such health benefit plans as a separate class of business.
- 4. A small employer carrier that assumes one or more health benefit plans from another carrier may exceed the limitation contained in subsection 2 of North Dakota Century Code section 26.1-36.3-03, relating to the maximum number of classes of business a carrier may establish, due solely to such assumption for a period of up to fifteen months after the date of the assumption, provided that the carrier complies with the following provisions:
 - a. Upon assumption of the health benefit plans, such health benefit plans shall be maintained as a separate class of business. During the fifteen-month period following the assumption, each of the assumed small employer health benefit plans shall be transferred by the assuming small employer carrier into a single class of business operated by the assuming small employer carrier. The assuming small employer carrier shall select the class of business into which the assumed health benefit plans will be transferred in a manner such that the transfer results in the least possible change to the benefits and rating method of the assumed health benefit plans.
 - b. The transfers authorized in subdivision a shall occur with respect to each small employer on the anniversary date of the small employer's coverage, except that the period with respect to an individual small employer may be extended beyond its first anniversary date for a period of up to twelve months if the anniversary date occurs within three months of the date of assumption of the class of business.
 - c. A small employer carrier making a transfer pursuant to subdivision a may alter the benefits of the assumed health benefit plans to conform to the benefits currently offered by the carrier in the class of business into which the health benefit plans have been transferred.
 - d. The premium rate for an assumed small employer health benefit plan shall not be modified by the assuming small employer carrier until the health benefit plan is transferred pursuant to subdivision a. Upon transfer, the assuming small employer carrier shall calculate a new premium rate for the health benefit plan from the rate manual established for the class of business into which the health benefit plan is transferred. In making such calculation, the risk load applied to the health benefit plan shall be no higher than the risk load applicable to such health benefit plan prior to the assumption.
 - e. During the fifteen-month period provided in this subsection, the transfer of small employer health benefit plans from the assumed class of business in accordance with this subsection shall not be considered a violation of the first sentence of subsection 2 of North Dakota Century Code section 26.1-36.3-04.
- 5. An assuming carrier may not apply eligibility requirements, including minimum participation and contribution requirements, with respect to an assumed health benefit plan or with respect to any health benefit plan subsequently offered to a small employer covered by such an assumed health benefit plan that are more stringent than the requirements applicable to such health benefit plan prior to the assumption.
- 6. The commissioner may approve a longer period of transition upon application of a small employer carrier. The application shall be made within sixty days after the date of assumption of the class of business and shall clearly state the justification for a longer transition period.

- 7. Nothing in this section or in the Act is intended to:
 - a. Reduce or diminish any legal or contractual obligation or requirement, including any obligation provided by law, of the ceding or assuming carrier related to the transaction;
 - b. Authorize a carrier that is not admitted to transact the business of insurance in this state to offer or insure health benefit plans in this state; or
 - c. Reduce or diminish the protections related to an assumption reinsurance transaction provided by law.

History: Effective August 1, 1994.

General Authority: NDCC 26.1-01-08, 26.1-36.3-03

Law Implemented: NDCC 26.1-36.3-03

45-06-06.1-05. Restrictions relating to premium rates.

- This section applies only to a health benefit plan offered by a small employer who employed an
 average of at least two but not more than twenty-five eligible employees on business days
 during the preceding calendar year and who employs at least two employees on the first day of
 the plan year.
- 2. a. A small employer carrier shall develop a separate rate manual for each class of business. Base premium rates and new business premium rates charged to small employers by the small employer carrier shall be computed solely from the applicable rate manual developed pursuant to this subsection. To the extent that a portion of the premium rates charged by a small employer carrier is based on the carrier's discretion, the manual shall specify the criteria and factors considered by the carrier in exercising such discretion.
 - b. (1) A small employer carrier shall not modify the rating method used in the rate manual for a class of business until the change has been approved as provided in this paragraph. The commissioner may approve a change to a rating method if the commissioner finds that the change is reasonable, actuarially appropriate, and consistent with the purposes of the Act and this chapter.
 - (2) A carrier may modify the rating method for a class of business only with prior approval of the commissioner. A carrier requesting to change the rating method for a class of business shall make a filing with the commissioner at least thirty days prior to the proposed date of the change. The filing shall contain at least the following information:
 - (a) The reasons the change in rating method is being requested;
 - (b) A complete description of each of the proposed modifications to the rating method;
 - (c) A description of how the change in rating method would affect the premium rates currently charged to small employers in the class of business, including an estimate from a qualified actuary of the number of groups or individuals and a description of the types of groups or individuals whose premium rates may change by more than ten percent due to the proposed change in rating method, not generally including increases in premium rates applicable to all small employers in a health benefit plan;
 - (d) A certification from a qualified actuary that the new rating method would be based on objective and credible data and would be actuarially sound and appropriate; and

- (e) A certification from a qualified actuary that the proposed change in rating method would not produce premium rates for small employers that would be in violation of North Dakota Century Code section 26.1-36.3-04.
- (3) For the purpose of this section a change in rating method means:
 - (a) A change in the number of case characteristics used by a small employer carrier to determine premium rates for health benefit plans in a class of business:
 - (b) A change in the manner or procedures by which insureds are assigned into categories for the purpose of applying a case characteristic to determine premium rates for health benefit plans in a class of business;
 - (c) A change in the method of allocating expenses among health benefit plans in a class of business; or
 - (d) [1] A change in a rating factor with respect to any case characteristic if the change would produce a change in premium for any small employer that exceeds ten percent.
 - [2] For the purpose of item 1, a change in a rating factor shall mean the cumulative change with respect to such factor considered over a twelvementh period. If a small employer carrier changes rating factors with respect to more than one case characteristic in a twelve-month period, the carrier shall consider the cumulative effect of all such changes in applying the ten percent test under item 1.
- 3. a. The rate manual developed pursuant to subsection 2 shall specify the case characteristics and rate factors to be applied by the small employer carrier in establishing premium rates for the class of business.
 - b. A small employer carrier may not use case characteristics other than those specified in subdivision j of subsection 1 of North Dakota Century Code section 26.1-36.3-04 without the prior approval of the commissioner. A small employer carrier seeking such an approval shall make a filing with the commissioner for a change in rating method under subdivision b of subsection 2.
 - c. A small employer carrier shall use the same case characteristics in establishing premium rates for each health benefit plan in a class of business and shall apply them in the same manner in establishing premium rates for each such health benefit plan. Case characteristics shall be applied without regard to the risk characteristics of a small employer.
 - d. The rate manual developed pursuant to subsection 2 shall clearly illustrate the relationship among the base premium rates charged for each health benefit plan in the class of business. If the new business premium rate is different than the base premium rate for a health benefit plan, the rate manual shall illustrate the difference.
 - e. Differences among base premium rates for health benefit plans shall be based solely on the reasonable and objective differences in the design and benefits of the health benefit plans and shall not be based in any way on the actual or expected health status or claims experience of the small employer groups that choose or are expected to choose a particular health benefit plan. A small employer carrier shall apply case characteristics and rate factors within a class of business in a manner that assures that premium differences among health benefit plans for identical small employer groups vary only due to reasonable and objective differences in the design and benefits of the health benefit

plans and are not due to the actual or expected health status or claims experience of the small employer groups that choose or are expected to choose a particular health benefit plan.

- f. The rate manual developed pursuant to subsection 2 shall provide for premium rates to be developed in a two step process. In the first step, a base premium rate shall be developed for the small employer group without regard to any risk characteristics of the group. In the second step, the resulting base premium rate may be adjusted by a risk load, subject to the provisions of North Dakota Century Code section 26.1-36.3-04, to reflect the risk characteristics of the group.
- g. A premium charged to a small employer for a health benefit plan shall not include a separate application fee, underwriting fee, or any other separate fee or charge.
- h. A small employer carrier shall allocate administrative expenses to the basic and standard health benefit plans on no less favorable of a basis than expenses are allocated to other health benefit plans in the class of business. The rate manual developed pursuant to subsection 2 shall describe the method of allocating administrative expenses to the health benefit plans in the class of business for which the manual was developed.
- i. Each rate manual developed pursuant to subsection 2 shall be maintained by the carrier for a period of six years. Updates and changes to the manual shall be maintained with the manual.
- j. The rate manual and rating practices of a small employer carrier shall comply with any guidelines issued by the commissioner.
- 4. If group size is used as a case characteristic by a small employer carrier, the highest rate factor associated with a group size classification shall not exceed the lowest rate factor associated with such a classification by more than twenty percent.
- 5. The restrictions related to changes in premium rates in subdivisions c and g of subsection 1 of North Dakota Century Code section 26.1-36.3-04 shall be applied as follows:
 - a. A small employer carrier shall revise its rate manual each rating period to reflect changes in base premium rates and changes in new business premium rates.
 - b. (1) If, for any health benefit plan with respect to any rating period, the percentage change in the new business premium rate is less than or the same as the percentage change in the base premium rate, the change in the new business premium rate shall be deemed to be the change in the base premium rate for the purposes of paragraph 3 of subdivision c of subsection 1 and paragraph 1 of subdivision g of subsection 1 of North Dakota Century Code section 26.1-36.3-04.
 - (2) If, for any health benefit plan with respect to any rating period, the percentage change in the new business premium rate exceeds the percentage change in the base premium rate, the health benefit plan shall be considered a health benefit plan into which the small employer carrier is no longer enrolling new small employers for the purposes of subdivisions c and g of subsection 1 of North Dakota Century Code section 26.1-36.3-04.
 - c. If, for any rating period, the change in the new business premium rate for a health benefit plan differs from the change in the new business premium rate for any other health benefit plan in the same class of business by more than twenty percent, the carrier shall make a filing with the commissioner containing a complete explanation of how the respective changes in new business premium rates were established and the reason for

- the difference. The filing shall be made within thirty days of the beginning of the rating period.
- d. A small employer carrier shall keep on file for a period of at least six years the calculations used to determine the change in base premium rates and new business premium rates for each health benefit plan for each rating period.
- 6. a. Except as provided in subdivisions b through d, a change in premium rate for a small employer shall produce a revised premium rate that is no more than the following:
 - (1) The base premium rate for the small employer, as shown in the rate manual as revised for the rating period, multiplied by;
 - (2) One plus the sum of:
 - (a) The risk load applicable to the small employer during the previous rating period; and
 - (b) Fifteen percent, prorated for periods of less than one year.
 - b. In the case of a health benefit plan into which a small employer carrier is no longer enrolling new small employers, a change in premium rate for a small employer shall produce a revised premium rate that is no more than the following:
 - (1) The base premium rate for the small employer, given its present composition and as shown in the rate manual in effect for the small employer at the beginning of the previous rating period, multiplied by;
 - (2) One plus the lesser of:
 - (a) The change in the base rate; or
 - (b) The percentage change in the new business premium for the most similar health benefit plan into which the small employer carrier is enrolling new small employers, multiplied by;
 - (3) One plus the sum of:
 - (a) The risk load applicable to the small employer during the previous rating period; and
 - (b) Fifteen percent, prorated for periods of less than one year.
 - c. In the case of a health benefit plan described in subdivision g of subsection 1 of North Dakota Century Code section 26.1-36.3-04, if the current premium rate for the health benefit plan exceeds the ranges set forth in subsection 1 of North Dakota Century Code section 26.1-36.3-04, the formulae set forth in subdivisions a and b will be applied as if the fifteen percent adjustment provided in subparagraph b of paragraph 2 of subdivision a and subparagraph b of paragraph 3 of subdivision b were a zero percent adjustment.
 - d. Notwithstanding the provisions of subdivisions a and b, a change in premium rate for a small employer shall not produce a revised premium rate that would exceed the limitations on rates provided in subdivision b of subsection 1 of North Dakota Century Code section 26.1-36.3-04.
- 7. a. A representative of a Taft-Hartley trust, including a carrier upon the written request of such a trust, may file in writing with the commissioner a request for the waiver of

- application of the provisions of subsection 1 of North Dakota Century Code section 26.1-36.3-04 with respect to such trust.
- b. A request made under subdivision a shall identify the provisions for which the trust is seeking the waiver and shall describe, with respect to each provision, the extent to which application of such provision would:
 - (1) Adversely affect the participants and beneficiaries of the trust; and
 - (2) Require modifications to one or more of the collective bargaining agreements under or pursuant to which the trust was or is established or maintained.
- c. A waiver granted under subsection 3 of North Dakota Century Code section 26.1-36.3-04 shall not apply to an individual who participates in the trust because the individual is an associate member of an employee organization or the beneficiary of such an individual.

History: Effective August 1, 1994; amended effective December 1, 1997.

General Authority: NDCC 26.1-01-08, 26.1-36.3-04

Law Implemented: NDCC 26.1-36.3-04

45-06-06.1-06. Requirement to insure entire groups.

- a. A small employer carrier that offers coverage to a small employer shall offer to provide coverage to each eligible employee and to each dependent of an eligible employee. Except as provided in subdivision b, the small employer carrier shall provide the same health benefit plan to each such employee and dependent.
 - b. A small employer carrier may offer the employees of a small employer the option of choosing among one or more health benefit plans, provided that each employee may choose any of the offered plans. Except as provided in subsection 3 of North Dakota Century Code section 26.1-36.3-06, with respect to exclusions for preexisting conditions, the choice among benefit plans may not be limited, restricted, or conditioned based upon the risk characteristics of the employees or their dependents.
- 2. a. A small employer carrier shall require each small employer that applies for coverage, as part of the application process, to provide a complete list of eligible employees and dependents of eligible employees as defined in subsections 12 and 13 of North Dakota Century Code section 26.1-36.3-01. The small employer carrier shall require the small employer to provide appropriate supporting documentation, such as the W-2 summary wage and tax form, or certification, to verify the information required under this subdivision.
 - b. A small employer carrier shall secure a waiver with respect to each eligible employee and each dependent of such an eligible employee who declines an offer of coverage under a health benefit plan provided to a small employer. The waiver shall be signed by the eligible employee, on behalf of such employee or the dependent of such employee, and shall certify that the individual who declined coverage was informed of the availability of coverage under the health benefit plan. The waiver form shall require that the reason for declining coverage be stated on the form and shall include a written warning of the penalties imposed on late enrollees. Waivers shall be maintained by the small employer carrier for a period of six years.
 - c. (1) A small employer carrier may not issue coverage to a small employer that refuses to provide the list required under subdivision a or a waiver required under subdivision b.

- (2) (a) A small employer carrier shall not issue coverage to a small employer if the carrier, or a producer for such carrier, has reason to believe that the small employer has induced or pressured an eligible employee, or dependent of an eligible employee, to decline coverage due to the individual's risk characteristics.
 - (b) A producer shall notify a small employer carrier, prior to submitting an application for coverage with the carrier on behalf of a small employer, of any circumstances that would indicate that the small employer has induced or pressured an eligible employee, or dependent of an eligible employee, to decline coverage due to the individual's risk characteristics.
- 3. a. New entrants to a small employer group shall be offered an opportunity to enroll in the health benefit plan currently held by such group. A new entrant that does not exercise the opportunity to enroll in the health benefit plan within the period provided by the small employer carrier may be treated as a late enrollee by the carrier, provided that the period provided to enroll in the health benefit plan extends at least thirty days after the date the new entrant is notified of the entrant's opportunity to enroll. If a small employer carrier has offered more than one health benefit plan to a small employer group pursuant to subdivision b of subsection 1, the new entrant shall be offered the same choice of health benefit plans as the other members of the group.
 - b. A small employer carrier may not apply a waiting period, elimination period, or other similar limitation of coverage, other than an exclusion for preexisting medical conditions consistent with subdivision b of subsection 3 of North Dakota Century Code section 26.1-36.3-06, with respect to a new entrant that is longer than ninety days.
 - c. New entrants to a group shall be accepted for coverage by the small employer carrier without any restrictions or limitations on coverage related to the risk characteristics of the employees or their dependents, except that a carrier may exclude coverage for preexisting medical conditions, consistent with the provisions provided in subsection 3 of North Dakota Century Code section 26.1-36.3-06.
 - d. A small employer carrier may assess a risk load to the premium rate associated with a new entrant, consistent with the requirements of North Dakota Century Code section 26.1-36.3-04. The risk load shall be the same risk load charged to the small employer group immediately prior to acceptance of the new entrant into the group.
- 4. a. (1) In the case of an eligible employee or dependent of an eligible employee who, prior to the effective date of subsection 1 of North Dakota Century Code section 26.1-36.3-06,0was excluded from coverage or denied coverage by a small employer carrier in the process of providing a health benefit plan to an eligible small employer, as defined in subdivision c of subsection 1 of North Dakota Century Code section 26.1-36.3-06, the small employer carrier shall provide an opportunity for the eligible employee or dependent of such eligible employee to enroll in the health benefit plan currently held by the small employer.
 - (2) A small employer carrier may require an individual who requests enrollment under this subsection to sign a statement indicating that such individual sought coverage under the group contract other than as a late enrollee and that the coverage was not offered to the individual.
 - b. The opportunity to enroll must meet the following requirements:
 - (1) The opportunity to enroll shall begin September 1, 1994, and shall last for a period of at least three months.

- (2) Eligible employees and dependents of eligible employees who are provided an opportunity to enroll pursuant to this subsection shall be treated as new entrants. Premium rates related to such individuals shall be set in accordance with subsection 3.
- (3) The terms of coverage offered to an individual described in paragraph 1 ofsubdivision a may exclude coverage for preexisting medical conditions if the health benefit plan currently held by the small employer contains such an exclusion, provided that the exclusion period shall be reduced by the number of days between the date the individual was excluded or denied coverage and the date coverage is provided to the individual pursuant to this subsection.
- (4) A small employer carrier shall provide written notice at least forty-five days prior to the opportunity to enroll provided in paragraph 1 of subdivision a to each small employer insured under a health benefit plan offered by such carrier. The notice shall clearly describe the rights granted under this subsection to employees and dependents who were previously excluded from or denied coverage and the process for enrollment of such individuals in the employer's health benefit plan.

History: Effective August 1, 1994; amended effective December 1, 1997; August 1, 2000.

General Authority: NDCC 26.1-01-08 **Law Implemented:** NDCC 26.1-36.3

45-06-06.1-07. Consideration of industry.

- Except as provided in subsections 2 and 3, a small employer carrier may not consider the trade or occupation of the employees of a small employer or the industry or type of business in which the small employer is engaged in determining whether to issue or continue to provide coverage to the small employer.
- 2. A small employer carrier may use industry as a case characteristic in establishing premium rates, subject to subdivision f of subsection 1 of North Dakota Century Code section 26.1-36.3-04.
- 3. A small employer carrier may consider trade, occupation, or industry as part of the eligibility criteria for a class of business, subject to paragraph 2 of subdivision b of subsection 1 of North Dakota Century Code section 26.1-36.3-06.

History: Effective August 1, 1994.

General Authority: NDCC 26.1-01-08

Law Implemented: NDCC 26.1-36.3

45-06-06.1-08. Application to reenter state.

- 1. A carrier that has been prohibited from writing coverage for small employers in this state pursuant to subsection 2 of North Dakota Century Code section 26.1-36.3-05 may not resume offering health benefit plans to small employers in this state until the carrier has made a petition to the commissioner to be reinstated as a small employer carrier and the petition has been approved by the commissioner. In reviewing a petition, the commissioner may ask for such information and assurances as the commissioner finds reasonable and appropriate.
- 2. In the case of a small employer carrier doing business in only one established geographic service area of the state, if the small employer carrier elects to nonrenew a health benefit plan under subdivision f of subsection 1 of North Dakota Century Code section 26.1-36.3-05, the small employer carrier shall be prohibited from offering health benefit plans to small employers in any part of the service area for a period of five years. In addition, the small employer carrier shall not offer health benefit plans to small employers in any other geographic area of the

state without the prior approval of the commissioner. In considering whether to grant approval, the commissioner may ask for such information and assurances as the commissioner finds reasonable and appropriate.

History: Effective August 1, 1994.

General Authority: NDCC 26.1-01-08

Law Implemented: NDCC 26.1-36.3-05

45-06-06.1-09. Qualifying previous and qualifying existing coverage.

Repealed effective December 1, 1997.

45-06-06.1-10. Restrictive riders.

- 1. A restrictive rider, endorsement, or other provision that would violate the provisions of paragraph 2 of subdivision e of subsection 3 of North Dakota Century Code section 26.1-36.3-06 and that was in force on the effective date of this chapter may not remain in force beyond the first anniversary date of the health benefit plan subject to the restrictive provision that follows the effective date of this chapter. A small employer carrier shall provide written notice to those small employers whose coverage will be changed pursuant to this subsection at least thirty days prior to the required change to the health benefit plan.
- Except as permitted in subdivision b of subsection 3 of North Dakota Century Code section 26.1-36.3-06, a small employer carrier shall not modify or restrict a basic or standard health benefit plan in any manner for the purposes of restricting or excluding coverage or benefits for specific diseases, medical conditions, or services otherwise covered by the plan.
- 3. Except as permitted in subdivision b of subsection 3 of North Dakota Century Code section 26.1-36.3-06, a small employer carrier shall not modify or restrict any health benefit plan with respect to any eligible employee or dependent of an eligible employee, through riders, endorsements, or otherwise, for the purpose of restricting or excluding the coverage or benefits provided to such employee or dependent for specific diseases, medical conditions, or services otherwise covered by the plan.

History: Effective August 1, 1994. General Authority: NDCC 26.1-01-08 Law Implemented: NDCC 26.1-36.3-06

45-06-06.1-11. Rules related to fair marketing.

- a. A small employer carrier shall actively market each of its health benefit plans to small employers in this state. A small employer carrier may not suspend the marketing or issuance of a health benefit plan unless the carrier has good cause and has received the prior approval of the commissioner.
 - b. In marketing the basic and standard health benefit plans to small employers, a small employer carrier shall use at least the same sources and methods of distribution that it uses to market other health benefit plans to small employers. Any producer authorized by a small employer carrier to market health benefit plans to small employers in the state shall also be authorized to market the basic and standard health benefit plans.
- 2. a. A small employer carrier shall offer to any small employer that applies for or makes an inquiry regarding health insurance coverage from the small employer carrier all health benefit plans it actively markets to small employers. The offer shall be in writing and shall include at least the following information:

- (1) A general description of the benefits contained in the health benefit plans being offered to small employers in this state; and
- (2) Information describing how the small employer may enroll in the plans. The offer may be provided directly to the small employer or delivered through a producer.
- b. In connection with the offering of any health insurance coverage to a small employer, a health insurance issuer is required to make reasonable disclosure to the employer, as a part of its solicitation and sales materials, of the availability of information described in this subsection; and upon request provide that information to the employer.

Subject to the above, the information that must be provided is the provisions of coverage relating to the following:

- (1) The issuer's right to change premium rates and the factors that may affect changes in premium rates.
- (2) Renewability of coverage.
- (3) Any preexisting condition exclusion, including use of the alternative method of counting creditable coverage.
- (4) The geographic areas served by HMOs.
- c. (1) A small employer carrier shall provide a price quote to a small employer, directly or through an authorized producer, within ten working days of receiving a request for a quote and such information as is necessary to provide the quote. A small employer carrier shall notify a small employer, directly or through an authorized producer, within five working days of receiving a request for a price quote of any additional information needed by the small employer carrier to provide the quote.
 - (2) A small employer carrier may not apply more stringent or detailed requirements related to the application process for the basic and standard health benefit plans than are applied for other health benefit plans offered by the carrier.
- 3. The small group carrier shall not require a small employer to join or contribute to any association or group as a condition of being accepted for coverage by the small employer carrier, except that, if membership in an association or other group is a requirement for accepting a small employer into a particular health benefit plan, a small employer carrier may apply such requirement, subject to the requirements of paragraph 2 of subdivision b of subsection 1 of North Dakota Century Code section 26.1-36.3-06.
- 4. A small employer carrier may not require, as a condition to the offer or sale of a health benefit plan to a small employer, that the small employer purchase or qualify for any other insurance product or service.
- 5. a. Carriers offering individual and group health benefit plans in this state shall be responsible for determining whether the plans are subject to the requirements of the Act and this chapter. Carriers shall elicit the following information from applicants for such plans at the time of application:
 - (1) Whether or not any portion of the premium will be paid by or on behalf of a small employer, either directly or through wage adjustments or other means of reimbursement; and
 - (2) Whether or not the prospective policyholder, certificate holder, or any prospective insured individual intends to treat the health benefit plan as part of plan or program

under section 162 (other than section 162(1)), section 125, or section 106 of the United States Internal Revenue Code.

- b. If a small employer carrier fails to comply with subdivision a, the small employer carrier shall be deemed to be on notice of any information that could reasonably have been attained if the small employer carrier had complied with subdivision a.
- 6. a. A small employer carrier shall file annually the following information with the commissioner related to health benefit plans issued by the small employer carrier to small employers in this state:
 - (1) The number of small employers that were issued health benefit plans in the previous calendar year, separated as to newly issued plans and renewals;
 - (2) The number of small employers that were issued the basic health benefit plan and the standard health benefit plan in the previous calendar year, separated as to newly issued plans and renewals and as to class of business:
 - (3) The number of small employer health benefit plans in force in each county or by zip code of the state as of December thirty-first of the previous calendar year;
 - (4) The number of small employer health benefit plans that were voluntarily not renewed by small employers in the previous calendar year;
 - (5) The number of small employer health benefit plans that were terminated or nonrenewed for reasons other than nonpayment of premium by the carrier in the previous calendar year; and
 - (6) The number of small employer health benefit plans that were issued to small employers that were uninsured for at least the three months prior to issue.
 - b. The information described in subdivision a shall be filed no later than March fifteenth of each year. Repealed effective January 1, 2024

History: Effective August 1, 1994; amended effective December 1, 1997.

General Authority: NDCC 26.1-01-08 Law Implemented: NDCC 26.1-36.3-11

45-06-06.1-12. Status of carriers as small employer carriers.

- 1. A carrier shall not offer health benefit plans to small employers after January 1, 1994, or continue to provide coverage after September 1, 1994, under health benefit plans previously issued to small employers in this state, unless the filing provided pursuant to section 45-06-06-01 indicates the carrier intends to operate as a small employer carrier in this state.
- 2. If the filing made pursuant to section 45-06-06-01 indicates that a carrier does not intend to operate as a small employer carrier in this state, the carrier shall be precluded from operating as a small employer carrier in this state for a period of five years from the date of the filing. Upon a written request from such a carrier, the commissioner may reduce the period provided for in the previous sentence if the commissioner finds that permitting the carrier to operate as a small employer carrier would be in the best interests of the small employers in the state.

History: Effective August 1, 1994.

General Authority: NDCC 26.1-01-08, 26.1-36.3-07

Law Implemented: NDCC 26.1-36.3-07

45-06-06.1-13. Restoration of coverage.

- a. Except as provided in subdivision b, a small employer carrier shall, as a condition of continuing to transact business in this state with small employers, offer to provide a health benefit plan as described in subsection 3 to any small employer whose coverage was terminated or not renewed by such small employer carrier after January 1, 1994.
 - b. The offer required under subdivision a shall not be required with respect to a health benefit plan that was not renewed if:
 - (1) The health benefit plan was not renewed for reasons permitted in subsection 1 of North Dakota Century Code section 26.1-36.3-05; or
 - (2) The nonrenewal was a result of the small employer voluntarily electing coverage under a different health benefit plan.
- 2. The offer made under subsection 1 shall be made in accordance with paragraph 4 of subdivision b of subsection 4 of section 45-06-06.1-06. A small employer shall be given at least ninety days to accept an offer made pursuant to subsection 1.
- 3. A health benefit plan provided to a terminated small employer pursuant to subsection 1 shall meet the following conditions:
 - a. The health benefit plan shall contain benefits that are identical to the benefits in the health benefit plan that was terminated or nonrenewed.
 - b. The health benefit plan shall not be subject to any waiting periods, including exclusion periods for preexisting conditions, or other limitations on coverage that exceed those contained in the health benefit plan that was terminated or nonrenewed. In applying such exclusions or limitations, the health benefit plan shall be treated as if it were continuously in force from the date it was originally issued to the date that it is restored pursuant to this section and North Dakota Century Code section 26.1-36.3-12.
 - c. The health benefit plan shall not be subject to any provision that restricts or excludes coverage or benefits for specific diseases, medical conditions, or services otherwise covered by the plan.
 - d. The health benefit plan shall provide coverage to all employees who are eligible employees as of the date the plan is restored. The carrier shall offer coverage to each dependent of such eligible employees.
 - e. The premium rate for the health benefit plan shall be no more than the premium rate charged to the small employer on the date the health benefit plan was terminated or nonrenewed; provided that, if the number or case characteristics of the eligible employees or their dependents of the small employer has changed between the date the health benefit plan was terminated or nonrenewed and the date that it is restored, the carrier may adjust the premium rates to reflect any changes in case characteristics of the small employer. If the carrier has increased premium rates for other similar groups with similar coverage to reflect general increases in health care costs and utilization, the premium rate may further be adjusted to reflect the lowest such increase given to a similar group. The premium rate for the health benefit plan may not be increased to reflect any changes in risk characteristics of the small employer group until one year after the date the health benefit plan is restored. Any such increase shall be subject to the provisions of North Dakota Century Code section 26.1-36.3-04.
 - f. A carrier may reinsure new entrants to the health benefit plan who enroll after the restoration of coverage.

History: Effective August 1, 1994.

General Authority: NDCC 26.1-01-08, 26.1-36.3-12

Law Implemented: NDCC 26.1-36.3-12

45-06-06.1-14. Special enrollment periods.

1. Employees losing other coverage. A group health plan shall permit an employee who is eligible, but not enrolled, for coverage (or a dependent of the employee if the dependent is eligible, but not enrolled) to enroll for coverage under the terms of the plan if each of the following conditions is met:

- a. The employee or dependent was covered under a group health plan at the time coverage was previously offered to the employee or dependent.
- b. The employee stated in writing at the time coverage was previously offered that coverage under a group health plan was the reason for declining enrollment, but only if the plan required such a statement at the time and provided the employee with notice of the requirement and its consequences.
- c. The employee's or dependent's coverage:
 - (1) Was under a Consolidated Omnibus Budget Reconciliation Act continuation provision and the coverage was exhausted; or
 - (2) If not under a Consolidated Omnibus Budget Reconciliation Act continuation provision, the coverage was terminated as a result of loss of eligibility for the coverage or because employer contributions toward the coverage were terminated.
- d. Under the terms of the plan, the employee requests enrollment not later than thirty days after the date of termination of the coverage or employer contribution.
- 2. For dependent beneficiaries. A group health plan shall provide for a "dependent special enrollment period" if:
 - a. The group health plan makes coverage available with respect to dependents of an employee;
 - The employee is a participant under the plan or has met any waiting period applicable to becoming a participant under the plan and is eligible to be enrolled under the plan but for a failure to enroll during a previous enrollment period; and
 - c. A person becomes a dependent of the individual through marriage, birth, or adoption or placement for adoption.
- 3. For purposes of this section, a "dependent special enrollment period" is a period of not less than thirty days beginning on the later of:
 - a. The date dependent coverage is made available; or
 - b. The date of the marriage, birth, adoption, or placement for adoption.

During the dependent special enrollment period, the dependent or, if not otherwise enrolled, the employee may be enrolled under the plan as a dependent of the employee. In the case of the birth or adoption of a child, the spouse of the employee may be enrolled as a dependent if the spouse is otherwise eligible for coverage.

4. If an employee seeks to enroll a dependent during the first thirty days of the dependent special enrollment period, the coverage of the dependent shall become effective:

- a. In the case of marriage, not later than the first day of the first month beginning after the date the completed request for enrollment is received;
- b. In the case of a dependent's birth, as of the date of birth; or
- c. In the case of a dependent's adoption or placement for adoption, the date of adoption or placement for adoption.

History: Effective December 1, 2001. General Authority: NDCC 28-32-02(1) Law Implemented: NDCC 26.1-36.3

ARTICLE 45-09 REGULATION OF UNAUTHORIZED INSURERS AND INSURANCE

Chapter

45-09-01 Surplus Lines Insurance

CHAPTER 45-09-01 SURPLUS LINES INSURANCE

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45-09-01-01. Definitions.

Unless otherwise defined, or made inappropriate by context, all words used in this chapter have meanings given to them under North Dakota Century Code chapters 26.1-02, 26.1-26, and 26.1-44.

History: Effective January 1, 1982. General Authority: NDCC 26.1-44-09 Law Implemented: NDCC 26.1-44

45-09-01-02. Surplus lines insurance producer application.

The insurance commissioner will not issue a resident surplus lines insurance producer's license until the applicant has met the requirements of North Dakota Century Code section 26.1-26-17, has completed and filed with the commissioner a completed application for a surplus lines insurance producer license, and paid the license fee. An applicant for a nonresident surplus lines insurance producer license must hold an active resident surplus lines insurance producer license in the applicant's home state and must complete and file with the commissioner an application for a nonresident surplus lines insurance producer license and pay the license fee.

History: Effective January 1, 1982; amended effective December 1, 2001; January 1, 2008; July 1,

2012.

General Authority: NDCC 26.1-26-49, 26.1-44-09 **Law Implemented:** NDCC 26.1-26-17, 26.1-26-20

45-09-01-03. Surplus lines insurance producer must conduct search.

The licensed surplus lines insurance producer seeking the placement of nonadmitted insurance must conduct a diligent search to ascertain whether the insurance, indemnity contract, or surety bond can be procured from a company authorized to do business in this state. The surplus lines insurance producer may rely on a diligent search done by a licensed insurance producer or the insured if the surplus lines insurance producer deems it sufficient. After the placing of any surplus lines insurance, the surplus lines insurance producer must complete and file with the commissioner a surplus lines affidavit confirming such a search has been done no later than March first for the quarter ending the preceding December thirty-first, June first for the quarter ending the preceding March thirty-first, September first for the quarter ending the preceding September thirtieth of each year. The affidavit is not required if the insured is an exempt commercial purchaser as defined in North Dakota Century Code section 26.1-44-02.

History: Effective January 1, 1982; amended effective December 1, 2001; July 1, 2012; April 1, 2021,

January 1, 2024.

General Authority: NDCC 26.1-44-09 **Law Implemented:** NDCC 26.1-44-02

45-09-01-04. Presumption - Diligent search.

A presumption that a diligent search has been made and that the insurance producer was unable to procure the insurance, indemnity contract, or surety bond desired from a company authorized to do business in this state is created when the insurance, contract, or bond is written in one of the categories set out in Appendix I.

History: Effective January 1, 1982; amended effective December 1, 2001; January 1, 2008; July 1,

2012.

General Authority: NDCC 26.1-44-09 **Law Implemented:** NDCC 26.1-44-02

45-09-01-05. Other acceptable lines of coverage.

The categories designated in Appendix I are not to be considered as the only lines of coverage in which unauthorized insurers may be used. Other categories of coverage not listed may be acceptable because of special underwriting considerations, i.e., losses, high exposure, etc. Any exceptions must be fully explained on the surplus lines report of placement.

The securing of advantage as to lower premium rates or as to the terms of the insurance contract do not constitute justification nor are they special underwriting considerations sufficient to allow the surplus lines broker to use an unauthorized company nor lines of coverage other than those designated in Appendix I.

History: Effective January 1, 1982; amended effective December 1, 2001; January 1, 2008; July 1,

2012.

General Authority: NDCC 26.1-44-09 **Law Implemented:** NDCC 26.1-44-02

45-09-01-06. Surplus lines affidavit - Time for filing.

Repealed effective July 1, 2012.

45-09-01-07. Surplus lines affidavit - Limits on availability.

Repealed effective July 1, 2012.

45-09-01-08. Additional policy endorsement requirement. Repealed effective July 1, 2012.

45-09-01-09. Statement of taxable premiums.

Repealed effective July 1, 2012.

APPENDIX I

Categories of Acceptable Surplus Lines Coverage

The following categories of surplus lines coverage are not the only lines which may be written in North Dakota. Other lines of coverage not on this list may be acceptable because of special underwriting considerations. Any exceptions must be fully explained on the surplus lines report of placement.

If the coverage written is in an approved category, there is a presumption that after diligent search the insurance, indemnity contract, or surety bond desired cannot be procured from a company authorized to do business in this state.

These categories may be changed from time to time at the discretion of the insurance commissioner subject to provisions of North Dakota Century Code chapter 28-32, the Administrative Agencies Practice Act.

- 1. Fiduciary liability.
- 2. <u>Commercial Cyber Insurance (inclusive of first party and/or third party commercial cyber insurance coverage).</u>
- 3. Professional liability (E & O) except for hospitals.
- 4. Directors and officers.
- 5. Ocean marine cargo, liability and hull.
- 6. Hazardous cargo and short-term trip transit.
- 7. Bridges (large).
- 8. Heavy woodworking property (unprotected, high-value sawmills).
- 9. Product liability (hazardous).
- 10. Ski lifts and tows' liability.
- 11. Fireworks, ammunition, fuse, cartridges, power, nitroglycerine, explosive gases.
- 12. Environmental impairment pollution.
- 13. Kidnap ransom.
- 14. Oil and gas liability and marine.
- 15. Livestock mortality (high values and unusual).
- 16. Short tail (hole-in-one, 300 bowling score, etc.).
- 17. Large utilities (generation, transmission).
- 18. Building demolition and moving.
- 19. Mono line liquor legal liability.
- 20. Surcharged fire and allied lines excluding uncontrolled marine.
- 21. High-value substandard private passenger automobile.
- 22. Commercial automobile physical damage coverage in excess of rating organizations' filed rates.
- 23. Any excess liability coverages.

Day care liability insurance coverages. 23.

History: Amended effective February 1, 1983; November 1, 1987; December 1, 2001; January 1, 2008;

July 1, 2012, <u>January 1, 2024</u>. **General Authority:** NDCC 26.1-44-09 Law Implemented: NDCC 26.1-44-02

ARTICLE 45-10 PETROLEUM TANK RELEASE COMPENSATION FUND

Chapter	
45-10-01	General Provisions [Superseded]
45-10-02	General Provisions

CHAPTER 45-10-01 GENERAL PROVISIONS

[Superseded by Chapter 45-10-02]

CHAPTER 45-10-02 GENERAL PROVISIONS

Section	
45-10-02-01	Definitions
45-10-02-02	Tank Registration
45-10-02-03	Registration Fee
45-10-02-04	Notification of Release Procedures
45-10-02-05	Procedures for Investigation of Claims
45-10-02-06	Reimbursement
45-10-02-06.1	Reimbursement Disputes
45-10-02-07	Third-Party Claims
45-10-02-08	Board
45-10-02-09	Report to Legislative Assembly and Governor [Repealed]

45-10-02-01. Definitions.

For the purposes of this chapter, the following definitions apply in addition to the definitions set forth in North Dakota Century Code chapter 23-37:

- 1. "Antifreeze" is not a petroleum product.
- 2. "Farm tank" means a tank located on a tract of land devoted to the production of crops or for raising animals and associated residences and improvements. A farm tank must be located on the farm property.
- 3. "Portable tank" means any storage tank, along with its piping and wiring, that is not stationary or affixed including, but not limited to, tanks which are on skids.
- 4. "Residential tank" means a tank located on property used primarily for dwelling purposes.
- 5. "Surface impoundment" means a natural topographic depression, manmade excavation, or diked area formed primarily of earthen materials.
- 6. Storage tanks used for collecting crude oil are considered flowthrough process tanks and are excluded from coverage. Repealed effective January 1, 2024

History: Effective November 25, 1991; amended effective June 1, 1994; April 1, 2014.

General Authority: NDCC 23-37-05, 28-32-02

Law Implemented: NDCC 23-37

45-10-02-02. Tank registration.

On an annual basis (fiscal year July first through June thirtieth), the administrator will mail to all prior fund registrants and any other known petroleum tank owners and operators in North Dakota a registration letter and billing notice. The letter will explain the function of the fund and the requirement that the tank owner or operator must have all tanks owned or operated registered and all fees paid prior to a petroleum release in order to be eligible for reimbursement. In the event of a petroleum release, no payment will be made to an owner or operator of a registered tank unless the owner or operator has complied with all other state and federal regulations regarding petroleum tanks. Repealed effective January 1, 2024

History: Effective November 25, 1991; amended effective June 1, 1994.

General Authority: NDCC 23-37-05, 28-32-02

Law Implemented: NDCC 23-37-17

45-10-02-03. Registration fee.

- 1. An annual registration fee is due and payable on July 1, 1991, and on July first of each successive year thereafter or from the date a new tank was installed if it was after April 1991, to be in compliance with this section. The period of registration must run from July first to June thirtieth to coincide with the fiscal year of North Dakota.
- 2. No reregistration or fee modification will be made during any registration year when an owner or operator removes a tank or replaces an underground tank with an aboveground tank within a registration year. The renewal billing will reflect the tank status change. Repealed effective January 1, 2024

History: Effective November 25, 1991; amended effective June 1, 1994; January 1, 2000; April 1, 2014

General Authority: NDCC 23-37-05, 28-32-02

Law Implemented: NDCC 23-37-17

45-10-02-04. Notification of release procedures.

Upon receiving notice of a release, the administrator shall:

- 1. Verify that the tank and all other tanks owned or operated by the operator are registered with the fund.
- 2. Record the release information in the registration file for the location.
- 3. Verify that the state department of health has received notice of the release.
- 4. If the owner or operator has not registered all of the tanks owned and operated by the operator at the location of the release, send a letter of denial to the owner or operator with a copy to the state department of health and close the file.
- 5. Obtain verification from the owner or operator that the affected tank, equipment, components, material, or dispenser is compatible and meet state requirements for the petroleum product stored and dispensed. If not compatible, send letter of denial to the owner operator with a copy to the state department of health and close file.
- 6. If all tanks are registered and the affected tank, piping, fitting, or dispenser is compatible, notify the owner of the fund's claim filing procedures and send the tank owner or operator the fund's tank release guidelines with an application for reimbursement. Repealed effective January 1, 2024

History: Effective November 25, 1991; amended effective June 1, 1994; August 1, 2000; April 1, 2014.

General Authority: NDCC 23-37-05, 28-32-02 **Law Implemented:** NDCC 23-37-10, 23-37-19

45-10-02-05. Procedures for investigation of claims.

In each release investigation, the administrator shall:

- 1. Investigate the location and cause of the release.
- 2. Interview persons with knowledge of the release.
- 3. Examine records and documentation concerning the release, including documentation of the corrective action taken and expenses incurred.
- 4. Prepare a written report determining the validity of the claim and the eligible cleanup expenses.

5. Complete other tasks as required. Repealed effective January 1, 2024

History: Effective November 25, 1991; amended effective August 1, 2000; April 1, 2014.

General Authority: NDCC 23-37-05, 28-32-02

Law Implemented: NDCC 23-37-18, 23-37-20, 23-37-23

45-10-02-06. Reimbursement.

- 1. The fund will reimburse only reasonable and necessary eligible cleanup expenses as determined by the administrator in consultation with the state department of health and only if all tanks are properly registered prior to the discovery of the release.
- 2. No payment will be made from the fund unless a completed application form has been received by the administrator.
- 3. Eligible expenses for corrective action include the following:
 - a. Labor.
 - b. Testing.
 - c. Use of machinery.
 - d. Materials and supplies.
 - e. Professional services.
 - f. Expenses incurred through direction of the state department of health.
 - g. Any other expenses the administrator and the board deem to be reasonable and necessary to remedy cleanup of the release and satisfy liability to any third party.
 - h. Consultant fees if authorized by the state department of health.
- 4. The following will not be considered eligible expenses under this regulation:
 - a. The cost of replacement, repair, and maintenance of affected tanks and associated piping.
 - b. Pumping out of any product, including water, from any tanks which need to be removed.
 - c. The cost of upgrading existing affected tanks and associated piping.
 - d. The loss of income, profits, or petroleum product.
 - e. Decreased property value.
 - f. Bodily injuries or property damages except for injuries or damages suffered by third parties.
 - g. Attorney's fees.
 - h. Costs associated with preparing, filing, and prosecuting an application for reimbursement or assistance under this regulation.
 - i. The costs of making improvements to the facility beyond those that are required for corrective action, including replacing concrete, asphalt, equipment, or buildings.

- j. Any cleanup costs resulting from negligence or misconduct on the part of the owner or operator.
- k. Marked-up costs.
- Costs in excess of those considered reasonable by the fund.
- m. Fines or penalties imposed by order of federal, state, or local government.
- n. Finance charges, interest charges, or late payment charges.
- 5. To determine what expenses are reasonable and necessary, the owner, operator, or landowner must bid the excavation and consultant work. The lowest bid that meets the requirements of the state department of health will be deemed by the fund to be the reasonable cost for that project. The bid must be submitted according to the fund's excavation and consultant worksheets. Additional work over and above the original bid will be reimbursed according to unit costs on the original bid.
- 6. The administrator may provide partial payments prior to the final determination of the amount of the loss, if it is determined that the cleanup is proceeding according to the proposed workplan of the state department of health for the site assessment. The payment may be made to the owner, operator, or landowner or that person's assigned representative if the appropriate assignment form is submitted to the administrator with appropriate documentation verifying that the work has been completed by the assignee.
- 7. All claims for payment are subject to the availability of funds in the petroleum tank release compensation fund and must be submitted no later than one year after the work has been completed to be eligible.
- 8. Prior to payment for any loss, the owner, operator, or landowner shall subrogate to the fund all rights, claims, and interest which the owner, operator, or landowner has or may have against any party, person, persons, property, corporation, or other entity liable for the subject loss, and shall authorize the fund to sue, compromise, or settle in the name of the owner, operator, or landowner or otherwise, all such claims. The subrogation agreement required by this section must be prescribed and produced by the administrator.
- 9. Reimbursement will be considered when the owner, operator, or landowner has submitted complete excavation or consultant worksheets along with legible copies of all invoices and a description of the work performed.
- 10. The owner, operator, or landowner must submit, prior to any payment, evidence that the amounts shown on the invoices for which the payment is requested were either paid in full by the owner, operator, or landowner or, if the owner, operator, or landowner has assigned the right to receive payment from the fund, that a contractor hired has expended time and materials for which payment must be made. This must include documentation that the work has been completed by the assignee.
- 11. Prior to payment, the administrator must be satisfied that the corrective action taken has met all state regulations and that the corrective action has satisfied public health, welfare, and environmental concerns. Repealed effective January 1, 2024

History: Effective November 25, 1991; amended effective June 1, 1994; August 1, 2000; December 1, 2001; April 1, 2014.

General Authority: NDCC 23-37-05, 28-32-02

Law Implemented: NDCC 23-37-18, 23-37-20, 23-37-23, 23-37-24

45-10-02-06.1. Reimbursement disputes.

If the fund administrator denies or reduces payment to a tank owner, operator, or landowner, the tank owner, operator, or landowner may request a review by the board by filing a written request and supporting documentation with both the administrator and the board within thirty days of receiving a proof of loss. The board shall issue a written decision concerning the issues in dispute within thirty days of receiving the written notice and supporting documentation. If after review by the board a dispute still exists, the claimant or the administrator may appeal the board decision to the commissioner. The decision of the commissioner may be appealed under North Dakota Century Code chapter 28-32. Repealed effective January 1, 2024

History: Effective August 1,2000; amended effective December 1, 2001.

General Authority: NDCC 23-37-05, 28-32-02;

Law Implemented: NDCC 23-37

45-10-02-07. Third-party damages.

No reimbursement may be made for damage to employees as defined by the North Dakota Workers' Compensation Act or agents of the owner or operator. Repealed effective January 1, 2024

History: Effective November 25, 1991.

General Authority: NDCC 23-37-05, 28-32-02 **Law Implemented:** NDCC 23-37-26, 23-37-27

45-10-02-08. Board.

The administrator shall advise the board of the fund's general operations and review claims either through written correspondence, telephone conference calls, or meetings. The board shall meet at least once each half of each calendar year. Repealed effective January 1, 2024

History: Effective November 25, 1991; amended effective August 1, 2000; December 1, 2001.

General Authority: NDCC 23-37-05, 28-32-02

Law Implemented: NDCC 23-37-03

45-10-02-09. Report to legislative assembly and governor.

Repealed effective April 1, 2014.

ARTICLE 45-12 NORTH DAKOTA BOILER RULES

(Chapter	
4	15-12-01	Definitions
4	15-12-02	Administration
4	15-12-03	General Requirements
4	15-12-04	Power Boilers - New Installations
4	15-12-05	Power Boilers - Existing Installations
4	15-12-06	Miniature Boilers - New Installations
4	15-12-07	Miniature Boilers - Existing Installations
4	15-12-08	Heating, Low Pressure, and Hot Water Supply Boilers - New Installations
4	15-12-09	Heating, Low Pressure, and Hot Water Supply Boilers - Existing Installations
4	15-12-10	Unfired Pressure Vessels
4	15-12-11	Hobby Boiler Operator Licensing

CHAPTER 45-12-01 DEFINITIONS

Section

45-12-01-01 **Definitions**

45-12-01-01. Definitions.

As used in this article:

- 1. "Alteration" means a change in an item described on an original manufacturer's data report which affects the pressure retaining capability of the pressure retaining item. An alteration includes nonphysical changes such as an increase in the maximum allowable internal or external working pressure, an increase in design temperature, or a reduction in minimum temperature. For boilers used in the power generation industry exceeding one hundred thousand pounds of steam per hour output, increases in steaming capacity shall not be considered an alteration if a new baseline steaming capacity is established based on either an engineering evaluation or a review of the operating history and a conditional assessment of the boiler and its components. An engineering evaluation or conditional assessment must be made by the boiler owner with review and comment by the authorized inspection agency responsible for the in-service inspection of the boiler. Engineering evaluations and conditional assessments are subject to the review and approval of the chief boiler inspector.
- 2. "Apartments" means all multiple dwellings, including condominiums.
- 3. "Approved" means approved by the commissioner.
- 4. "A.S.M.E. code" means the boiler and pressure vessel construction code of the American society of mechanical engineers of which sections I, II, IV, V, VIII (divisions 1, 2 and 3), IX, and X, 2017 edition, are hereby adopted by the commissioner and incorporated by reference as a part of this article. A copy of the American society of mechanical engineers code is on file at the office of the boiler inspection program. The American society of mechanical engineers code may be obtained from the American society of mechanical engineers headquarters at 2 park avenue, New York, New York 10016-5990 or from www.asme.org.
- 5. "Boiler" means a closed vessel in which water is heated, steam is generated, steam is superheated, or any combination thereof, under pressure or vacuum for use externally to itself by the direct application of heat from the combustion of fuels or from electricity or nuclear energy. The term boiler includes fired units for vaporizing liquids other than water when these

- units are separate from processing systems and are complete within themselves, as provided under North Dakota Century Code section 26.1-22.1-01.
- 6. "Certificate inspection" means an inspection, the report of which is used by the chief boiler inspector to decide whether a certificate may be issued under North Dakota Century Code section 26.1-22.1-10.
- 7. "Certificate of competency" means a certificate issued by a jurisdiction indicating that a person has passed an examination prescribed by the national board of boiler and pressure vessel inspectors.
- 8. "Chief inspector" means the chief boiler inspector appointed by the commissioner to serve in the capacity as stated by law.
- 9. "Commissioner" means the insurance commissioner of North Dakota.
- 10. "Condemned boiler" means a boiler that has been inspected and declared unsafe or disqualified by legal requirements by an inspector qualified to take such action who has applied a stamping or marking designating its rejection.
- 11. "Deputy inspector" means a boiler inspector or inspectors employed by the commissioner to assist the chief inspector in making inspections of boilers.
- **12.** "Existing installations" includes any boiler constructed, installed, or placed in operation before July 1, 1973.
- 13. "External inspection" means an inspection made when a boiler is in operation.
- 14. "Fusion welding" means a process of welding metals in a molten or molten and vaporous state, without the application of mechanical pressure or blows. Such welding may be accomplished by the oxyacetylene or oxyhydrogen flame or by the electric arc. Thermic welding is also classed as fusion.
- **15.** "High pressure, high temperature water boiler" means a water boiler operating at pressures exceeding one hundred sixty pounds per square inch gauge [1103.17 kilopascals] or temperatures exceeding two hundred fifty degrees Fahrenheit [121.16 degrees Celsius]. For practical purposes it must be deemed the same as a power boiler.
- **16.** "Hot water supply boiler" means a fired boiler used exclusively to supply hot water for purposes other than space heating and includes all service-type and domestic-type water heaters not otherwise exempt by North Dakota Century Code section 26.1-22.1-06.
- 17. "Inspector" means the chief boiler inspector or any deputy inspector or special inspector.
- **18.** "Internal inspection" means an inspection made when a boiler is shut down and handholes and manholes are opened for inspection of the interior.
- **19.** "Low pressure and heating boiler" means a boiler operated at pressures not exceeding fifteen pounds per square inch gauge [103 kilopascals] for steam or at pressures not exceeding one hundred sixty pounds per square inch gauge [1103.17 kilopascals] and temperatures not exceeding two hundred fifty degrees Fahrenheit [121.1 degrees Celsius] for water.
- **20.** "Major repair" means a repair upon which the strength of a boiler would depend. Major repairs are those that are not of a routine nature as described in the national board inspection code.
- 21. "Miniature boiler" means any boiler that does not exceed any of the following limits:
 - a. Sixteen-inch [40.64-centimeter] inside diameter of shell.

- b. Twenty square feet [1.86 square meter] heating surface.
- c. Five cubic feet [.142 cubic meter] gross volume, exclusive of casing and insulation.
- **d.** One hundred pounds per square inch gauge [689.48 kilopascals] maximum allowable working pressure.
- 22. "National board" means the national board of boiler and pressure vessel inspectors, 1055 crupper avenue, Columbus, Ohio 43229, whose membership is composed of the chief inspectors of government jurisdictions who are charged with the enforcement of the provisions of the American society of mechanical engineers code.
- 23. "National board inspection code" means the manual for boiler and pressure vessel inspectors supplied by the national board. The national board inspection code, 2017 edition, is hereby adopted by the commissioner and incorporated by reference as a part of this article. Copies of this code may be obtained from the national board at 1055 crupper avenue, Columbus, Ohio 43229.
- **24.** "New boiler installations" includes all boilers constructed, installed, or placed in operation after July 1, 1973.
- 25. "Nonstandard boiler" means a boiler that does not bear the state stamp, the national board stamping, the American society of mechanical engineers stamp, or the stamp of any state or political subdivision which has adopted a standard of construction equivalent to that required by this article.
- **26.** "Owner or user" means any person, firm, corporation, state, or political subdivision owning or operating any boiler which is not specifically exempt under North Dakota Century Code section 26.1-22.1-06 within North Dakota.
- 27. "Power boiler" means a closed vessel in which steam or other vapor (to be used externally to itself) is generated at a pressure of more than fifteen pounds per square inch gauge [103 kilopascals] by the direct application of heat.
- 28. "Reciprocal commission" means a commission issued by the commissioner to persons who have passed a written examination prescribed by the national board and who hold a national board commission issued by the national board, or to persons who have passed the written examination prescribed by the national board and are employed by an accredited national board owner/user inspection organization.
- **29.** "Reinstalled boiler" means a boiler removed from its original setting and recrected at the same location or erected at a new location without change of ownership.
- **30.** "Reinstalled pressure vessel" means a pressure vessel removed from its original setting and recrected at the same location or erected at a new location without change of ownership.
- 31. "Repair" is a restoration of any damaged or impaired part to an effective and safe condition.
- **32.** "Secondhand boiler" means a boiler of which both the location and ownership have been changed after primary use.
- **33.** "Secondhand pressure vessel" means a pressure vessel of which both the location and ownership have been changed after primary use.
- 34. "Service-type or domestic-type water heater" means a fired water heater of either instantaneous or storage type, used for heating or combined heating and storage of hot water to be used exclusively for domestic or sanitary purposes, with temperatures not exceeding two

hundred ten degrees Fahrenheit [98.68 degrees Celsius], and a heat input not in excess of two hundred thousand British thermal units [2.11 x 10 to the 8th power joules] per hour, and pressure not to exceed one hundred sixty pounds per square inch [1103.17 kilopascals].

- 35. "Special inspector" means an inspector regularly employed by an accredited national board authorized inspection agency or an inspector who has passed the national board examination and is employed by an accredited national board owner/user inspection organization.
- 36. "Standard boiler" means a boiler that bears the stamp of North Dakota or of another state that has adopted a standard of construction equivalent to that required by this article or a boiler that bears the national board stamping or American society of mechanical engineers stamp.
- 37. "State of North Dakota boiler construction code" is used to designate the accepted reference for construction, installation, operation, and inspection of boilers and will be referred to as this article. Anything not amended or specifically covered in this article must be considered the same as the American society of mechanical engineers code.
- 38. "Steam traction engines" means boilers on wheels which are used solely for show at state fairs and other exhibitions in which the public is invited to attend. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective April 1, 1996; January 1, 2000; October 1, 2002; January 1, 2006; January 1, 2008; April 1, 2010; July 1, 2012; January 1, 2014; April 1, 2017.

CHAPTER 45-12-02 ADMINISTRATION

Section	
45-12-02-01	Inspection Reports to Be Submitted
45-12-02-02	Insurance Companies and Other Authorized Inspection Agencies to Notify the Chief Inspector of New, Canceled, or Suspended Risks
45-12-02-03	Insurance Companies and Other Authorized Inspection Agencies to Notify the Chief Inspector of Defective Boilers and Boiler Accidents
45-12-02-04	Owner/User Inspection Organizations Making Own Inspections
45-12-02-05	Defective Conditions Disclosed at Time of External Inspections
45-12-02-06	Owner or User to Notify the Chief Inspector in Case of Accident
45-12-02-07	Operating Without a Certificate of Inspection
45-12-02-08	Validity of Inspection Certificate for Boilers
45-12-02-09	Restamping Boilers
45-12-02-10	Condemned Boilers and Condemned Pressure Vessels
45-12-02-11	Owner and Installer to Notify Chief Boiler Inspector of Boilers to Be Installed in North Dakota or Brought Into North Dakota for Temporary Use
45-12-02-12	Owner to Notify the Chief Boiler Inspector of Businesses Closed or Reopened
45-12-02-13	Removal of Used Boilers From the State
45-12-02-14	Nonstandard Boilers
45-12-02-15	Installing Used or Secondhand Boilers
45-12-02-16	Reinstalled Boilers
45-12-02-17	Reporting Repairs to Be Made
45-12-02-18	Reports of Welded Repair or Alterations
45-12-02-19	Stamping of Boilers
45-12-02-20	Welders' Requirements
45-12-02-21	Alterations to Boilers
45-12-02-22	Major Repairs to Boilers

45-12-02-01. Inspection reports to be submitted.

- 1. Power boilers. Each authorized inspection agency or owner/user inspection organization, to which a special inspector commission has been issued, shall submit to the chief boiler inspector complete data of each high pressure boiler insured or inspected by it or covered by a written inspection agreement. A complete report of each boiler inspection must be filed electronically with the chief boiler inspector on form SFN 10706 within fifteen days of inspection.
- 2. Low pressure, hot water heating, and hot water supply boilers. Within one year from effective date of this article, each authorized inspection agency or owner/user inspection organization shall submit to the chief boiler inspector complete data of each boiler insured or inspected by it or covered by a written inspection agreement. A complete report of each boiler inspection must be filed electronically with the chief boiler inspector on form SFN 10706 within fifteen days of inspection. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2006; April 1, 2010; January 1, 2016.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-02-02. Insurance companies and other authorized inspection agencies to notify the chief inspector of new, canceled, or suspended risks.

Each insurance company or other authorized inspection agency shall notify the chief inspector within thirty days of each boiler insured, covered by a written inspection agreement, canceled, not renewed, or suspended because of unsafe conditions. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2006.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-02-03. Insurance companies and other authorized inspection agencies to notify the chief inspector of defective boilers and boiler accidents.

If a special inspector, upon the first inspection of a boiler, finds that the boiler or any of the appurtenances are in such condition that the inspector's company refuses insurance or the boiler does not comply with the provisions of this article, the company shall submit a report of the defects to the chief inspector. When an accident occurs to an insured boiler or to a boiler covered by a written inspection agreement which requires major repairs as defined in subsection 20 of section 45-12-01-01, or which results in the boiler being removed from service, that accident must be reported to the chief boiler inspector within thirty days of the insuring or inspecting company first becoming aware of the accident. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2006.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-02-04. Owner/user inspection organizations making own inspections.

The chief inspector will not be required to inspect boilers in any establishment owned and operated by an owner/user inspection organization provided an annual boiler inspection program is established and maintained by such organization and all boilers and appurtenances are constructed, installed, operated, and repaired in accordance with the provisions of this article. When boilers are inspected by an employee of an owner/user inspection organization, such inspector must hold a certificate of competency or a commission issued by North Dakota or a state that has adopted the American Society of Mechanical Engineers Code. A complete report of each boiler inspection must be filed electronically with the chief inspector on form SFN 10706 within fifteen days of inspection. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2006; January 1, 2016.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-02-05. Defective conditions disclosed at time of external inspections.

If upon an external inspection there is evidence of a leak or crack, enough of the covering of the boiler must be removed to satisfy the inspector, in order that the inspector may determine the safety of the boiler. If the covering cannot be removed at that time, the inspector may order the operation of the boiler stopped until the covering can be removed and proper examination can be made. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-02-06. Owner or user to notify the chief inspector in case of accident.

When an accident occurs which requires major repairs as defined in subsection 20 of section 45-12-01-01, the owner or user shall immediately notify the chief inspector and submit a detailed report of the accident. In case of an explosion, notice must be given immediately by telephone, telegraph, or messenger and the parts of the boiler may not be removed or disturbed before an inspection has been made by an inspector, unless for the purpose of saving human life or property. Repealed effective January 1, 2024

History: Effective June 1, 1994.

45-12-02-07. Operating without a certificate of inspection.

The owner or user who causes a boiler to be operated after inspections without possessing a valid certificate of inspection is subject to the penalty under North Dakota Century Code section 26.1-22.1-11. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2000.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-02-08. Validity of inspection certificate for boilers.

A certificate of inspection, issued in accordance with this article, is valid until expiration unless some defect or condition affecting the safety of the boiler is disclosed and if all inspection fees have been paid. A certificate of inspection is valid for the following time periods:

- 1. Thirty-six months for power boilers over one hundred thousand pounds [45359.24 kilograms] of steam per hour as allowed by North Dakota Century Code section 26.1-22.1-07.
- 2. Twelve months for steam traction engines.
- 3. Twelve months for all other power boilers.
- 4. Thirty-six months for hot water heating and hot water supply boilers.
- 5. Twenty-four months for low pressure steam boilers.

A certificate issued for a boiler inspected by a special inspector is valid only if the boiler for which it was issued continues to be insured by a duly authorized insurance company, covered by a written inspection agreement with an authorized inspection agency, or inspected by an accredited owner/user inspection organization. A two-month grace period must be extended for any certificate. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2000; January 1, 2006; January 1,

2016.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-02-09. Restamping boilers.

When the stamping on a boiler becomes indistinct, the inspector shall instruct the owner or user to have it restamped. Request for permission to restamp the boiler must be made to the chief inspector and proof of the original stamping must accompany the request before authorization by the chief inspector. Restamping authorized by the chief inspector may be done only by an inspector, and must be identical with the original stamping, except that it is not required to restamp the American Society of Mechanical Engineers Code symbol. Notice of completion of such restamping must be filed with the chief inspector by the inspector who stamped the boiler or pressure vessel, together with a facsimile of the stamping. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-02-10. Condemned boilers and condemned pressure vessels.

Any boiler having been inspected and declared unsafe by the chief inspector or the inspector's deputy must be stamped by the inspector with the letter X and the letters ND as shown on the following facsimile which will be designated a condemned boiler:)0(ND)0(. Repealed effective January 1, 2024.

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-02-11. Owner and installer to notify chief boiler inspector of boilers to be installed in North Dakota or brought into North Dakota for temporary use.

- 1. The owner shall notify the chief boiler inspector before any new or secondhand boiler may be operated in North Dakota, giving its location and operating pressure.
- 2. The installer shall notify the chief boiler inspector before any new or secondhand boiler may be installed in North Dakota, giving its location and operating pressure.
- 3. The owner shall notify the chief boiler inspector of boilers removed from location, junked, or sold.
- 4. The owner shall notify the chief boiler inspector within fifteen days of removing a boiler from its location as to whether it has been junked or sold. If it has been sold, the name and address of the purchaser must be given.
- 5. When a boiler is brought into the state on a temporary basis and is to be removed from the state, a notice must be given as to the date it will be removed from North Dakota. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-02-12. Owner to notify the chief boiler inspector of businesses closed or reopened.

- 1. It is the responsibility of the owner of a building complex or owner of a boiler to notify the chief boiler inspector of plans to discontinue use of a boiler due to business being permanently closed.
- 2. If a business is destroyed by fire, flood, or windstorm, the owner shall notify the chief boiler inspector as to plans developed for the disposition of the boiler. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-02-13. Removal of used boilers from the state.

When a nonportable standard boiler located in this state is moved to another state for use or repair, the owner shall apply to the chief boiler inspector before the boiler may be reinstalled in North Dakota. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-02-14. Nonstandard boilers.

A nonstandard boiler used in this state, if moved outside of the state, cannot be reinstalled in this state without permission of the chief boiler inspector. Repealed effective January 1, 2024

History: Effective June 1, 1994.

45-12-02-15. Installing used or secondhand boilers.

Before a used or secondhand boiler may be installed in this state, an inspection must be made by an inspector. (Note: It is recommended that before a used or secondhand boiler is shipped for installation or operation in this state, that it be inspected by a North Dakota inspector, or by a national board commissioned inspector, and data submitted by the inspector filed by the buyer or owner or user with the chief boiler inspector for the chief inspector's approval. Otherwise hardships may be encountered should the boiler be condemned after installation.) Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-02-16. Reinstalled boilers.

When a stationary boiler is moved and reinstalled, the fittings and appliances must comply with all requirements for new installations. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-02-17. Reporting repairs to be made.

- 1. The owner or person in charge of a boiler repair shop making major repairs to a boiler shall notify the chief boiler inspector of each major repair or alteration to be made to a boiler, and the anticipated repair must be approved before work is started; or
- If the boiler is insured, covered by a written inspection agreement with an authorized inspection agency, or owned by an owner/user inspection organization, the special inspector may authorize the repair. After such repairs are made, they are subject to the approval of an inspector. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2006.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-02-18. Reports of welded repair or alterations.

All alterations and major repairs made to boilers in North Dakota must be reported on the appropriate national board form. The completed form must be sent to the chief boiler inspector by the repair concern effecting the repair or alteration within thirty days of the completion of the repair or alteration.

Subject to the administrative procedures of the boiler inspection program and the approval of the inspector, repairs of a routine nature may be given prior approval and the requirement for the repair stamping may be waived. The National Board Inspection Code must be used as a guideline in determining repairs of a routine nature. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective October 1, 2002; January 1, 2014.

45-12-02-19. Stamping of boilers.

- 1. Every boiler built for use in North Dakota must conform in every detail to the boiler laws and rules of North Dakota. When correctly constructed in accordance with these laws and rules it must be stamped with a state stamp of North Dakota and assigned a state number.
- 2. A boiler may not be operated in North Dakota unless it is stamped with the American society of mechanical engineers stamp and registered with the national board or can qualify for a North Dakota stamp. A request for a North Dakota stamp must be accompanied by a manufacturer's data report with supporting evidence that the boiler meets all requirements of the laws of North Dakota.
- 3. Upon completion of the installation, all boilers must be inspected by an inspector. Initial certificate inspections may only be made by the chief inspector or deputy inspectors. At the time of this inspection, each boiler must be stamped with a serial number of North Dakota preceded by the letters N.D. The letters and figures must not be less than five-sixteenths inch [7.94 millimeters] in height. If construction will not permit stamping, a numbered metal tag must be attached in a conspicuous place. The stamping may not be concealed by lagging or paint and must be exposed at all times. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-02-20. Welders' requirements.

- 1. Any person welding on new or existing boilers shall register with the chief boiler inspector sufficient data to show a satisfactory performance qualification test for American society of mechanical engineers position "6G" or equivalent. This data must be documented on a current American society of mechanical engineers section IX "QW-484" form. Tests of welded specimens must be made by a certified testing laboratory.
- 2. In lieu of the above requirements, a firm in possession of a valid American society of mechanical engineers certificate of authorization for new boiler construction or a valid national board "R" certificate of authorization for repairing or altering existing boilers may allow welder's qualifications to be audited by the chief boiler inspector at the chief boiler inspector's discretion. The welders must be qualified according to the requirements of American Society of Mechanical Engineers Boiler and Pressure Vessel Code, section IX. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective April 1, 1996.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-02-21. Alterations of boilers.

Alterations, as defined in this article, must be made by a firm in possession of a valid national board "R" certificate of authorization, with alterations included within its scope of activity. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-02-22. Major repairs to boilers.

Major repairs, as defined in this article, must be made by:

- 1. A firm in possession of a valid national board "R" certificate of authorization for the type of vessel to be repaired; or
- 2. A firm authorized by the commissioner to do repairs to boilers. Such authorization may only be issued upon a successful review of that firm's repair capabilities by the chief inspector. Such a review must be based on the National Board Inspection Code and must be made on a frequency determined by the chief inspector. Such authorization may be revoked or not renewed by the chief inspector for cause.

The requirements of this section are effective December 1, 1994. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2006.

CHAPTER 45-12-03 GENERAL REQUIREMENTS

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45-12-03-01. Inspection of boilers.

The owner or user shall prepare a boiler subject to regular inspections for such inspections or hydrostatic tests when notified by the inspector. The owner or user shall prepare each boiler for internal inspection and shall prepare for and apply the hydrostatic test whenever necessary, on the date specified by the inspector, which may not be less than seven days after the date of notification. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-01.1. Boiler inspection fees.

The following will be charged for boiler inspections:

1. High pressure boilers.

a. Internal inspections.	Fee
- 50 square feet [4.65 square meters] or less of heating	\$80.00

Over 50 square feet [4.65 square meters] and not over 500 square feet [46.45 square meters]	\$100.00
Over 500 square feet [46.45 square meters] and not over 4,000 square feet [371.61 square meters]	\$120.00
Over 4,000 square feet [371.61 square meters] of heating surface	\$150.00
b. External inspections.	
50 square feet [4.65 square meters] of heating surface or less; 100 KW or less	\$60.00
Over 50 square feet [4.65 square meters] of heating surface; over 100 KW	\$80.00
 Portable oilfield boilers. Internal and external inspections of portable oilfield boilers must be charged inspection fees of seventy-five dollars per hour, including travel time, plus expenses for meals, mileage, and lodging at current state rates. 	
2. Low pressure boilers.	
a. Internal inspections.	
- Without manway	\$75.00
- With manway	\$85.00
b. External inspections.	
Hot water heat and low pressure steam	\$50.00
- Hot water	\$35.00
3. Steam traction engines.	
Internal	\$60.00
	

Internal	\$60.00
External	\$55.00
Hydrostatic test	\$70.00
Ultrasonic survey, per hour	\$60.00

4. Certificate fee, per certificate as required by North \$20.00, per year of Dakota Century Code section 26.1-22.1-10certificate issued Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2000; October 1, 2002; July 1, 2012.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-02. Preparation for internal inspection.

The owner or user shall prepare a boiler for internal inspection in the following manner:

1. Water must be drawn off and the boiler thoroughly washed.

- 2. All manholes and handhole plates, washout plugs, and plugs in water column connections must be removed, the furnace and combustion chambers thoroughly cooled and cleaned, at the discretion of the inspector.
- All grates of internally fired boilers must be removed, at the discretion of the inspector.
- 4. At each annual inspection, brickwork must be removed as required by the inspector in order to determine the condition of the boiler, headers, furnace, supports, or other parts.
- 5. The steam gauge must be removed for testing, at the discretion of the inspector.
- Any leakage of steam or hot water into the boiler must be cut off by disconnecting the pipe or valve at the most convenient point.
- 7. Any low-water fuel cutoff float chamber must be opened and cleaned.
- 8. Safety concerns such as asbestos and confined space entry must be addressed by the owner to provide for the safety of the inspector. Applicable state or federal regulations must be used to decide if safety measures must be taken. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-03. Boiler improperly prepared for inspection.

If a boiler has not been properly prepared for an internal inspection or the owner or user fails to comply with the requirements for hydrostatic test as set forth in this article, the inspector may decline to make the inspection or test and withhold the certificate of inspection until the owner or user complies with the requirements. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-04. Removal of covering to permit inspection.

If the boiler is jacketed so that the longitudinal seams of shells, drums, or domes cannot be seen, enough of the jacketing, setting wall, or other form of casing or housing must be removed, at the discretion of the inspector, so that the size of the rivets, pitch of the rivets, and other data necessary to determine the safety of the boiler may be obtained, provided such information cannot be determined by other means. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-05. Lap seam crack.

The shell or drum of a boiler in which a lap seam crack is discovered along a longitudinal riveted joint must be immediately discontinued from use. If the boiler is not more than fifteen years of age, a complete new course of the original thickness may be installed at the discretion of the chief inspector. Patching is prohibited. "Lap seam crack" means the typical crack frequently found in lap seams, extending parallel to the longitudinal joint and located either between or adjacent to rivet holes. Repealed effective January 1, 2024

History: Effective June 1, 1994.

45-12-03-06. Hydrostatic pressure tests.

A hydrostatic pressure test, when applied to boilers of riveted or welded construction, except locomotive boilers, may not exceed one and one-half times the maximum allowable working pressure. Hydrostatic pressure applied to locomotive boilers may not exceed one and one-quarter times the maximum allowable working pressure. During the hydrostatic pressure test, the safety valve or valves must be removed or each valve disk must be held down by means of a testing clamp and not by applying the additional load to the spring with the compression screw. The minimum temperature of the water used to apply a hydrostatic test must not be less than sixty degrees Fahrenheit [15.6 degrees Celsius], nor shall it exceed one hundred twenty degrees Fahrenheit [49.3 degrees Celsius]. (Note: For all cases involving the question of tightness, the pressure may be equal to the release pressure of the safety valve or valves having the lowest release setting.) Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2000.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-07. Automatic low-water fuel cutoff or water-feeding device.

- 1. Each automatically fired steam or vapor system boiler must be equipped with an automatic lowwater cutoff located to automatically cut off the fuel supply when the surface of the water falls to the lowest safe waterline. For other than electric and miniature boilers, each automatically fired steam or vapor system boiler must be equipped with at least two low-water fuel cutoffs, one of which must be readily testable. One low-water fuel cutoff must be set to function ahead of the other. Functioning of the lower of the controls shall cause safety shutdown and lockout. The manual reset may be incorporated into the lower cutoff control. Where a reset device is separate from the low-water fuel cutoff, a means shall be provided to indicate actuation of the low-water fuel cutoff. The manual reset device may be of the instantaneous type or may include a time delay of not more than three minutes after the fuel has been cut off. A system may incorporate a time delay component with the low-water fuel cutoff device to prevent short cycling. A time delay must not exceed the manufacturer's recommended timing, or ninety seconds, whichever is less. A high pressure boiler regularly attended by a full-time operator is not considered as automatically fired, and is not required to be equipped with low-water fuel cutoffs. For other than electric boilers, the primary low-water fuel cutoff for low pressure steam boilers must be a float type that can be readily tested.
- 2. If a water-feeding device is installed, it must be constructed so that the water inlet valve cannot feed water into the boiler through the float chamber and located to supply requisite feedwater. The lowest safe waterline should not be lower than the lowest visible part of the water glass.
- 3. Such fuel or feedwater control device may be attached directly to a boiler or to the tapped openings provided for attaching a water glass directly to a boiler, provided that for low pressure boilers such connections from the boiler are nonferrous tees or Ys not less than one-half-inch [12.7-millimeter] pipe size between the boiler and the water glass, so that the water glass is attached directly and as close as possible to the boiler; the straight tapping of the Y or tee to take the water glass fittings, and the side outlet of the Y or tee to take the fuel cutoff or water-feeding device. The ends of all nipples must be reamed to full-size diameter.
- 4. Designs embodying a float and float bowl must have a vertical straight drainpipe at the lowest point in the water equalizing pipe connections by which the bowl and the equalizing pipe can be flushed and the device tested. This drainpipe and connections must be not less than national pipe standard (NPS) 1. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective April 1, 1996; January 1, 2000; January 1, 2006. General Authority: NDCC 26.1-22.1-14

Law Implemented: NDCC 26.1-22.1-14

45-12-03-08. Safety appliances.

- 1. A person may not remove, tamper with, or render inoperative any safety appliances prescribed by these rules except for the purpose of making repairs. The resetting of safety appliances may not exceed the accepted working pressure of the unit.
- 2. Repairs or adjustments made to safety or safety relief valves must be done by the manufacturer of the valve or an approved testing facility equipped to do such repairs or adjustments. The resetting of safety valves or safety relief valves may not exceed the accepted working pressure for the unit.
- 3. An approved testing facility must be one of the following:
 - a. A facility holding a valid certificate of authorization and "VR" symbol stamp issued by the national board of boiler and pressure vessel inspectors.
 - b. An owner or user program for doing adjustments to set pressure or blowdown, or both, to boiler pressure relief valves owned by them, provided the adjusted settings or capacities, or both, and the date of the adjustments are recorded on a metal tag secured to the seal wire. All external adjustments must be sealed showing the identification of the organization making the adjustments. The chief boiler inspector shall review the training, qualifications, and procedures used to implement this program. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2006.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-09. Blowoff tanks.

- 1. Blowoff piping from a boiler may not discharge directly into a sewer. A blowoff tank, constructed to the provisions of section VIII of the American Society of Mechanical Engineers Code, must be used where conditions do not provide an adequate and safe open discharge.
- 2. Blowoff tanks hereinafter installed, if of metal, must be designed for a minimum working pressure of fifty pounds per square inch [344.74 kilopascals].
- 3. The outlet from the blowoff tank must be twice the area of the inlet pipe, and made to extend internally within eight inches [203.2 millimeters] from the bottom of the tank.
- 4. Vent pipe at least four times the area of the inlet pipe must lead to the outer atmosphere.
- 5. Vents must be as direct as possible to the outer air and discharge at a safe location. There may be no valve or other possible obstructions such as water pockets between the tank and the discharge end of the vent pipe.
- 6. All pipe connections between the tank and the boiler must be as direct as possible and must conform to the American Society of Mechanical Engineers Code.
- 7. For convenience in cleaning the tank, a manhole or an access opening must be provided.
- 8. If a blowoff tank is not vented as specified above, it must be constructed for a pressure equal to that allowed on the boiler to which it is attached or must be equipped with a safety valve or valves of sufficient capacity to prevent the pressure from exceeding the safe working pressure of the tank.

9. Boiler blowoff systems constructed in accordance with the national board rules and recommendations for the design and construction of boiler blowoff systems must be considered as complying with this section. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-10. Blowoff piping.

- 1. The construction of the setting must be done in such a manner that it does not restrict the movement of the blowoff piping.
- 2. All blowoff piping, when exposed to furnace heat, must be protected by firebrick or other heat-resisting material so constructed that the piping may be readily inspected.
- 3. Each boiler must have a blowoff pipe, fitted with a valve cock, in direct connection with the lowest water space. Cocks must be of the gland or guard type and suitable for the pressure allowed. The use of globe-type valves is not permitted unless complying with the American Society of Mechanical Engineers Code. When the maximum allowable working pressure exceeds one hundred pounds per square inch gauge [689.48 kilopascals] each blowoff pipe must be provided with two valves or a valve and a cock, such valves and cocks to be of the extra heavy type.
- 4. When the maximum allowable working pressure exceeds one hundred pounds per square inch gauge [689.48 kilopascals], blowoff piping must be extra heavy from the boiler to the valve or valves and must be run full size without use of reducers or bushings. The piping must be at least extra heavy duty wrought iron or steel and may not be galvanized.
- 5. All fittings between the boiler and blowoff valve must be steel or extra heavy fittings of malleable iron. In case of renewal of blowoff pipe or fittings, they must be installed in accordance with the rules and regulations for new installations. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-11. Location of blowoffs and vents.

The discharge of safety valves, blowoff pipes, and other outlets must be located so as to prevent injury to personnel. For high pressure boilers, vents from blowoff tanks, condensate tanks, and the discharge piping from safety valves must be as short and straight as possible and so arranged as to avoid undue stresses on the safety valve or valves. Safety valve discharge piping must be so designed and constructed as to prevent excessive back pressure, while not affecting safety valve capacity and performance. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-12. Underground installations.

Where necessary to install a blowoff tank underground, it must be enclosed in a concrete or brick pit with a removable cover so that inspection of the entire shell and heads of the tank can be made. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14

Law Implemented: NDCC 26.1-22.1-14

45-12-03-13. Supports.

Each boiler must be supported by masonry or structural supports of sufficient strength and rigidity to safely support the boiler and its contents. There must be a minimum of vibration in the boiler and its connecting piping. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-14. Pressure reducing valves.

- 1. Where pressure reducing valves are used, one or more relief or safety valves must be provided on the low pressure side of the reducing valve in case the piping or equipment on the low pressure side does not meet the requirements for the full initial pressure. The relief of safety valves must be located adjoining or as close as possible to the reducing valve. Proper protection must be provided to prevent injury or damage caused by the escaping steam from the discharge. Capacity of the relief valves must be such that the pressure rating of the lower pressure piping or equipment shall not be exceeded in case the reducing valve sticks open.
- 2. The use of hand-controlled bypasses around reducing valves is permissible. The bypass if used around a reducing valve may not be greater in capacity than the reducing valve unless the piping or equipment is adequately protected by relief valves or meets the requirements of the high pressure system.
- 3. A pressure gauge must be installed on the low pressure side of a reducing valve.
- 4. All low pressure headers and their outlets must be protected by a safety valve or valves whose combined capacity is equivalent to the total amount of steam that can pass from the high pressure system to the lower pressure system. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-15. Ladders and runways.

To ensure safe access to batteries of boilers, a steel platform or runway at least eighteen inches [457.2 millimeters] in width must be provided, complete with standard railing and toeboards on either side, across the tops of adjacent boilers. Wherever arrangement and location permit, all runways must provide for two means of egress remotely located with respect to the other and connected to a permanent stairway or fixed ladder leading to the floor level. The inspector shall notify the chief inspector of the owners or users who must provide for these requirements and the chief inspector shall give written notice to the owner or user that the installation be made. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-16. Boiler logs.

A log must be kept as to all repairs made, unusual incidents, accidents, water tests, amounts, types, and dates of water treatment. Logs for hobby boilers must also include operating hours, operators, fusible plug installation dates, safety valve tests, and apprentice operator training data. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective July 1, 2012.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-17. Major repairs and alterations.

If a major repair or alteration is necessary, an inspector must be called for consultation and advice as to the best method of making such repair or alteration. After such repair or alteration is made, it is subject to the approval of the inspector. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective October 1, 2002.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-18. Same material to be used.

- 1. No repair to any boiler or steampipe nor any of the connections thereto may be approved which is made in whole or in part of unsuitable material or is unsafe from any cause. Nothing herein may be construed to prevent the use of any boiler constructed of riveted iron or steel plates when the inspector has satisfactory evidence that such boiler or steam generator is equal in strength to and as safe from explosion as boilers constructed of the best quality of materials.
- Quality of the material used in boiler construction and repair demands critical attention because in performing its function a steam boiler is continually subjected to disruptive stresses. These are due to high internal pressures and to changes in temperature. Disastrous consequences will inevitably follow if the material fails under these stresses.
- 3. The quality of the material used in the different parts of a boiler should be selected with special reference to the stresses and disruptive influences which each part encounters in service.
- 4. Galvanized pipe may not be used on any boiler or boiler system subject to this article, as this may cause deterioration of the boiler.
- 5. Sweated or soldered copper joints may not be used in steam piping and connections.
- Repair material having a lesser tensile strength than that used in the original construction may not be used. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-19. Repairs to boilers.

- 1. Rejection of repair. Any riveted or welded repair made to a boiler in North Dakota which does not meet this article's requirements will be cause for rejection of the repair by an inspector.
- 2. Rejection of welds. Any weld found to contain heavy slag inclusions or to be porous or found to be cracked will be reason for rejection of the weld and either part or all of the weld must be removed by grinding or chipping and the weld must be replaced. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective October 1, 2002.

45-12-03-20. Removal of safety appliances.

- 1. A person may not attempt to remove or do any work upon a safety appliance, prescribed by these rules, while a boiler is in operation. Should any of these safety appliances be repaired during an outage of a boiler, they must be reinstalled and in proper working order before the object is again placed in service. This provision does not apply to the removal and replacement of a gauge glass.
- 2. A person may not in any manner load the safety valve or valves to maintain a working pressure in excess of that stated on the certificate of inspection. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-21. Repairs and renewals of boiler fittings and appliances.

Whenever repairs are made to fittings or appliances or it becomes necessary to replace them, the work must comply with all requirements for new installations. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-22. Return pump.

Each condensate return pump where practicable must be provided with an automatic water level control set to maintain the water level within the limits of two gauge cocks. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-23. Shop inspection - Manufacturing - Repairs - Alterations.

Any boiler or pressure vessel being constructed, repaired, or altered in North Dakota must be inspected by an inspector holding a North Dakota reciprocal commission and a national board commission. The boiler inspection program may function as an authorized inspection agency. The boiler inspection program may cooperate with the national board and American society of mechanical engineers in making shop reviews and audits. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2014.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-24. Commissioner to arrange for examinations.

The commissioner shall cause examinations to be conducted at such times as is necessary for the qualification of inspectors. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-25. Conditions not covered by this article.

In any conditions not covered by this article, the American Society of Mechanical Engineers Code for new installations applies.

2. If any section, subsection, sentence, clause, phrase, provision, or exemption of this article is declared unconstitutional or invalid for any reason, such invalidity does not affect the remaining portion of this article. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-26. Inspection of boilers.

- 1. Each boiler used or proposed to be used within this state, except boilers exempt in North Dakota Century Code section 26.1-22.1-06, must be thoroughly inspected as to their construction, installation, condition, and operation as follows:
 - a. Power boilers must be inspected annually both internally while not under pressure and externally while under pressure. However, any power boiler or steam generator, the operation of which is an integral part of or a necessary adjunct to other continuous processing operations, must be inspected internally at such intervals as are permitted by the shutting down of the processing operation. The chief boiler inspector may provide for extension of time between internal inspections, but an external inspection must be made, and report submitted, for purposes of issuing a certificate. In all other instances the certificate inspection must be an internal inspection when construction permits.
 - b. Power boilers of one hundred thousand pounds [45359.24 kilograms] per hour or more capacity, which comply with subsection 2 of North Dakota Century Code section 26.1-22.1-07, must be inspected at least once every thirty-six months internally while not under pressure and at least once every twelve months externally while under pressure.
 - c. Steam traction engines must be inspected at least once every twelve months. Inspections must alternate between internal inspections, external inspections, and hydrostatic tests.
 - d. Low pressure steam boilers must be inspected annually. Low pressure steam boilers of steel construction must be inspected alternately internally and externally. The issuance of a certificate must normally be based on the internal inspection.
 - e. Hot water heating and hot water supply boilers must be inspected triennially unless they are located in a nursing home, school, hospital, nursery school, or kindergarten, in which case they must be inspected annually. Internal inspections will be required when deemed necessary by the inspector.
 - f. A grace period of two months beyond the period specified in the above subdivisions may elapse between inspections.
- 2. Certificate inspections must be made during the period of thirty days prior to and thirty days after the expiration date of the certificate. Noncertificate inspections, when required by the provisions of this section, must be made between certificate inspections. The chief boiler inspector encourages reports to be made at any time adverse conditions are found, or when difficulty is encountered getting cooperation from the owner or user.
- 3. The inspections required under this section must be made by the chief boiler inspector, or by a deputy inspector, or by a special inspector provided for in this article.
- 4. If at any time a hydrostatic test is deemed necessary by the inspector, it must be made by the owner or user in the presence of, and under the supervision of the inspector, and must be approved by the inspector.

5. Cast iron boilers must be considered as boilers that do not lend themselves to internal inspections. Internal inspections of electric boilers must be made when deemed necessary by the inspector. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective April 1, 1996; January 1, 2000; January 1, 2006;

April 1, 2010; January 1, 2016.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-27. Steam traction engines.

All steam traction engines must conform to at least one of the following: chapter 45-12-04, 45-12-05, 45-12-06, or 45-12-07. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-03-28. Safety valves.

- 1. Boiler safety valves and safety relief valves must be placed on, or as close as physically possible, to the boiler proper.
- 2. Safety valves or safety relief valves may not be placed on the feedline except when installed to provide control for feedwater pressure or to protect a feed pump against overpressure. Repealed effective January 1, 2024

History: Effective June 1, 1994.

CHAPTER 45-12-04 POWER BOILERS - NEW INSTALLATIONS

Section 45-12-04-01 Requirements 45-12-04-02 Appurtenances - Piping and Tests 45-12-04-03 Exits From Boiler Rooms 45-12-04-04 Boiler Clearances 45-12-04-05 Safety Valve Capacity

45-12-04-01. Requirements.

- 1. All new boilers, except those exempt by law, to be installed in North Dakota must be reported to the chief boiler inspector by the owner or user and by the installer.
- 2. After July 1, 1973, power boilers that are not exempt by law may not be installed in this state unless they have been constructed, inspected, and stamped in conformity with the applicable edition of the American Society of Mechanical Engineers Code for power boilers and are approved, registered, and inspected in accordance with the requirements of this article.
- 3. A boiler having the standard stamping of another state or province of Canada that has adopted a standard of construction equivalent to the standard of North Dakota may be accepted by the chief boiler inspector if the person desiring to install the boiler makes application for the installation and files with the application the manufacturer's data report covering the construction of the boiler. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective July 1, 2012.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-04-02. Appurtenances - Piping and tests.

- The inspector shall inspect all boilers and connected appurtenances for their safe operation and all pressure piping connecting them to the appurtenances and all piping up to and including the first stop valve, or the second stop valve when two are required.
- 2. Any pressure piping to the boiler, such as water column, blowoff valve, feedwater regulator, superheater, economizer, stop valves, etc., which are shipped connected to the boiler as a unit, must be hydrostatically tested with the boiler and witnessed by an inspector.
- All economizers, whether separately fired or not, and when located within the scope of boiler external piping, must be constructed to section I of the American Society of Mechanical Engineers Code. All superheaters must be constructed to section I of the American Society of Mechanical Engineers Code.
- 4. The chief boiler inspector may waive American society of mechanical engineers section I boiler external piping requirements for new and secondhand boilers of less than forty horsepower output if the boiler external piping is mechanically installed (i.e., no welding), the piping does not exceed two-inch [5.08 centimeters] national pipe standard in size, the piping is schedule eighty minimum, and the boiler maximum allowable working pressure does not exceed one hundred fifty pounds per square inch [1034.22 kilopascals] gauge. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective October 1, 2002; July 1, 2012.

45-12-04-03. Exits from boiler rooms.

- 1. To lessen the hazard of being trapped within the boiler room, ash pit aisles, or other locations, there must be at least two means of exit as may be considered necessary by the inspector. Each elevation must be provided with at least two means of egress, each to be remotely located from the other.
- 2. All inspectors shall notify the chief inspector of the owners or users who must provide for these requirements. The chief inspector shall then give written notice to the owner or user that the necessary work must be completed within six months from the date of notification. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-04-04. Boiler clearances.

- 1. All new boiler installations must be designed to allow for normal operation, cleaning, and inspections, and must have at least three feet [.91 meters] of clearance on each side of the boiler with no obstructions and boilers operated in battery may not be installed closer than four feet [1.22 meters] from each other.
- 2. All boilers must be installed to allow for removal of tubes without removing walls or other structures. The front or rear of any boiler may not be located any nearer than three feet [.91 meters] from any wall or structure.
- 3. On all boilers equipped with a manhole, at least seven feet [2.1336 meters] of clearance must be maintained from the top of the boiler manhole to the ceiling of the boiler room.
- 4. Boilers without manholes must have a minimum of at least three feet [.91 meters] from the top of the boiler to the lowest point of the boiler room ceiling. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-04-05. Safety valve capacity.

The minimum required relieving capacity of safety valves or safety relief valves for all types of boilers may not be less than the maximum designed steaming capacity as determined by the manufacturer and must be based on the capacity of all the fuel burning equipment as limited by other boiler functions. Repealed effective January 1, 2024

History: Effective April 1, 1996.

CHAPTER 45-12-05 POWER BOILERS - EXISTING INSTALLATIONS

Section	
45-12-05-01	Maximum Allowable Working Pressure for Standard Boilers
45-12-05-02	Maximum Allowable Working Pressure for Nonstandard Boilers
45-12-05-03	Age Limit of Existing Boilers
45-12-05-04	Welded Boilers
45-12-05-05	Pressure on Old Boilers
45-12-05-06	Cast Iron Headers and Mud Drums
45-12-05-07	Pressure on Cast Iron Boilers
45-12-05-08	Safety Valves and Safety Relief Valves
45-12-05-09	Superheater Safety Valve Requirements
45-12-05-10	Capacity
45-12-05-11	Mounting
45-12-05-12	Operation
45-12-05-13	Steam Stop Valves
45-12-05-14	Feedwater Valves and Piping
45-12-05-15	Blowoff Valves and Piping
45-12-05-16	Factors of Safety
45-12-05-17	Inspection of Inaccessible Parts
45-12-05-18	Repairs and Renewals of Fittings and Appliances
45-12-05-19	Fusible Plugs
45-12-05-20	Water Columns, Gauge Glasses, and Gauge Cocks
45-12-05-21	Steam Pressure Gauge
45-12-05-22	Pressure on Nonstandard Steam Traction Engines
45-12-05-23	Duties of Owners
45-12-05-24	Inspection and Repair of Standard and Nonstandard Steam Traction Engines.

45-12-05-01. Maximum allowable working pressure for standard boilers.

The maximum allowable working pressure for standard boilers must be determined in accordance with the applicable provisions of the edition of the American Society of Mechanical Engineers Code under which they were constructed and stamped. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-05-02. Maximum allowable working pressure for nonstandard boilers.

1. The maximum allowable working pressure on the shell of a nonstandard boiler must be determined by the strength of the weakest section of the structure, computed from the thickness of the plate, the tensile strength of the plate, the efficiency of the longitudinal joint or tube ligaments, the inside diameter of the weakest course and the factor of safety allowed by this article.

TStE = Maximum allowable working pressure, per square inch gauge where:
 RES
 TS = Ultimate tensile strength of shell plates per square inch
 t = Minimum thickness of shell plate, in weakest course, inches

E = Efficiency of longitudinal joint:

For tube ligaments and riveted construction, E shall be determined by the rules given in section I, part PR, of the American Society of Mechanical Engineers Code for power boilers. For seamless construction, E shall be considered one hundred percent.

R = Inside radius of the weakest course of the shell, in inches

FS = Factor of safety permitted

- 2. When the tensile strength of steel or wrought iron shell plate is not known, it must be taken as fifty-five thousand pounds per square inch [386.11 megapascals] for steel and forty-five thousand pounds per square inch [310.26 megapascals] for wrought iron.
- 3. The resistance to crushing of mild steel must be taken at ninety-five thousand pounds per square inch [655 megapascals] of the cross-sectional area.
- 4. When computing the ultimate strength of rivets in shear, the following values, in pounds per square inch [megapascals] of the cross-sectional area of the rivet shank must be used:

	POUNDS PER SQUARE INCH	MEGAPASCALS
Iron rivets in single shear	38,000	262.00
Iron rivets in double shear	76,000	524.00
Steel rivets in single shear	44,000	303.37
Steel rivets in double shear	88,000	606.69

When the diameter of the rivet holes in the longitudinal joints of a boiler is not known, the diameter and cross-sectional area of rivets, after driving, may be selected from the following table, or as ascertained by cutting out one rivet in the body of the joint.

SIZES OF RIVETS BASED ON PLATE THICKNESS

Thickness of plate, inches Diameter of rivet after driving, inches	1/4 11/16	9/32 11/16	5/16 3/4	11/32 3/4	3/8 13/16	13/32 13/16
Thickness of plate, inches	7/16	15/32	1/2	9/16	5/8	
Diameter of rivet after driving, inches	15/16	15/16	15/16	1-1/16	1-1/16	

5. The following factors of safety must be increased by the inspector if the condition and safety of the boiler demand it:

The lowest factor of safety permissible on existing installations is four, except for horizontal-return-tubular boilers having continuous longitudinal lap seams more than twelve feet [3.66 meters] in length, when the factor of safety is eight; when this latter type boiler is removed from its existing setting, it may not be reinstalled for pressures in excess of fifteen pounds per square inch gauge [103 kilopascals].

Reinstalled or secondhand boilers must have a minimum factor of safety of six when the longitudinal seams are of lap-riveted construction, and a minimum factor of safety of five when the longitudinal seams are of butt-and-double-strap construction. Steam traction

engines must be considered as secondhand boilers for purposes of determining their factors of safety. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective July 1, 2012; January 1, 2014.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-05-03. Age limit of existing boilers.

- 1. The age limit of any boiler of nonstandard construction is thirty years except that after a thorough internal and external inspection and a hydrostatic pressure test of one and one-half times the allowable working pressure held for a period of at least thirty minutes during which no distress or leakage develops, any boiler having other than a lap-riveted longitudinal joint may be continued in operation without reduction in working pressure. The age limit of any boiler having lap-riveted longitudinal joints and operating at a pressure in excess of fifty pounds per square inch [344.74 kilopascals] is twenty years; this type of boiler, when removed from an existing setting, may not be reinstalled for a pressure in excess of fifteen pounds per square inch [103 kilopascals]. A reasonable time for replacement, not to exceed one year, may be given at the discretion of the chief boiler inspector.
- 2. The shell or drum of a boiler in which a typical lap seam crack is discovered along a longitudinal riveted joint for either butt seam or lap joints must be permanently discontinued for use under steam pressure. "Lap seam crack" means the typical crack frequently found in lap seams extending parallel to the longitudinal joint and located either between or adjacent to rivet holes.
- 3. The age limit of boilers of standard construction installed prior to the date this law becomes effective is dependent on thorough internal and external inspection and hydrostatic pressure test of one and one-half times the allowable working pressure for a period of thirty minutes. If the boiler under these test conditions exhibits no distress or leakage, it may be continued in operation at the same working pressure. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-05-04. Welded boilers.

Boilers that have either longitudinal or circumferential seams of fusion welded construction must have been constructed and stamped in accordance with the rules and regulations of the American Society of Mechanical Engineers Code or must have the standard stamping of another state that has adopted a standard of construction equivalent to the standards of the American Society of Mechanical Engineers Code. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-05-05. Pressure on old boilers.

The maximum working pressure of an old boiler may not be increased to a greater pressure than would be allowed for a new boiler of the same construction. Repealed effective January 1, 2024

History: Effective June 1, 1994.

45-12-05-06. Cast iron headers and mud drums.

The maximum allowable working pressure on a watertube boiler, the tubes of which are secured to a cast iron or malleable iron header, or which have cast iron mud drums, may not exceed one hundred sixty pounds per square inch gauge [1103.17 kilopascals]. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-05-07. Pressure on cast iron boilers.

The maximum allowable working pressure for any cast iron boiler, except hot water boilers, is fifteen pounds per square inch gauge [103 kilopascals]. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-05-08. Safety valves and safety relief valves.

Safety valves and safety relief valves must meet the requirements of the edition of the American Society of Mechanical Engineers Code, section 1, referenced in this article or the requirements of the edition of the American Society of Mechanical Engineers Code, section 1, to which the boiler they are installed was constructed. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2014.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-05-09. Superheater safety valve requirements.

Superheater safety valves must meet the requirements of the edition of the American Society of Mechanical Engineers Code section referenced in this article or the requirements of the edition of the American Society of Mechanical Engineers Code section to which the superheater they are installed was constructed. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2014.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-05-10. Capacity.

The minimum safety valve or safety relief valve relieving capacity for all high-pressure boilers other than steam traction engines must be determined by the edition of the American Society of Mechanical Engineers Code, section 1, referenced in this article or by the requirements of the American Society of Mechanical Engineers Code, section 1, to which the boiler they are installed was constructed.

The minimum safety valve relieving capacity for steam traction engines must be determined using the edition of the National Board Inspection Code referenced in this article. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2014.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-05-11. Mounting.

The mounting of safety valves and safety relief valves must meet the requirements of the edition of the American Society of Mechanical Engineers Code, section 1, referenced in this article or by the requirements of the edition of the American Society of Mechanical Engineers Code, section 1, to which the boiler they are installed was constructed. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2014.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-05-12. Operation.

The operation of safety valves and safety relief valves must meet the requirements of the edition of the American Society of Mechanical Engineers Code, section 1, referenced in this article or by the requirements of the edition of the American Society of Mechanical Engineers Code, section 1, to which the boiler they are installed was constructed.

If the operating conditions of a valve are changed so as to require a new spring for a different pressure, the valve must be adjusted by the manufacturer, the manufacturer's authorized representative, or by a holder of a valid national board "VR" certificate who shall furnish and install a new nameplate. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective July 1, 2012; January 1, 2014.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-05-13. Steam stop valves.

- Each discharge outlet, except safety valve, safety relief valves, reheater inlet and outlet, or superheater inlet connections, must be fitted with a stop valve located at an accessible point in the steam-delivery line and as near the boiler nozzle as is convenient and practicable. When such outlets are over two-inch [50.8-millimeter] pipe size, the valve or valves used on the connection must be of the outside-screw-and-yoke-rising-spindle type so as to indicate from a distance by the position of its spindle whether it is closed or open, and the wheel may be carried either on the yoke or attached to the spindle. A plug-cock-type valve may be used provided the plug is held in place by a guard or a gland, the valve is equipped to indicate from a distance whether it is closed or open, and the valve is equipped with a slow-opening mechanism. In the case of a single boiler and prime mover installation, the stop valve required herein may be omitted provided the prime mover throttle valve is equipped with an indicator to show whether the valve is open or closed and is designed to withstand the required hydrostatic pressure test of the boiler.
- 2. When the boilers are connected to a common header, the connection from each boiler having a manhole opening must be fitted with two stop valves having an ample free-blow drain between them. The discharge of this drain must be visible to the operator while manipulating the valve. The stop valves must consist preferably of one automatic nonreturn valve (set next to the boiler) and a second valve of the outside-screw-and-yoke type must be used. Where intercommunicating systems of different pressures are installed, every boiler on each system must be equipped with an automatic nonreturn valve set next to the boiler.
- 3. When more than one stop valve is required, it shall have a pressure rating at least equal to that required for the expected steam temperature and pressure at the valve, or the pressure rating at least equal to eighty-five percent of the lowest set pressure of any safety valve on the boiler drum and for the expected temperature of the steam at the valve, whichever is greater.

4. All valves and fittings on steamlines shall have a pressure rating of at least one hundred pounds per square inch [689.48 kilopascals] in accordance with the applicable American national standards institute standard. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-05-14. Feedwater valves and piping.

- 1. Except for high temperature water boilers, the feedpipe must be provided with a check valve near the boiler and a valve or cock between the check valve and the boiler. When two or more boilers are fed from a common source, there must also be a globe or regulating valve on the branch to each boiler located between the check valve and the source of supply. Whenever globe valves are used on feedpiping, the inlet must be under the disk of the valve. On single boiler-turbine unit installations, the boiler feed shutoff valve may be located upstream from the boiler feed check valve.
- 2. When the supply line to a boiler is divided into branch feed connections and all such connections are equipped with stop and check valves, the stop and check valves in the common source may be omitted.
- 3. If a boiler is equipped with duplicate feed arrangements, each such arrangement must be equipped as required by these rules.
- 4. A combination stop-and-check valve in which there is only one seat and disk and a valve stem is provided to close the valve when the stem is screwed down must be considered only as a stop valve, and a check valve must be installed as otherwise provided.
- 5. Where an economizer or other feedwater-heating device is connected directly to the boiler without intervening valves, the feed valves and check valves required must be placed on the inlet of the economizer or feedwater-heating device.
- 6. The recirculating return line for a high temperature water boiler must be provided with the same stop valve, or valves, required by subsection 1 of section 45-12-05-13 for the main boiler and the required stop valve or valves is optional. A check valve may not be a substitute for a stop valve.
- 7. Except as provided for in subsections 8 and 10, boilers having more than five hundred square feet [46.45 square meters] of water-heating surface must have at least two means of feeding water. Each source of feeding must be capable of supplying water to the boiler at a pressure of six percent higher than the highest setting of any safety valve on the boiler. For boilers that are fired with solid fuel not in suspension, and for boilers whose setting or heat source can continue to supply sufficient heat to cause damage to the boiler if the feed supply is interrupted, one such means of feeding must not be subject to the same interruption as the first method.
- 8. Except as provided for in subsection 7, boilers fired by gaseous, liquid, or solid fuel in suspension may be equipped with a single means of feeding water provided means are furnished for the immediate shut off of heat input if the water feed is interrupted.
- 9. For boilers having a water-heating surface of not more than one hundred square feet [9.29 square meters], the feedpiping and connection to the boiler may not be smaller than one-half-inch [12.7-millimeter] pipe size. For boilers having a water-heating surface more than one hundred square feet [9.29 square meters], the feedpiping and connection to the boiler may not be less than three-quarter-inch [19.05-millimeter] pipe size.

- 10. High temperature water boilers must be provided with means of adding water to the boiler or system while under pressure.
- 11. The feedwater must be introduced into a boiler in such a manner that the water will not be discharged directly against surfaces exposed to gases of high temperature or to direct radiation from the fire or close to any riveted joints of the furnace sheets or of the shell. For pressures of four hundred pounds [2757.92 kilopascals] or over, the feedwater inlet through the drum must be fitted with shields, sleeves, or other suitable means to reduce the effects of temperature differentials in the shell or head. If necessary, the discharge end of a feedpipe must be fitted with a baffle to divert the flow from riveted joints. Feedwater may not be introduced through the blowoff. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-05-15. Blowoff valves and piping.

- 1. A "blowoff" means a pipe connection provided with valves through which the water in the boiler may be blown out under pressure, excepting drains such as are used on water columns, gauge glasses, or piping of feedwater regulators, etc., used for the purpose of determining the operating condition of such equipment. Piping connections used primarily for continuous operation, such as deconcentrators on continuous blowdown systems, are not classed as blowoffs but the pipe connections and all fittings up to and including the first shutoff valve must be equal at least to the pressure requirements for the lowest set pressure of any safety valve on the boiler drum and with the corresponding saturated-steam temperature.
- 2. A surface blowoff may not exceed two and one-half-inch [63.5-millimeter] pipe size, and the internal and external pipes, when used, must form a continuous passage, but with clearance between their ends and arranged so that the removal of either will not disturb the other.
- 3. Each boiler, except high temperature water boilers, must have a bottom blowoff pipe fitted with a valve or cock in direct connection with the lowest water space practicable.
- 4. All waterwalls and water screens which do not drain back into the boiler, and all integral economizers must be equipped with blowoff valves.
- 5. Except as permitted for miniature boilers, the minimum size of pipe and fittings is one inch [25.4 millimeters], and the maximum size is two and one-half inches [63.5 millimeters], except that for boilers with one hundred square feet [9.29 square meters] of heating surface or less, the minimum size of pipe and fittings is three-fourths inch [19.05 millimeters].
- 6. Condensate return connections of the same size or larger than the size herein specified may be used, and the blowoff may be connected to them. In such case the blowoff must be so located that the connection may be completely drained.
- 7. A bottom blowoff pipe when exposed to direct furnace heat must be protected by firebrick or other heat-resisting material which is so arranged that the pipe may be inspected.
- 8. An opening in the boiler setting for a blowoff pipe must be arranged to provide free expansion and contraction.
- 9. On a boiler having multiple blowoff pipes, a single master valve may be placed on the common blowoff pipe from the boiler, in which case only one valve on each individual blowoff is required. In such a case either the master valve or the individual valves or cocks must be of the slow-opening type.

- 10. Two independent slow-opening valves, or a slow-opening valve and a quick-opening valve or cock, may be combined in one body and may be used provided the combined fitting is the equivalent of two independent slow-opening valves, or a slow-opening valve and a quick-opening valve or cock and provided further that the failure of one to operate cannot affect the operation of the other.
- 11. The bottom blowoff pipes of every traction or portable boiler must have at least one slow-opening or quick-opening blowoff valve or cock conforming to the requirements of section 45-12-05-15.
- 12. Only one blowoff valve, which must be of a slow-opening type, is required on forced circulation and electric boilers having a normal water content not exceeding one hundred gallons [378.54 liters]. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-05-16. Factors of safety.

The minimum factor of safety may not be less than four for existing installations. The commissioner authorizes an inspector to increase the factor of safety if the condition of the boiler or pressure vessel warrants it. If the owner or user does not concur with the inspector's decision, the owner or user may appeal to the commissioner who may request a joint inspection by the chief boiler inspector and the deputy inspector or special inspector. Each inspector shall render the inspector's report to the commissioner, and the commissioner shall render the final decision, based upon the data contained in all the inspector's reports. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2008.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-05-17. Inspection of inaccessible parts.

If in the opinion of the inspector, as the result of conditions disclosed at the time of inspection, it is advisable to remove the interior or exterior lining, covering, or brickwork to expose certain parts of the vessel not normally visible, the owner or user shall remove such material to permit proper inspection and the drilling of any part of the vessel to ascertain thickness. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-05-18. Repairs and renewals of fittings and appliances.

Whenever repairs are made to fittings and appliances or it becomes necessary to replace them, the work must comply with the requirements for new installations. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-05-19. Fusible plugs.

Fire-actuated fusible plugs, if used, must conform to the requirements of the American society
of mechanical engineers code for power boilers.

2. They may be replaced by steel plugs if the boiler is gas-fired or oil-fired and is equipped with a low water fuel cutoff. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2006.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-05-20. Water columns, gauge glasses, and gauge cocks.

- 1. Outlet connections (except for damper regulator, feedwater regulator, low water fuel cutoff, drains, steam gauges, or such apparatus that does not permit the escape of an appreciable amount of steam or water therefrom) may not be placed on the piping that connects the water column to the boiler. The water column must be placed on the piping that connects the water column to the boiler. The water column must be provided with a valved drain of at least three-fourths-inch [19.05-millimeter] pipe size, the drain to be piped to a safe location.
- 2. Each boiler constructed prior to 1999 must have three or more gauge cocks located within the visible length of the water glass, except when the boiler has two water glasses located on the same horizontal lines. Boilers not over thirty-six inches [.914 meters] in diameter, in which the heating surface does not exceed one hundred square feet [9.29 square meters] need have but two gauge cocks.
- 3. For all installations where the water gauge glass or glasses are more than thirty feet [9.14 meters] from the boiler operating floor, it is recommended that water level indicating or recording gauges be installed at eye height from the operating floor. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2016.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-05-21. Steam pressure gauge.

- 1. Each steam boiler must have a steam gauge, with dial range not less than one and one-half times the pressure at which the safety valve is set, connected to the steam space or to the steam connection to the water column. The steam gauge must be connected to a siphon or equivalent device of sufficient capacity to keep the gauge tube filled with water and so arranged that the gauge cannot be shut off from the boiler except by a cock placed near the gauge and provided with a tee or lever handle arranged to be parallel to the pipe in which it is located when the cock is open.
- 2. When a steam pressure gauge connection longer than eight feet [2.44 meters] becomes necessary, a shutoff valve may be used near the boiler provided the valve is of the outside-screw-and-yoke type and is locked open. The line must be ample size with provision for free blowing. Each boiler must be provided with a one-fourth-inch [6.35-millimeter] nipple and globe valve connected to the steam space for the exclusive purpose of attaching a test gauge when the boiler is in service so that the accuracy of the boiler steam gauge may be ascertained. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-05-22. Pressure on nonstandard steam traction engines.

All steam traction engines that are of nonstandard boiler construction are limited to a maximum allowable working pressure of one hundred pounds per square inch [690 kilopascals], unless a thorough ultrasonic thickness survey, engineering analysis, and other inspections, approved by the

chief boiler inspector, determine that a different pressure is appropriate. The maximum allowable working pressure may not be greater than that permitted by the original manufacturer. Boilers herein described are not subject to the age limits of section 45-12-05-03. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2014.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-05-23. Duties of owners.

- 1. It is the duty of the owner or user of any steam traction engine on wheels to notify the chief boiler inspector of sale or other disposition of steam traction engines.
- 2. Within ten days of purchase, any person purchasing any steam traction engine shall notify the chief boiler inspector where it will be located and operated. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-05-24. Inspection and repair of standard and nonstandard steam traction engines.

The National Board Inspection Code referenced in this article must be used for the inspection and repair of all steam traction engines unless otherwise noted in this article. Repealed effective January 1, 2024

History: Effective January 1, 2014.

General Authority: NDCC 26.1-22.1-14

Law Implemented: NDCC 26.1-22.1-14

CHAPTER 45-12-06 MINIATURE BOILERS - NEW INSTALLATIONS

Section

45-12-06-01 Requirements

45-12-06-01. Requirements.

- 1. All new boilers, except those exempt by law, to be installed in North Dakota must be reported to the chief boiler inspector by the owner or user and by the installer.
- 2. A miniature boiler, except one exempt by law, may not be installed in North Dakota unless it has been constructed, inspected, and stamped in conformity with section I of the American Society of Mechanical Engineers Code and is approved, registered, and inspected in accordance with this article.
- 3. A miniature boiler having the standard stamping of another state that has adopted a standard of construction equivalent to the standard of North Dakota may be accepted by the inspector. However, the person desiring to install the same shall make application for the installation and shall file with this application the manufacturer's data report covering the construction of the boiler in question.
- 4. All new installation boilers, including reinstalled boilers, must be installed in accordance with the requirements of the American Society of Mechanical Engineers Code and these regulations. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

CHAPTER 45-12-07 MINIATURE BOILERS - EXISTING INSTALLATIONS

Section	
45-12-07-01	General Rules
45-12-07-02	Maximum Allowable Working Pressure
45-12-07-03	Maximum Allowable Working Pressure for Nonstandard Boilers
45-12-07-04	Safety Valves
45-12-07-05	Gauge Glass and Water Level Indicator
45-12-07-06	Feeding and Feedwater Piping
45-12-07-07	Blowoff Piping
45-12-07-08	Steam Gauges
45-12-07-09	Stop Valves
45-12-07-10	Flue Connection
45-12-07-11	Duties of Owners
45-12-07-12	Steam Gauge

45-12-07-01. General rules.

The rules adopted for power boilers applying to strength of materials and calculations to determine maximum allowable working pressure must be used for miniature boilers unless a special rule is stated in those rules. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-07-02. Maximum allowable working pressure.

The maximum allowable working pressure for standard boilers on the shell of a boiler or drum must be determined by section 45-12-05-01. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-07-03. Maximum allowable working pressure for nonstandard boilers.

Nonstandard miniature boilers:

- 1. Must conform to all requirements of this chapter.
- 2. Must have a factor of safety as given in subsection 5 of section 45-12-05-02.
- 3. Must be given an initial inspection that must include a hydrostatic pressure test.
- May not have solder or silver solder as a method of attachment of any pressure part of the entire
 assembled unit.
- 5. May have a plate for the North Dakota stamp and registration number to be welded to boiler proper. The plate must be placed in a conspicuous and accessible location with a minimum size thickness one-sixteenth inch [1.59 millimeters], length two inches [50.8 millimeters], and width one inch [25.4 millimeters].
- 6. May not exceed the design criteria limits as defined in subsection 20 of section 45-12-01-01.

- 7. Of the watertube, fired-coil and fired-radiator design must be considered as not meeting the requirements of this section.
- 8. Exceeding twelve inches [304.80 millimeters] internal diameter must have at least one 1-inch [25.4-millimeter] opening in the bottom of the shell and one 1-inch [25.4-millimeter] opening in each water leg. Boilers not exceeding twelve inches [304.80 millimeters] internal diameter must have one 1/2-inch [12.7-millimeter] opening in the shell and one 1/2-inch [12.7-millimeter] opening in each water leg.
- 9. Construction material used for fabrication of the shell must be steel of at least fifty-five thousand pounds per square inch [386.11 megapascals] tensile strength. Material of tubes may be steel, brass, or copper with a rating equal to materials from section II of the American Society of Mechanical Engineers Code. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-07-04. Safety valves.

- 1. Each miniature boiler must be equipped with an American society of mechanical engineers approved safety valve set at or below the maximum allowable working pressure.
- 2. The safety valve must be plainly marked by the manufacturer showing name or identifying trademark, nominal diameter, and pressure at which it is set to release.
- 3. The safety valve relieving capacity of each boiler must be such that it will discharge all the steam that can be generated by the boiler without allowing the pressure to rise more than six percent above the maximum allowable working pressure.
- 4. In those cases where the boiler is supplied with feedwater directly from a pressure main or system without the use of a mechanical feeding device, the safety valve must be set to release at a pressure not in excess of ninety-four percent of the lowest pressure obtained in the supply main or system feeding the boiler. Return traps may not be considered mechanical feeding devices.
 Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-07-05. Gauge glass and water level indicator.

- 1. Each miniature boiler must be equipped with a water gauge glass for determination of water level.
- 2. The lowest permissible water level must be at a point one-third of the height of the shell, except where the boiler is equipped with internal furnace in which case it may not be less than one-third of the tube length above the top of the furnace. For small boilers where there is insufficient space for the usual type of gauge glass, water level indicators of the glass bull's-eye type may be used. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-07-06. Feeding and feedwater piping.

- 1. Every miniature boiler must be provided with at least one feed pump or other mechanical feeding device except if the following conditions exist:
 - a. If the boiler is connected to a water main or system having sufficient pressure to feed the boiler at any time while under pressure.
 - b. If the fuel burned is such that all heat input can be discontinued instantaneously by the operation of a valve, cock, or switch, thereby permitting the boiler pressure to be quickly lowered to a point where water can be introduced from the connection of the water main.
 - c. If the boiler is operated without extraction of steam (closed system) in which case the boiler is filled, when cold, through the connection or opening provided in accordance with the following rule.
- 2. Each miniature boiler must be fitted with a feedwater connection that may not be less than one-half-inch [12.7-millimeter] iron pipe size. The feedpiping must be provided with a check valve near the boiler and a valve or check between the check valve and the boiler.
- 3. Feedwater may be introduced through the blowoff connection if the boiler is operated without extraction of steam (closed system).
- 4. Feedwater may not be introduced through the water column or gauge glass connections while the boiler is under pressure. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-07-07. Blowoff piping.

- 1. Each miniature boiler must be provided with a blowoff connection not less than one-half-inch [12.7-millimeter] iron pipe size, directly connected with the lowest water space.
- 2. Blowoff piping may not be galvanized and must be provided with a valve or cock. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-07-08. Steam gauges.

Each miniature boiler must be equipped with a steam gauge having a dial range not less than one and one-half times the safety valve setting. The gauge must be connected to the steam space or to the steam connection to the gauge glass by a brass or bronze composition siphon tube, or equivalent device that will keep the gauge tube filled with water. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-07-09. Stop valves.

The steam piping from a miniature boiler must be provided with a stop valve located as close to the boiler shell or drum as is practicable, except in those cases where the boiler and steam receiver are operated as a closed system. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-07-10. Flue connection.

Each gas-fired boiler must be equipped with a four-inch [10.16-centimeter] vent pipe or flue extended to an approved location outside the building or connected to a chimney flue. If the horizontal run is more than ten feet [3.05 meters], the vent must be increased to six inches [152.4 millimeters]. A draft hood of approved design must be provided on each boiler. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-07-11. Duties of owners.

- 1. The owner and user of any steam traction engine or boiler on wheels shall notify the chief boiler inspector of sale or other disposition of steam traction engines.
- 2. Within ten days of purchase, any person purchasing any steam traction engine shall notify the chief boiler inspector where it will be located and operated. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-07-12. Steam gauge.

The steam pressure gauge must show the pressure at which the boiler is actually being operated. Adjustments to the gauge to show a lesser pressure are prohibited, and if any gauge has been so adjusted, such act will be considered a willful violation of this section. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

CHAPTER 45-12-08 HEATING, LOW PRESSURE, AND HOT WATER SUPPLY BOILERS - NEW INSTALLATIONS

Section 45-12-08-01 Requirements

45-12-08-01. Requirements.

- 1. Unless exempt by this article, a heating or low pressure boiler may not be installed in this state unless it has been constructed, inspected, and stamped to conform with section IV of the American Society of Mechanical Engineers Boiler and Pressure Vessel Code and is approved, registered, and inspected in accordance with the requirements of this article.
- 2. All new installation boilers, including reinstalled boilers, must be installed in accordance with the requirements of the American Society of Mechanical Engineers Code and this article.
- Hot water supply boilers may not be installed unless constructed and approved in accordance with the American gas association, the American national standards institute, or the American society of mechanical engineers.
- 4. All new boilers, except those exempt by law, to be installed in North Dakota must be reported to the chief boiler inspector by the owner or user, and by the installer. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

CHAPTER 45-12-09 HEATING, LOW PRESSURE, AND HOT WATER SUPPLY BOILERS - EXISTING INSTALLATIONS

Section	
45-12-09-01	American Society of Mechanical Engineers Code Boilers
45-12-09-02	Nonstandard Riveted Boilers
45-12-09-03	Nonstandard Welded Boilers
45-12-09-04	Nonstandard Cast Iron Boilers
45-12-09-05	Fired Radiators
45-12-09-06	General
45-12-09-07	Pressure-Relieving Devices
45-12-09-08	Steam Pressure Gauge
45-12-09-09	Water Gauge Glasses
45-12-09-10	Stop Valves and Check Valves
45-12-09-11	Feedwater Connections
45-12-09-12	Pressure or Altitude Gauges
45-12-09-13	Thermometers
45-12-09-14	Temperature Control
45-12-09-14. 1	Pressure Control
45-12-09-15	Provisions for Thermal Expansion in Hot Water Systems
45-12-09-16	Return Pump
45-12-09-17	Repairs and Renewals of Fittings and Appliances
45-12-09-18	Low-Water Fuel Cutoff
45-12-09-19	Modular Hot Water Heating Boilers
45-12-09-20	Bottom Blowoff and Drain Valves
45-12-09-21	Emergency Shutoff Switches

45-12-09-01. American Society of Mechanical Engineers Code boilers.

The maximum allowable working pressure of a boiler built in accordance with the American Society of Mechanical Engineers Code may not exceed the pressure indicated by the manufacturer's identification stamped or cast upon the boiler or upon a plate secured to it. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-09-02. Nonstandard riveted boilers.

The maximum allowable working pressure on the shell of a noncode riveted heating boiler must be determined in accordance with section 45-12-05-01 except that the maximum allowable working pressure of a steam heating boiler may not exceed fifteen pounds [103 kilopascals] and a hot water boiler may not exceed thirty pounds [206.85 kilopascals] at a temperature not exceeding two hundred fifty degrees Fahrenheit [120 degrees Celsius]. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-09-03. Nonstandard welded boilers.

The maximum allowable working pressure of a noncode steel or wrought iron heating boiler of welding construction may not exceed fifteen pounds [103 kilopascals]. For other than steam service, the maximum allowable working pressure must be calculated in accordance with section IV of the American Society of Mechanical Engineers Code. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-09-04. Nonstandard cast iron boilers.

- 1. The maximum allowable working pressure of a noncode boiler composed principally of cast iron may not exceed fifteen pounds [103 kilopascals] for steam service or thirty pounds [206.85 kilopascals] for hot water service.
- The maximum allowable working pressure of a nonstandard boiler having cast iron shell or heads and steel or wrought iron tubes may not exceed fifteen pounds [103 kilopascals] for steam service or thirty pounds [206.85 kilopascals] for water service. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-09-05. Fired radiators.

A radiator in which steam pressure is generated at a pressure of fifteen pounds [103 kilopascals] or less is considered a low pressure boiler. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-09-06. General.

If in the judgment of the inspector, a boiler is unsafe for operation at the pressure previously approved, the pressure must be reduced, proper repair made, or the boiler retired from service. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2014.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-09-07. Pressure-relieving devices.

- Safety valve requirements for steam boilers are:
 - a. Each steam boiler must have one or more American society of mechanical engineers approved safety valves of the spring-pop type adjusted and sealed to discharge at a pressure not to exceed fifteen pounds per square inch [103 kilopascals]. Seals must be attached in a manner to prevent the valve from being taken apart without breaking the seal. The safety valves must be arranged so that they cannot be reset to relieve at a higher pressure than the maximum allowable working pressure of the boiler. For iron-and-steel-bodied valves exceeding two-inch [50.8-millimeter] pipe size, the drain hole or holes must be tapped not less than three-eighths-inch [9.53-millimeter] pipe size.
 - b. Each safety valve three-fourths inch [10.05 millimeters] diameter or over used on a steam boiler must have a substantial device that will positively lift the disk from its seat at least one-sixteenth inch [1.59 millimeters] when there is no pressure in the boiler. The seats and disks must be of suitable material to resist corrosion.
 - c. A safety valve for a steam boiler may not be smaller than three-fourths inch [19.05 millimeters] unless the boiler and radiating surfaces consist of a self-contained unit. A

- safety valve may not be larger than four and one-half inches [114.3 millimeters]. The inlet opening must have an inside diameter equal to, or greater than, the seat diameter.
- **d.** The minimum relieving capacity of valve or valves is governed by the capacity marking on the boiler.
- e. The minimum valve capacity in pounds per hour is the greater of that determined by dividing the maximum British thermal units output at the boiler nozzle obtained by the firing of any fuel for which the unit is installed by one thousand, or is determined on the basis of the pounds of steam generated per hour per square foot of boiler heating surface. (One British thermal unit equals 1.055 x 10 to the 3rd power joules.)

MINIMUM POUNDS OF STEAM PER HOUR PER SQUARE FOOT OF HEATING SURFACE

	Firetube	
Boiler Heating Surface	Boilers	- Boilers
Hand-fired	5	6
Stoker-fired	7	8
Oil, gas, or pulverized fuel-fired	8	10

- f. Safety valves must be installed with the valve spindle in the vertical position. Discharge piping, to a safe location, may be required by the inspector.
- 2. When a boiler is fired only by a gas having a heat value not in excess of two hundred British thermal units per cubic feet [745.58 x 10 to the 4th power joules per cubic meter], the minimum safety valve or safety relief valve relieving capacity may be based on the values given for hand-fired boilers above.
- 3. The safety valve or safety relief valve relieving capacity for electric boilers is three and one-half pounds [3692.5 joules] per hour per kilowatt input.
 - a. The safety valve capacity for each steam boiler must be such that with the fuel-burning equipment installed and operated at maximum capacity the pressure cannot rise more than five pounds per square inch [34.47 kilopascals] above the maximum allowable working pressure.
 - b. When operating conditions are changed, or additional boiler heating surface is installed, the valve capacity must be increased, if necessary, to meet the new conditions, the additional valves required, on account of changed conditions, may be installed on the outlet piping provided there is no intervening valve.
- 4. Safety relief valve requirements for hot water boilers are:
 - a. Each hot water heating boiler must have at least one American society of mechanical engineers approved pressure relief valve set to relieve at or below the maximum allowable working pressure of the boiler. Each hot water supply boiler must have at least one officially rated safety relief valve or at least one American society of mechanical engineers approved pressure-temperature relief valve of the automatic-reseating type set to relieve at or below the maximum allowable working pressure of the boiler. Pressure relief valves officially rated as to capacity must have pop action when tested by steam. When more than one safety relief valve is used on either hot water heating or hot water supply boilers, the additional valve or valves must be

officially rated and may be set within a range not to exceed six pounds per square inch [41.47 kilopascals] above the

maximum allowable working pressure of the boiler up to and including sixty pounds per square inch [413.69 kilopascals] and ten percent for those having a maximum allowable working pressure exceeding sixty pounds per square inch [413.69 kilopascals]. Safety relief valves must be spring loaded without disk guides on the pressure side of the valve. Safety relief valves must be arranged so that they cannot be reset to relieve at a higher pressure than the maximum permitted by this subdivision.

- b. Each safety relief valve must have a substantial device that will positively lift the disk from its seat at least one-sixteenth inch [1.59 millimeters] when there is no pressure on the boiler.
- c. Materials subject to deterioration or vulcanization when subject to saturated steam temperature corresponding to capacity test pressure may not be used for any part.
- d. A safety relief valve may not be smaller than three-fourths inch [19.05 millimeters] nor larger than four and one-half-inch [114.3-millimeter] standard pipe size, except that boilers having a heat input not greater than fifteen thousand British thermal units per hour [15.38 x 10 to the 7th power joules] may be equipped with a rated safety relief valve of one-half-inch [12.7-millimeter] standard pipe size. The inlet opening must have an inside diameter approximately equal to, or greater than, the seat diameter. The minimum opening through any part of the valve may not be less than one-fourth inch [6.35 millimeters] diameter or its equivalent area.
- e. The required steam-relieving capacity, in pounds per hour, of the pressure-relieving device or devices on a boiler must be determined by dividing the maximum output in British thermal units at the boiler nozzle obtained by the firing of any fuel for which the unit is designed by one thousand or by multiplying the square feet of heating surface by five. In every case, the requirements of subdivision g must be met. (One British thermal unit equals 1.055 x 10 to the 3rd power joules.)
- f. When operating conditions are changed, or additional boiler heating surface is installed, the valve capacity must be increased, if necessary, to meet the new conditions and be in accordance with subdivision g. The additional valves required, on account of changed conditions, may be installed on the outlet piping provided there is no intervening valve.
- 9. Safety relief valve capacity for each boiler must be such that with maximum heat input the pressure cannot rise more than six pounds per square inch [41.37 kilopascals] above the maximum allowable working pressure for pressures up to and including sixty pounds per square inch [413.69 kilopascals] and ten percent for maximum allowable working pressures over sixty pounds per square inch [413.69 kilopascals].
- h. Safety relief valves must be installed with the spindle in the vertical position. Discharge piping, to a safe location, must be installed. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-09-08. Steam pressure gauge.

1. Each steam boiler must have a steam gauge or a compound steam gauge connected to its steam space or to its water column or to its steam connections. The gauge or connection must contain a siphon or equivalent device that will develop and maintain a water seal that will prevent steam from entering the gauge tube. The connection must be arranged so that the gauge cannot be shut off from the boiler except by a cock placed in the pipe at the gauge and provided with a tee or a lever handle arranged to be parallel to the pipe in which it is located

when the cock is open. The connections to the boiler must be not less than one-fourth-inch [6.35-millimeter] standard pipe size, but where steel or wrought iron pipe or tubing is used, they must be not less than one-half-inch [12.7-millimeter] standard pipe size. The minimum size of a siphon, if used, must be one-fourth inch [6.35 millimeters] inside diameter. Ferrous and nonferrous tubing having inside diameters at least equal to that of standard pipe sizes listed above may be substituted for pipe.

2. The scale on the dial of a steam boiler gauge must be graduated to not less than thirty pounds per square inch [206.84 kilopascals] nor more than sixty pounds per square inch [413.69 kilopascals]. The gauge must be provided with effective stops for the indicating pointer at the zero point and at the maximum pressure point. The travel of the pointer from zero to thirty pounds per square inch [206.84 kilopascals] pressure must be at least three inches [76.2 millimeters]. On a compound gauge, effective stops must be set at the limits of the gauge readings on both the pressure and vacuum sides of the gauge. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-09-09. Water gauge glasses.

- 1. Each steam boiler must have one or more water gauge glasses attached to the water column or boiler by means of valved fittings not less than one-half-inch [12.70-millimeter] pipe size, with the lower fitting provided with a drain valve of the straight type with opening not less than one-fourth inch [6.35 millimeters] diameter to facilitate cleaning. Gauge glass replacement must be possible under pressure. Water glass fittings may be attached directly to a boiler.
- 2. The lowest visible part of the water gauge glass must be at least one inch [25.4 millimeters] above the lowest permissible water level recommended by the boiler manufacturer. With the boiler operating at this lowest permissible water level, there must be no danger of overheating any part of the boiler. Transparent material other than glass may be used for the water gauge provided that the material will remain transparent and has proved suitable for the pressure, temperature, and corrosive conditions expected in service. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-09-10. Stop valves and check valves.

- 1. If a steam boiler may be closed off from the heating system by closing a steam stop valve, there must be a check valve in the condensate return line between the boiler and the system.
- 2. If any part of a steam heating system may be closed off from the remainder of the system by closing a steam stop valve, there must be a check valve in the condensate return pipe from that part of the system.
- 3. If more than one boiler is connected to a system, they must each be equipped with main stops on the discharge and return side, in such a manner not affecting operation of any other boiler.
- 4. When single boilers are located above the system and can be drained without draining the system, stop valves are optional. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-09-11. Feedwater connections.

- 1. Feedwater connections must be independent of any water gauge connections and be made to the condensate return pipe or reservoir of the condensate return tank.
- 2. Alternatively, makeup water or water treatment may be introduced through an independent connection. The water flow from the independent connection may not discharge directly against parts of the boiler exposed to direct radiant heat from the fire. Makeup water or water treatment may not be introduced through openings or connections provided for inspection or cleaning, safety valve, safety relief valve, blowoff, water column, water gauge glass, pressure gauge, or temperature gauge.
- 3. When there is more than one boiler connected to a system, each boiler must have an independent feedwater line.
- 4. There must be a stop valve and a check valve in the feedwater line at the boiler. For hot water heating boilers, the check valve must be a backflow preventer approved by the state plumbing board.
- 5. Hot water heating boilers, not equipped with an approved low-water fuel cutoff, must be equipped with an automatic feeding device or pressure reducing valve method of feeding, in addition to a manual bypass capable of feeding the boiler at a pressure of six percent above safety relief valve setting. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2000; October 1, 2002; July 1, 2012;

January 1, 2014.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-09-12. Pressure or altitude gauges.

- 1. Each hot water boiler must have a pressure or altitude gauge connected to it or to its flow connection in such a manner that it cannot be shut off from the boiler except by a cock with tee or lever handle placed on the pipe near the gauge. The handle of the cock must be parallel to the pipe in which it is located when the cock is open.
- 2. The scale on the dial of the pressure or altitude gauge must be graduated to not less than one and one-half nor more than three and one-half times the pressure at which the safety relief valve is set. The gauge must be provided with effective stops for the indicating pointer at the zero point and at the maximum pressure point.
- 3. Piping or tubing for pressure or altitude gauge connections must be of nonferrous metal when smaller than one-inch [25.4-millimeter] pipe size. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2000.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-09-13. Thermometers.

Each hot water boiler must have a thermometer located and connected so that it is easily readable when observing the water pressure or altitude. The thermometer must be located so that it will at all times indicate the temperature in degrees Fahrenheit [Celsius] of the water in the boiler at or near the outlet. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14

Law Implemented: NDCC 26.1-22.1-14

45-12-09-14. Temperature control.

Each automatically fired hot water boiler must be protected from over temperature by two temperature-operated controls.

- 1. Each individual automatically fired water boiler must have a safety limit control that will cut off the fuel supply to prevent water temperature from exceeding the maximum allowable temperature at the boiler outlet. The water temperature safety control must be constructed to prevent a temperature setting above the maximum allowable temperature and be of the manual reset type.
- 2. Each individual hot water boiler or each system of commonly connected boilers without intervening valves must have a control that will cut off the fuel supply when the water temperature reaches an operating limit, which must be less than the maximum allowable temperature. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2000; January 1, 2006.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-09-14.1. Pressure control.

Each automatically fired steam boiler must be protected from overpressure by two pressure-operated controls.

- 1. Each automatically fired steam boiler must have a safety limit control that will cut off the fuel supply to prevent steam pressure from exceeding the fifteen pounds per square inch [103 kilopascals] maximum allowable working pressure of the boiler. Each control must be constructed to prevent a pressure setting above fifteen pounds per square inch [103 kilopascals] and be of the manual reset type.
- Each individual steam boiler or each system of commonly connected steam boilers must have
 a control that will cut off the fuel supply when the pressure reaches an operating limit, which
 must be less than the maximum allowable pressure.
- 3. Shutoff valves of any type may not be placed in the steam pressure connection between the boiler and the controls described in subsections 1 and 2. These controls must be protected with a siphon or equivalent means of maintaining a water seal that will prevent steam from entering the control. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2006.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-09-15. Provisions for thermal expansion in hot water systems.

- 1. All hot water heating systems incorporating hot water tanks or fluid relief columns must be so installed as to prevent freezing under normal operating conditions.
- Systems with open expansion tank. If the system is equipped with an open expansion tank, an
 indoor overflow from the upper portion of the expansion tank must be provided in addition to an
 open vent, the indoor overflow to be carried within the building to a suitable plumbing fixture or
 to the basement.

- 3. Closed-type systems. If the system is of the closed type, an airtight tank or other suitable air cushion must be installed that will be consistent with the volume and capacity of the system, and must be suitably designed for a hydrostatic test pressure of two and one-half times the allowable working pressure of the system. Expansion tanks for systems designed to operate above thirty pounds per square inch [206.85 kilopascals] must be constructed in accordance with the American Society of Mechanical Engineers Code, section VIII, division 1. Except for prepressurized tanks, provisions must be made for draining the tank without emptying the system. Provisions must also be made for changing of all tanks without emptying the system.
- 4. Expansion tank capacities for gravity hot water systems. Based on two-pipe system with average operating water temperature one hundred seventy degrees Fahrenheit [76.7 degrees Celsius], using cast iron column radiation with heat emission rate one hundred fifty British thermal units per hour per square foot [158.25 x 10 to the 3rd power joules per .0929 square meter] equivalent direct radiation.

S	quare Feet of Installed Equivalent Direct I	Radiation	Tank Capacity, Gallons
Up	to	350	18
Up	ŧo	450	21
Up	ŧo	650	2 4
Up	ŧo	900	30
Up	ŧo	1,100	35
Up	ŧo	1,400	40
Up	ŧo	1,600	2-30
Up	to	1,800	2-30
Up	to	2,000	2-35
Up	to	2,400	2-40

5. Expansion tank capacities for forced hot water systems. Based on average operating water temperature one hundred ninety-five degrees Fahrenheit [90 degrees Celsius], a fill pressure twelve pounds per square inch gauge [82.74 kilopascals] and a maximum operating pressure thirty pounds per square inch gauge [206.84 kilopascals].

System Volume, Gallons	Nonpressurized Tank Capacity Gallons	Prepressurized Tank Capacity Gallons
100	15	9
200	30	17
300	45	25
400	60	33
500	75	42
1,000	150	83
2,000	300	165

Note: System volume includes volume of water in boiler, radiation, and piping, not including the expansion tank.

6. Expansion tanks for hot water supply systems must be constructed in accordance with the American society of mechanical engineers code, section VIII, division 1 if over five gallons in size of water and air. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2016.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-09-16. Return pump.

Each condensate return pump where practicable must be provided with an automatic water level control set to maintain the water level within the limits of two gauge cocks. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-09-17. Repairs and renewals of fittings and appliances.

Whenever repairs are made to fittings or appliances or it becomes necessary to replace them, all work must comply with all requirements for new installations. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-09-18. Low-water fuel cutoff.

- 1. Each automatically fired hot water heating boiler must have an automatic low-water fuel cutoff that has been designed for hot water service and which can be tested without draining the system or the boiler. It must be so located as to automatically cut off the fuel supply prior to the surface of the water falling below the lowest safe water level as established by the boiler manufacturer.
- 2. A coil-type or watertube boiler requiring forced circulation to prevent overheating of the coils or tubes must have a flow-sensing device installed in the boiler or piping in lieu of the required low-water fuel cutoff that will cut off the fuel supply when the circulation flow is interrupted. Functioning of the low-water fuel cutoff due to a low water condition must cause safety shutdown and lockout. Where a reset device is separate from the low-water fuel cutoff, a means shall be provided to indicate actuation of the low-water fuel cutoff. The manual reset may be the instantaneous type, or may include a time delay of not more than three minutes after the fuel has been cut off.
- 3. Low-water fuel cutoff requirements for steam boilers are addressed by section 45-12-03-07. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective January 1, 2006.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-09-19. Modular hot water heating boilers.

- Individual modules must be limited to a maximum input of four hundred thousand British thermal
 units [4.22 x 10 to the 8th power joules] per hour (gas), three gallons [11.36 liters] per hour (oil),
 or one hundred fifteen kilowatt-hours (electricity).
- Each module of a modular hot water heating boiler must be equipped with the following:

a. Pressure/altitude gauge (see section 45-12-09-12).

- b. Thermometer (see section 45-12-09-13).
- C. Operating temperature control (see subsection 2 of section 45-12-09-14).
- d. Safety relief valve (see section 45-12-09-07).
- e. Drain valve (see section 45-12-09-20).
- 3. The assembled modular hot water heating boiler must be equipped with the following:
 - a. High-limit temperature control (see subsection 1 of section 45-12-09-14).
 - b. Low-water fuel cutoff (see section 45-12-09-18).
 - c. Makeup feedwater connection (see section 45-12-09-11).
 - d. Expansion tank provisions (see section 45-12-09-15).
 - e. Stop valves (see section 45-12-09-10). Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective October 1, 2002.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-09-20. Bottom blowoff and drain valves.

Each steam boiler having a capacity over twenty-five gallons [94.6 liters] must have a bottom
blowoff connection fitted with a valve or cock connected to the lowest water space practicable with a
minimum size as shown below:

	•	ed Safety Valve C ds of Steam/Hour	apacity in	Steam Boiler Blowoff Piping Valve Size, Inches (Min.)
Up		to	500	3/4
	501	to	1,250	4
	1,251	to	2,500	11/4
	2,501	to	6,000	1 1/2
	6,001	and	larger	2

2. Each hot water boiler and each steam boiler having a capacity not exceeding twenty-five gallons [94.6 liters] must have a drain valve connected to the lowest water space practicable. The minimum size of this drain valve is three-quarter inch [1.9 centimeters]. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-09-21. Emergency shutoff switches.

1. A manually operated emergency shutoff switch or circuit breaker must be located just outside the boiler room door and marked for easy identification. Consideration should be given to the type and location of the switch to safeguard against tampering. If the boiler room door is on the building exterior, the switch must be located just inside the door. If there is more than one door to the boiler room, there must be a switch located at each door.

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2. The emergency switch or circuit breaker must disconnect all power to the burner controls.

3. This requirement is limited to single and modular boilers exceeding 400,000 Btu/hr input installed after January 1, 2006. Repealed effective January 1, 2024

History: Effective January 1, 2006. General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

CHAPTER 45-12-10 UNFIRED PRESSURE VESSELS

Construction and Installation Standards - Exceptions
Application of Standards - Repairs
Allowance for State Specials
Change of Service From Anhydrous Ammonia to Propane

45-12-10-01. Construction and installation standards - Exceptions.

Unfired pressure vessels may not be installed in North Dakota unless such vessels have been constructed in accordance with the American society of mechanical engineers boiler and pressure vessel code, section VIII, division 1, 2, or 3, and bear the American society of mechanical engineers stamping as proof of such construction.

Manufacturers shall register unfired pressure vessels with the national board of boiler and pressure vessel inspectors. Unfired pressure vessels must bear the required stamping of the national board.

The requirements of this section apply to all pressure vessels within the scope of the American society of mechanical engineers boiler and pressure vessel code, section VIII, division 1, 2, or 3, with these exceptions:

- Pressure vessels under federal control.
- 2. Pressure vessels that do not exceed four cubic feet [30 United States gallons] in volume and two hundred fifty pounds per square inch gauge [1723.70 kilopascals] in pressure.
- 3. Pressure vessels that do not exceed one and one-half cubic feet [11.22 United States gallons] in volume and six hundred pounds per square inch gauge [4136.88 kilopascals] in pressure.
- 4. Unfired pressure vessels installed or ordered prior to November 1, 1987. However, these unfired pressure vessels must be maintained in a safe operating condition using ANSI/NB-23 and ANSI/API-510 as guidelines. Unfired pressure vessels referenced by this section must be protected with the American society of mechanical engineers stamped pressure relief devices as defined in section VIII of the American society of mechanical engineers boiler and pressure vessel code. Existing pressure relief devices installed on unfired pressure vessels referenced by this section will be considered acceptable if the pressure relief device is set for the correct pressure, if the usage is correct, and if the device is in a satisfactory operating condition. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective April 1, 1996; January 1, 2000; October 1, 2002;

January 1, 2006; April 1, 2010; July 1, 2012; January 1, 2014; January 1, 2016.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-10-02. Application of standards - Repairs.

These rules apply only to new construction, except as noted below:

- Reinstalled pressure vessels must meet the rules for new construction. Exception: National board registration is required only for those vessels ordered and constructed after November 1, 1987.
- 2. Repairs to unfired pressure vessels and to safety and safety relief valves for those vessels:

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a. Repairs to safety valves and safety relief valves must be such that valve function is not impaired and the repaired valve will perform to the standards for which it was originally

constructed. It is recommended that these repairs be made by a firm in possession of a valid "VR" certificate of authorization from the national board of boiler and pressure vessel inspectors.

- b. Repairs to unfired pressure vessels must be such that vessels repaired will be returned to a safe and satisfactory operating condition, provided there is not deviation from the original design. It is recommended that these repairs be made by a firm in possession of a valid "R" certificate of authorization from the national board of boiler and pressure vessel inspectors.
- c. The national board inspection code and the American petroleum institute code (ANSI/API-510, 2006 edition) cover repair and alteration procedures. ANSI/API-510 may be used to cover the maintenance inspection, repair, alteration, and rerating procedure for pressure vessels used by the petroleum and chemical process industries. It is intended that ANSI/NB-23 cover installations other than those covered by ANSI/API-510.

3. Alterations to unfired pressure vessels:

- a. Alterations, as defined in ANSI/NB-23, must be made by a national board "R" certificate holder.
- b. Alterations may also be made by an organization operating under the provisions of ANSI/API-510, provided the alteration is within the scope of ANSI/API-510. Repealed effective January 1, 2024

History: Effective June 1, 1994; amended effective April 1, 1996; January 1, 2000; October 1, 2002;

January 1, 2006; January 1, 2008; July 1, 2012.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-10-03. Allowance for state specials.

If, due to a valid impediment to compliance with the American society of mechanical engineers code in its entirety, an unfired pressure vessel cannot bear the American society of mechanical engineers and national board stamping, details in the English language, and specifications and calculations, approved by a registered professional engineer experienced in pressure vessel design, must be submitted to the chief inspector by the owner or user. Approval as "state special" must be obtained from the chief inspector before construction is started. Repealed effective January 1, 2024

History: Effective June 1, 1994.

General Authority: NDCC 26.1-22.1-14 Law Implemented: NDCC 26.1-22.1-14

45-12-10-04. Change of service from anhydrous ammonia to propane.

Unfired pressure vessels that have been previously used in anhydrous ammonia service may be converted to liquid petroleum service only with all of the following conditions being met:

- 1. The pressure vessel is American society of mechanical engineers code constructed and national board registered.
- 2. The pressure vessel has a manhole opening for access or a manhole opening is provided as an alteration.
- 3. The pressure vessel is in satisfactory condition internally and externally using the national board inspection code to determine acceptable condition.

4. The pressure vessel has passed a wet fluorescent magnetic particle test made by an individual possessing a valid American society for nondestructive testing level II or III certificate issued in accordance with the requirements of the American society for nondestructive testing, incorporated. Repealed effective January 1, 2024

History: Effective January 1, 2016.

General Authority: NDCC 26.1-22.1-14

Law Implemented: NDCC 26.1-22.1-14

CHAPTER 45-12-11 HOBBY BOILER OPERATOR LICENSING

Section	
45-12-11-01	Definitions
45-12-11-02	License Required
45-12-11-03	Existing Operator Licenses
45-12-11-04	Application
45-12-11-05	Term of the License
45-12-11-06	License Renewal
45-12-11-07	Hobby Boiler Operation
45-12-11-08	License Denial or Revocation

45-12-11-01. Definitions.

- 1. "Commissioner" means the insurance commissioner.
- 2. "Hobby boiler" means a hand-fired steam boiler that operates above fifteen pounds per square inch [103.42 kilopascals] gauge pressure operated during a parade, an exhibition, or a threshing show where the public is invited and not otherwise exempt from North Dakota Century Code section 26.1-22.1-06. Repealed effective January 1, 2024

History: Effective January 1, 2008. General Authority: NDCC 26.1-22.1-14

Law Implemented: NDCC 26.1-22.1-09, 26.1-22.1-14

45-12-11-02. License required.

- 1. Except as provided in subsection 3, no individual may operate a hobby boiler in this state unless licensed under this chapter.
- 2. The commissioner may not issue a hobby boiler license to an individual unless the individual:
 - a. Files a written application with the commissioner on a form prescribed by the commissioner;
 - b. Passes an examination developed by the commissioner and pays an examination fee of twenty-five dollars;
 - c. Provides evidence of the successful completion of one hundred twenty hours of apprenticeship training with a licensed hobby boiler operator. Training must include the following:
 - (1) Basic boiler, steam engine, and piping fundamentals;
 - (2) Initial firing of the boiler with wood or coal or both and warmup of the steam engine;
 - (3) Basic operation of the boiler and steam engine to include operation of:
 - (a) Blower valve;
 - (b) Main steam valve:
 - (c) Throttle valve and governor;
 - (d) Injector and pump operation to include feedline stop and check valves;
 - (e) Gauge glass, gauge cocks, and water column;

- (f) Safety valve and fusible plug basics;
- (g) Blowdown valve use; and
- (h) Steam engine operation and drain valves;
- (4) Normal shutdown procedures:
- (5) Emergency shutdown procedures;
- (6) Driving and steering to include the use of the reversing lever and stopping procedures; and
- (7) Lining up for belt operation.

Attendance at one hobby boiler training seminar approved by the commissioner may substitute for up to forty hours of apprenticeship training;

- d. Is at least sixteen years of age; and
- e. Pays a twenty-five dollar license fee.
- 3. A license is not required under this chapter if the hobby boiler operator is not a resident of this state and is qualified by reason of possessing a valid license from another state or Canadian province and this license has been approved by the commissioner. Repealed effective January 1, 2024

History: Effective January 1, 2008.

General Authority: NDCC 26.1-22.1-14

Law Implemented: NDCC 26.1-22.1-09, 26.1-22.1-14

45-12-11-03. Existing operator licenses.

An individual who has operated a hobby boiler within this state as of July 1, 2007, may receive a license without complying with subdivisions b and c of subsection 2 of section 45-12-11-02. "Operated a hobby boiler" means demonstrated operating experience in boiler operations and maintenance that include sufficient training, observation, and personal participation to enable the individual to safely operate a hobby boiler. Repealed effective January 1, 2024

History: Effective January 1, 2008.
General Authority: NDCC 26.1-22.1-14

Law Implemented: NDCC 26.1-22.1-09, 26.1-22.1-14

45-12-11-04. Application.

An individual applying for a hobby boiler operator license must complete an application in the form provided by the commissioner, pay any required fee, and provide a notarized affidavit signed by a licensed North Dakota hobby boiler operator attesting to the applicant's completion of one hundred twenty hours of training regarding the operation of a hobby boiler. The notarized affidavit need not be provided if it has already been provided by the applicant in connection with a previous application or if the applicant is applying for an existing operator license under section 45-12-11-03. Repealed effective January 1, 2024

History: Effective January 1, 2008.

General Authority: NDCC 26.1-22.1-14

Law Implemented: NDCC 26.1-22.1-09, 26.1-22.1-14

45-12-11-05. Term of the license.

A hobby boiler operator license is valid for six years except that an initial license expires on January first of the year after the license has been in effect for five years. Repealed effective January 1, 2024

History: Effective January 1, 2008. General Authority: NDCC 26.1-22.1-14

Law Implemented: NDCC 26.1-22.1-09, 26.1-22.1-14

45-12-11-06. License renewal.

An individual may apply to renew a hobby boiler operator license for six years by submitting to the commissioner a renewal request along with a twenty-five dollar renewal fee in advance of the license expiration date. Repealed effective January 1, 2024

History: Effective January 1, 2008.

General Authority: NDCC 26.1-22.1-14

Law Implemented: NDCC 26.1-22.1-09, 26.1-22.1-14

45-12-11-07. Hobby boiler operation.

- 1. Notwithstanding any other provision of this section and with the exception of the operation of miniature boilers, two licensed operators or a licensed operator and an apprentice operator must be in attendance on a hobby boiler during a parade or plowing demonstration or during belt operation. At least one licensed operator must be in attendance on a hobby boiler at all other times except when it is considered safe for a hobby boiler operator to leave the hobby boiler as described in subsection 2.
- 2. A hobby boiler operator is required to be in attendance on a hobby boiler any time the steam pressure is above fifteen pounds per square inch [103.42 kilopascals] gauge and rising unless:
 - a. The water is above the one-third level in the gauge glass;
 - b. The fire is extinguished or banked;
 - c. All draft doors are closed:
 - d. The main steam outlet valve or dome valve is closed; and
 - e. The boiler pressure is at least twenty pounds per square inch [137.90 kilopascals] gauge below the safety valve set pressure and the boiler pressure is decreasing. Repealed effective January 1, 2024

History: Effective January 1, 2008.

General Authority: NDCC 26.1-22.1-14

Law Implemented: NDCC 26.1-22.1-09, 26.1-22.1-14

45-12-11-08. License denial or revocation.

- The commissioner may deny an application for a hobby boiler operator's license if the applicable requirements of North Dakota Century Code chapter 26.1-22.1 and this chapter are not met or if an applicant is not capable of operating a hobby boiler in a safe manner.
- The commissioner may revoke a hobby boiler operator's license if the applicable requirements
 of North Dakota Century Code chapter 26.1-22.1 and this chapter are not met, if an operator
 operates a hobby boiler carelessly or negligently or otherwise endangers the health and safety
 of others.

3. An applicant or licenseholder may appeal the denial or revocation of a license by filing a written appeal with the commissioner within ten days of receipt of written notice of such a decision. Upon receipt of a timely appeal, an administrative hearing may be conducted in the manner provided in North Dakota Century Code chapter 28-32. Repealed effective January 1, 2024

History: Effective January 1, 2008. General Authority: NDCC 26.1-22.1-14

Law Implemented: NDCC 26.1-22.1-09, 26.1-22.1-14

ARTICLE 45-18 FIRE MARSHAL

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45-18-01 Fire Prevention

CHAPTER 45-18-01 FIRE PREVENTION

Section	
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45-18-01-01. Fire prevention rules - Intent.

It is the intent of this chapter to prescribe regulations consistent with nationally recognized good practice for the safeguarding of life and property from the hazards of fire and explosions.

History: Effective January 1, 2024.

General Authority: NDCC 18-01-04

Law Implemented: NDCC 18-01-02

45-18-01-02. Fire prevention rules - Scope.

- 1. This chapter supplements all laws defined within the North Dakota Century Code relating to fire safety and applies to all persons without restrictions, unless specifically exempted.
- 2. This chapter applies to existing conditions, as well as to conditions arising after the adoption of this chapter, except that conditions legally in existence at the time of adoption of this chapter and, not in strict compliance with this chapter, shall be permitted to continue only if, in the opinion of the state fire marshal, they do not constitute a distinct hazard to life or property.
- 3. Where there is a conflict between this chapter and those provisions of the North Dakota Century Code, the provisions of the North Dakota Century Code shall prevail.

History: Effective January 1, 2024.

General Authority: NDCC 18-01-04, 18-01-33

Law Implemented: NDCC 18-01-02

45-18-01-03. Definitions.

The following definitions shall be used when referred to in the content of this chapter:

- 1. "Authority having jurisdiction", "bureau of fire prevention", "chief", "chief of the fire department", "chief of the fire prevention bureau", "fire chief", "fire code official", "fire department", "fire marshal", "fire marshal's office", "fire prevention bureau", "fire prevention engineer", "fire prevention inspector", "fire protection engineer", "inspector", or "office of the fire marshal" refers to the state fire marshal or any representative of the state fire marshal's office.
- 2. "City or "jurisdiction" refers to the state of North Dakota.
- 3. <u>"Fire prevention code"</u>, "fire prevention rules", or "state fire code" refers to the rules provided for within this chapter.

4. "Local jurisdiction" refers to any agency of local or state government which has a defined responsibility for any population, group of persons, land area, occupancy type, class of persons, or municipality located within this state which is less than the entire land area, population or geographical makeup of this state.

History: Effective January 1, 2024.

General Authority: NDCC 18-01-04, 18-01-33 **Law Implemented:** NDCC 18-01-04, 18-01-33

45-18-01-04. Fire prevention rules.

The fire prevention rules for this state include, but are not limited to, the following:

Fire code. The State Fire Code includes:

- 1. The provisions of the State Building Code, effective January 1, 2023, providing for fire-safe construction and operation, as provided for in North Dakota Century Code section 54-21.3-03.
- 2. The provisions of the International Fire Code (IFC), 2021 edition International Code Council (ICC), with the following exceptions and modifications:
 - a. Chapter 1. Scope and Administration:
 - 101.1 Title. The words "[NAME OF JURISDICTION]" are replaced with "North Dakota".
 - **102.4 Application of building code.** Insert "as amended by the State of North Dakota" after the words "International Building Code" in both instances.
 - **103.1 Creation of Agency**. The words "[INSERT NAME OF DEPARTMENT]" is replaced with "North Dakota Fire Marshals Division."
 - <u>105.1.1 Permits required.</u> The words "obtain the required permit" are replaced with "may be required to obtain a permit".
 - 106.4 Retention of construction documents. Remove the words "One set of approved construction documents shall be returned to the applicant, and said set shall be kept on the site of the building or work at all times during which the work authorized thereby is in progress."
 - **112.4 Violation penalties.** Does not apply.
 - b. Chapter 2. Definitions.

<u>Commercial motor Vehicle.</u> Commercial Motor Vehicle is amended to read as follows: <u>"Refer to North Dakota Century Code 39-06.2-02 for Commercial Motor Vehicle definition."</u>

<u>Fireworks</u>. Fireworks is amended to read as follows: "Refer to North Dakota Century Code 23-15 for the Fireworks definition."

Residential Child Care Building. For the purposes of child care fire safety inspections, a Residential Child Care Building is defined as a maximum of 30 children in a building designed for residential purposes (i.e. single family dwelling, single apartment, etc.).

<u>Commercial Child Care or Pre-School Building.</u> For the purposes of child care fire safety inspections, a Commercial Child Care or Pre-School Building is defined as any building licensed for over 30 children, or any building designed for commercial purpose regardless of the number of occupants.

- c. Chapter 3. General Requirements
 - 308.1.4 Open-flame cooking devices. Insert "or decks" after the word "balconies."

Exception 3. The words "2 ½ pounds [nominal 1 pound (0.454 kg)" is replaced with "47.8 pounds [nominal 20 pounds (9 kg) LP-gas capacity."

- 308.1.6.3 Sky lanterns. Does not apply.
- 308.3 Group A occupancies. Exception 1. The following is added: "1.4 Open-flame devices for food warming."
- 314.4 Vehicles. Insert "Batteries may remain connected if keys are not in ignition system" immediately after subsection 1's "safety features" as a subsection a. Delete "Fuel in fuel tanks does not exceed one-quarter tank or 5 gallons (19 L) (whichever is least)" and renumber accordingly.
- Chapter 5. Fire Service Features.
 - 510.1 Emergency responder radio coverage in new buildings. In the first sentence, replace "New" with "Where required by the fire code official, new".
- e. Chapter 8. Interior Finishes
 - **806.1.1 Restricted Occupancies.** Insert the following exception: 3. For purposes of this provision, churches shall not be deemed public building and may utilize natural or resin bearing cut trees in the alter area of the church. No electric lighting is allowed on the tree.
- f. Chapter 9. Fire Protection and Life Safety Systems.
 - 903.2.8 Group R. The following exception is added: after "fire area" add "Exception: Sprinklers are not required in single family dwellings or residential buildings that contain no more than two dwelling units and no higher risk occupancy within the same building."
 - 903.3.1.1.1 Exempt Locations is amended by adding the following exception:
 7. Elevator machine room and machinery spaces. Where sprinklers are not installed in elevator machine rooms, shunt trip required in accordance with IBC 3005.5 shall not be installed.
 - 903.3.5 Water Supplies. After the words "fire code official." add "Underground water supply piping shall be constructed of a material allowed by the North Dakota State Plumbing Code and shall be allowed to extend into the building through the slab or wall not more than 24 inches."
 - <u>905.1.1 Standpipe Hose.</u> Add the following "The installation of the fire hose on standpipes may be omitted when approved by the fire code official. Approved standpipe hose valves and connections shall be provided where required."
 - **907.8.3 Fire Alarm System Interface.** Delete this paragraph in its entirety.
- g. Chapter 10. Means of Egress.
 - **1009.8.1 System Requirements.** After the words "monitoring location" delete the words "or 9-1-1."

1103.5.1 Group A-2.: After the word "Where" remove the words "alcoholic beverages are consumed" and immediately add the words "a State Liquor License is applied for or, renewed or in-place"

h. Chapter 23. Wood.

2301.1 Scope. After the words "in accordance with this chapter and" insert the words "/or". After the words "International Mechanical Code," insert the words "NFPA 30" and "NFPA 30A."

i. Chapter 61. Liquefied Petroleum Gases.

6101.3 Construction Documents. After the word "Where" delete "a single LP gas container is more than 2,000 gallons (750 L) in water capacity or".

6108.1 General.: After the words "(15,140 L) insert "at the request of the AHJ,"

History: Effective January 1, 2024.

General Authority: NDCC 18-01-04, 18-01-33, 18-09-02, 23-15-03

Law Implemented: NDCC 18-01-02, 18-01-04, 18-01-33, 18-09-02, 23-15-03

45-18-01-05. Availability of standards.

The standards listed in section 45-18-01-04 are available from:

National Fire Protection Association
 Batterymarch Park
 Quincy, Massachusetts 02269
 (617) 328-9290

2. International Code Council, Inc. 4051 West Flossmoor Road Country Club Hills, IL 60478-5795 (800) 214-4321

History: Effective January 1, 2024.

General Authority: NDCC 18-01-04, 18-01-33, 18-09-02, 23-15-03

Law Implemented: NDCC 18-01-02, 18-01-04, 18-01-33, 18-09-02, 23-15-03