Cross references: For coal and metal mines safety, see title 34; for fuel products safety, see articles 20 and 20.5 of title 8; for railroad safety appliances, see article 29 of title 40.

9-1-101. Doors - passages. Every room or building intended to be used as a theater, opera house, music hall, concert hall, church, or other like place of public assemblage shall be provided with at least one doorway of not less than five feet in width for each two hundred fifty persons who may be seated within such building in the part thereof intended for public assemblage and with proper and sufficient ways and passages leading to and from every such doorway, so that in case of fire or other sudden alarm those who may be within such building may speedily and safely escape therefrom.


9-1-102. Penalty. Every proprietor who builds or procures to be built or leases, procures, or permits to be used as a theater, opera house, concert hall, music hall, public school, church, or for any other like public assemblage any building not in conformity to this article is guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine of not more than five hundred dollars.


9-1-103. No action for rent. No action shall lie to recover the rent on any lease or contract for the use or occupation of any room or building used as a theater, opera house, concert hall, music hall, public school, church, or other like place of public assemblage unless such room or building at the time of such renting, use, or occupation has doorways, passages, and means of safe escape therefrom in case of fire, in conformity with this article.
9-1-104. Doors open outward. All doors provided for the doorways of every such room or building shall open outwards, and every person using or occupying any such room or building as a theater, opera house, concert hall, music hall, public school, church, or for other like public assemblage during the whole of every exhibition, performance, or assemblage therein shall cause all the doors thereof to be left unfastened or latched or barred upon the inner side only so that any person may readily and speedily open the same from the inner side of such room or building and shall cause all the stairways and other ways and passages leading to every such door to be kept open and free from persons seated or standing therein or other obstructions. Any person failing to observe this section is guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine of not more than two hundred dollars.

9-1-105. Fireproof stairways. Whenever any building is erected for the purpose of accommodating public assemblages and the rooms intended for such purpose are not on the first floor of such building, it is the duty of the persons erecting the same to provide and erect at least two fireproof stairways of ample dimensions sufficient for the sudden egress of such assemblages.

9-1-106. Loss of life - penalty. If any lives are lost by reason of the willful negligence and failure to observe the provisions of this article, the person through whose default such loss of life was occasioned commits a class 6 felony and shall be punished as provided in section 18-1.3-401, C.R.S.
ARTICLE 1.3

Low-flow Plumbing Fixtures

9-1.3-101 to 9-1.3-106. (Repealed)

Editor's note: (1) This article was added in 1989. For amendments to this article prior to its repeal in 2016, consult the 2015 Colorado Revised Statutes and the Colorado statutory explanatory note beginning on page vii in the front of this volume.

(2) Section 9-1.3-106 provided for the repeal of this article, effective September 1, 2016. (See L. 2014, pp. 1878, 1880.)

Cross references: For current provisions regarding low-efficiency plumbing fixtures, see article 7.5 of title 6.

ARTICLE 1.5

Excavation Requirements

9-1.5-101. Legislative declaration. The purpose of this article is to prevent injury to persons and damage to property from accidents resulting from damage to underground facilities by excavation. This purpose shall be facilitated through the creation of a single statewide notification system to be administered by an association of the owners and operators of underground facilities. Through the association, excavators shall be able to obtain crucial information regarding the location of underground facilities prior to excavating and shall thereby be able to greatly reduce the likelihood of damage to any such underground facility or injury to any person working at an excavation site.

Source: L. 81: Entire article added, p. 520, § 1, effective October 1. L. 93: Entire article amended, p. 498, § 1, effective September 1.

9-1.5-102. Definitions. As used in this article 1.5, unless the context otherwise requires:

(1) "ASCE 38" means the standard for defining the quality of an underground facility location as defined in the current edition of the American Society of Civil Engineers' "Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data (CI/ASCE 38-02)" or an analogous successor standard as determined by the safety commission.

(1.5) "Damage" includes the penetration or destruction of any protective coating, housing, or other protective device of an underground facility, the denting or partial or complete severance of an underground facility, or the rendering of any underground facility inaccessible.

(2) "Emergency situations" includes ruptures and leakage of pipelines, explosions, fires, and similar instances where immediate action is necessary to prevent loss of life or significant damage to property, including, without limitation, underground facilities, and advance notice of proposed excavation is impracticable under the circumstances.

(3) "Excavation" means any operation in which earth is moved or removed by means of any tools, equipment, or explosives and includes augering, backfilling, boring, ditching, drilling,
grading, plowing-in, pulling-in, ripping, scraping, trenching, hydro excavating, postholing, and tunneling. "Excavation" does not include:

(a) Routine maintenance on existing planted landscapes; or
(b) An excavation by a rancher or a farmer, as defined in section 42-20-108.5, occurring on a ranch or farm when the excavation involves:
   (I) Any form of existing agricultural activity that is routine for that ranch or farm;
   (II) Land clearing if the activity does not involve deep ripping or deep root removal of trees or shrubs; or
   (III) Routine maintenance of:
       (A) An existing irrigation facility if the facility has been subjected to maintenance in the previous twenty-four months; or
       (B) Existing fence lines.

(3.4) "Gravity-fed system" means any underground facility that is not pressurized and that utilizes gravity as the only means to transport its contents. These systems include sanitary sewer lines, storm sewer lines, and open-air irrigation ditches.

(3.7) "Licensed professional engineer" means a professional engineer as defined in section 12-120-202 (7).

(4) "Notification association" or "association" means the statewide notification association of owners and operators of underground facilities created in section 9-1.5-105.

(5) (a) "Operator" or "owner" means any person, including public utilities, municipal corporations, political subdivisions, or other persons having the right to bury underground facilities in or near a public road, street, alley, right-of-way, or utility easement.

   (b) "Operator" or "owner" does not include any railroad.

(6) "Person" means any individual acting on his or her own behalf, sole proprietor, partnership, association, corporation, or joint venture; the state, any political subdivision of the state, or any instrumentality or agency of either; or the legal representative of any of them.

(6.5) "Routine maintenance" means a regular activity that happens at least once per year on an existing planted landscape if earth is not disturbed at a depth of more than twelve inches by nonmechanical means or four inches by mechanical means and if the activities are not intended to permanently lessen the ground cover or lower the existing ground contours. Mechanical equipment used for routine maintenance tasks shall be defined as aerators, hand-held rototillers, soil injection needles, lawn edgers, overseeders, and hand tools.

(6.7) "Subsurface utility engineering notification" means a notice to the notification association that a project is being designed by a licensed professional engineer and that the project will include the investigation and depiction of existing underground facilities that meet or exceed the ASCE 38 standard.

(6.8) "Subsurface utility engineering-required project" means a project that meets all of the following conditions:

   (a) The project involves a construction contract with a public entity, as that term is defined in section 24-91-102;

   (b) The project involves primarily horizontal construction and does not involve primarily the construction of buildings;

   (c) (I) The project:

       (A) Has an anticipated excavation footprint that exceeds two feet in depth and that is a contiguous one thousand square feet; or

       (B) Has an anticipated excavation footprint that exceeds two feet in depth and that is not a contiguous one thousand square feet; or

       (C) Has an anticipated excavation footprint that exceeds two feet in depth and that is not a contiguous one thousand square feet but involves the excavation of a single underground facility.
(B) Involves utility boring.

(II) For purposes of this subsection (6.8)(c), the term "two feet in depth" does not include rotomilling, and the contiguous one thousand square feet does not include fencing and signing projects.

(d) The project requires the design services of a licensed professional engineer.

(6.9) "Underground damage prevention safety commission" or "safety commission" means the enforcement authority established in section 9-1.5-104.2.

(7) "Underground facility" means any item of personal property which is buried or placed below ground for use in connection with the storage or conveyance of water or sewage, electronic, telephonic, or telegraphic communications or cable television, electric energy, or oil, gas, or other substances. "Item of personal property", as used in this subsection (7), includes, but is not limited to, pipes, sewers, conduits, cables, valves, lines, wires, manholes, and attachments thereto.

Source: L. 81: Entire article added, p. 520, § 1, effective October 1. L. 93: Entire article amended, p. 498, § 1, effective September 1. L. 2000: (3) and (6) amended, p. 685, § 1, effective May 23. L. 2009: (2) and (3) amended and (6.5) added, (HB 09-1092), ch. 38, p. 151, § 1, effective August 5. L. 2018: IP, (1), and (3) amended and (1.5), (3.4), (3.7), and (6.7) to (6.9) added, (SB 18-167), ch. 256, p. 1561, § 1, effective August 8. L. 2019: (3.7) amended, (HB 19-1172), ch. 136, p. 1650, § 27, effective October 1.

9-1.5-103. Plans and specifications - notice of excavation - duties of excavators - duties of owners and operators - fee - repeal.

(1) (Deleted by amendment, L. 93, p. 499, § 1, effective September 1, 1993.)

(2) Architects, engineers, or other persons designing excavation shall obtain general information as to the description, nature, and location of underground facilities in the area of such proposed excavation and include such general information in the plans or specifications to inform an excavation contractor of the existence of such facilities and of the need to obtain information thereon pursuant to subsection (3) of this section.

(2.4) At the project owner's expense, a licensed professional engineer designing for a subsurface utility engineering-required project shall:

(a) Notify the notification association with a subsurface utility engineering notification;

(b) Either:

(I) Meet or exceed the ASCE 38 standard for defining the underground facility location in the stamped plans for all underground facilities within the proposed excavation area; or

(II) Document the reasons why any underground facilities depicted in the stamped plans do not meet or exceed ASCE 38 utility quality level B or its successor utility quality level;

(c) Attempt to achieve ASCE 38 utility quality level B or its successor utility quality level on all utilities within the proposed excavation area unless a reasonable rationale by a licensed professional engineer is given for not doing so; and

(d) Document the reasons why any underground facilities depicted in the stamped plans do not meet or exceed ASCE 38 utility quality level A or its successor utility quality level for underground facilities at the point of a potential conflict with the installation of a gravity-fed system.
(2.7) An underground facility owner that receives a subsurface utility engineering notification or other request for information from a designer shall respond to the request within ten business days after the request, not including the day of actual notice, in one or more of the following ways:

(a) Provide underground facility location records that give the available information on the location, not to include depth, of underground facilities within the project limits;
(b) Provide a mark on the ground that gives the approximate location, not to include depth, of its underground facilities within the project limits; or
(c) Provide the available information as to the approximate location, not to include depth, of its underground facilities within the project limits.

(3) (a) (I) (A) Except in emergency situations and except as to an employee or an employer's contractor with respect to the employer's underground facilities or as otherwise provided in an agreement with an owner or operator, a person shall not make or begin excavation without first notifying the notification association and, if necessary, the tier two members having underground facilities in the area of the excavation. Notice may be given in person, by telephone, by electronic methods approved by the notification association, or in writing if delivered.

(B) This subsection (3)(a)(I) is repealed, effective January 1, 2021.

(II) Effective January 1, 2021, except in emergency situations and except as to an employee or an employer's contractor with respect to the employer's underground facilities, a person shall not make or begin excavation without first notifying the notification association. Notice may be given by electronic methods approved by the notification association or by telephone.

(b) Notice of the commencement, extent, and duration of the excavation work shall be given at least two business days prior thereto not including the day of actual notice.

(c) (I) Any notice given pursuant to subsection (3)(b) of this section must include the following:

(A) The name and telephone number of the person who is giving the notice;
(B) The name and telephone number of the excavator; and
(C) The specific location, starting date, and description of the intended excavation activity.

(II) If an area of excavation cannot be accurately described on the locate request, the excavator shall notify the owner or operator of the area of excavation using one or more of the following methods:

(A) Physical delineation with white marks on a hard surface area;
(B) Electronic delineation on a map, plan sheet, or aerial photograph that can be transmitted electronically from the excavator to the facility owner or operator through the notification association; or
(C) Scheduling an on-site meeting between the excavator and the owner or operator.

(d) An excavator requiring existing marked underground facilities to be exposed may list a single secondary excavator on its notice to the notification association and employ the services of the listed secondary excavator to expose marked underground facilities using reasonable care to not damage the facilities. The secondary excavator may expose marked underground facilities under the excavator's notice to the notification association only if the excavator has complied with this subsection (3).
(4) (a) (I) Any owner or operator receiving notice pursuant to subsection (3) of this section shall, at no cost to the excavator and within two business days, not including the day of actual notice, use reasonable care to advise the excavator of the location, number, and size of any underground facilities in the proposed excavation area, including laterals in the public right-of-way, by marking the location of the facilities with clearly identifiable markings within eighteen inches horizontally from the exterior sides of the facilities. The markings must include the depth, if known, and shall be made pursuant to the uniform color code as approved by the American Public Works Association. The markings must meet the marking standards as established by the safety commission pursuant to section 9-1.5-104.2 (1)(a)(I). The documentation required by this subsection (4)(a)(I) shall be provided to the excavator through the notification association and must meet or exceed any quality standards established by the safety commission pursuant to section 9-1.5-104.2 (1)(a)(I). In addition to the markings, the owner or operator shall provide for each of its underground facilities:

(A) Documentation listing the owner's or operator's name and the size and type of each marked underground facility; and

(B) Documentation of the location of the underground facilities in the form of a digital sketch, a hand-drawn sketch, or a photograph that includes a readily identifiable landmark, where practicable.

(II) A sewer system owner or operator shall provide its best available information when marking the location of sewer laterals in the public right-of-way with clearly identifiable markings. "Best available information" includes tap measurements and historic records. If the sewer lateral can be electronically located, the sewer system owner or operator shall mark and document the location of the sewer laterals in accordance with this subsection (4)(a). If a sewer system owner or operator of a sewer lateral cannot electronically locate the sewer lateral, the excavator shall find the sewer lateral.

(III) The marking of customer-owned laterals in the public right-of-way is for informational purposes only, and an owner or operator is not liable to any party for damages or injuries resulting from damage done to customer-owned laterals.

(IV) If a person is involved in excavating across a preexisting underground facility, the owner of such facility shall, upon a predetermined agreement at the request of the excavator or the owner, provide on-site assistance. Any owner or operator receiving notice concerning an excavator's intent to excavate shall use reasonable care to advise the excavator of the absence of any underground facilities in the proposed excavation area by providing positive response documentation to the excavator through the notification association that no underground facilities exist in the proposed excavation area. An owner or operator shall, within the time limits specified in subsection (6) of this section, provide to the excavator evidence, if any, of underground facilities abandoned after January 1, 2001, known to the owner or operator to be in the proposed excavation area.

(b) The marking of underground facilities shall be considered valid so long as the markings are clearly visible, but not for more than thirty calendar days following the due date of the locate request initiated pursuant to subsection (3) of this section; except that, if an excavation notice is limited to only annual road maintenance that does not exceed six inches in depth conducted by a government agency on an existing unpaved road, the marking shall be considered valid for up to one hundred eighty days. Upon receipt of the notification, an owner or operator has ten business days to coordinate the excavation activity with the government agency. If an
excavation has not been completed within the applicable period, the excavator shall notify the notification association at least two business days, not including the day of actual notice, before the end of the applicable period.

(b.5) Any person who willfully or maliciously removes a marking used by an owner or operator to mark the location of any underground facility, except in the ordinary course of excavation, is guilty of a class 2 misdemeanor, and, upon conviction thereof, in addition to any order for restitution, shall be punished by a fine of not more than five thousand dollars for each offense, by imprisonment for not more than one year, or by both such fine and imprisonment.

(c) (I) (A) When a person excavates within eighteen inches horizontally from the exterior sides of any marked underground facility, the person shall use nondestructive means of excavation to identify underground facilities and shall otherwise exercise reasonable care to protect any underground facility in or near the excavation area. When utilizing trenchless excavation methods, the excavator shall expose underground facilities and visually observe the safe crossing of marked underground facilities when requested to do so by the underground facility owner or operator or the government agency that issued a permit for the excavation.

(B) The excavator shall maintain adequate and accurate documentation, including photographs, video, or sketches and documentation obtained through the notification association, at the excavation site on the location and identification of any underground facility and shall maintain adequate markings of any underground facility throughout the excavation period. A person shall not use a subsurface utility engineering notification for excavation purposes.

(II) (A) If the documentation or markings maintained pursuant to subsection (4)(c)(I) of this section become lost or invalid, the excavator shall notify the notification association or the affected owner or operator through the notification association and request an immediate reverification of the location of any underground facility. Upon receipt of the notification, the affected owner or operator shall respond as quickly as is practicable. The excavator shall cease excavation activities at the affected location until the location of any underground facilities has been reverified.

(B) If the documentation or markings maintained pursuant to subsection (4)(c)(I) of this section are determined to be inaccurate, the excavator shall immediately notify the affected owner or operator through the notification association and request an immediate reverification of the location of any underground facility. Upon receipt of the notification, the affected owner or operator shall respond as quickly as practicable. The excavator may continue excavation activity if the excavator exercises due caution and care to prevent damaging any underground facility.

(III) If a person performing routine maintenance discovers an underground facility in the area where the routine maintenance is being performed, the person shall notify the notification association and the affected owner or operator as quickly as practicable and request an immediate verification of the location of any underground facility. Upon receiving notification, the affected owner or operator shall respond as quickly as practicable. The person shall cease routine maintenance activities in the immediate area, as determined by exercising due caution and care, until the location of any underground facilities has been verified.

(5) In emergency situations, excavators shall take such precautions as are reasonable under the circumstances to avoid damage to underground facilities and notify affected owners or operators and the notification association as soon as possible of such emergency excavations. In the event of damage to any underground facility, the excavator shall immediately notify the
affected owner or operator and the notification association of the location and extent of such
damage.

(6) If documentation or markings requested and needed by an excavator pursuant to
subsection (4) of this section are not provided by the owner or operator within two business
days, not including the day of actual notice, or such later time as agreed upon by the excavator
and the owner or operator, or, if the documentation or markings provided fail to identify the
location of the underground facilities, the excavator shall immediately give notice through the
notification association to the owner or operator, may proceed with the excavation, and is not
liable for such damage except upon proof of the excavator's lack of reasonable care.

(6.5) If positive response required pursuant to subsection (4) of this section is not
provided by the owner or operator within two business days, not including the day of actual
notice, or by a later time as otherwise agreed upon in writing, the notification association shall
send an additional renotification to that owner or operator. The notification association shall
continue to send out renotifications daily until the notification association receives the positive
response.

(7) (a) In the event of damage to an underground facility, the excavator, owner, and
operator shall cooperate to mitigate damages to the extent reasonably possible, including the
provision of in-kind work by the excavator where technical or specialty skills are not required by
the nature of the underground facility. Such in-kind work may be under the supervision and
pursuant to the specifications of the owner or operator.

(b) If damage to an underground facility meets or exceeds the reporting threshold as
established by the notification association pursuant to paragraph (c) of this subsection (7), the
owner or operator of the damaged underground facility shall provide the information listed in
subparagraphs (I) to (VII) of paragraph (c) of this subsection (7) to the notification association
within ninety days after service has been restored.

(c) The notification association shall create and publicize to its members a reporting
process, including the availability of electronic reporting and a threshold at which reporting is
required, to compile the following information:

(I) The type of underground facility that was damaged;

(II) Whether notice of the intention to excavate was provided to the notification
association;

(III) Whether the underground facility had been validly marked prior to being damaged;

(IV) The type of service that was interrupted;

(V) Repealed.

(VI) The duration of the interruption; and

(VII) The location of the area where the underground facility was damaged.

(d) The notification association shall include a statistical summary of the information
provided to it under this subsection (7) in the annual report required under section 9-1.5-105
(2.6).

(e) (I) On or before July 1 of each year, the notification association shall prepare and
submit to the safety commission an annual report for each owner or operator summarizing the
following data from the prior calendar year:

(A) The number of locate requests submitted to the owner or operator pursuant to
subsection (4) of this section;
(B) The number of notices submitted to the owner or operator pursuant to subsection (6) of this section;

(C) The percentage of locate requests resulting in notices submitted to the owner or operator pursuant to subsection (6) of this section;

(D) The number of renotifications submitted to the owner or operator pursuant to subsection (6.5) of this section; and

(E) The percentage of locate requests resulting in renotifications submitted to the owner or operator pursuant to subsection (6.5) of this section.

(II) The notification association shall make the data in the annual report electronically accessible to the safety commission for customized reports or research.

(8) A person who performs maintenance shall take reasonable care when disturbing the soil.

(9) If damage results in the escape of any interstate or intrastate natural gas or other gas or hazardous liquid, the excavator or person that caused the damage shall promptly report to the owner and operator and the appropriate authorities by calling the 911 emergency telephone number or another emergency telephone number. The reporting is in addition to any reporting required to be made to any state or local agency.

(10) All new underground facilities, including laterals up to the structure or building being served, installed on or after August 8, 2018, must be electronically locatable when installed.

(11) Nothing in this article 1.5 affects or impairs any local ordinances or other provisions of law requiring permits to be obtained before an excavation. A permit issued by a government agency does not relieve an excavator from complying with this article 1.5.

Source: L. 81: Entire article added, p. 521, § 1, effective October 1. L. 93: Entire article amended, p. 499, § 1, effective September 1. L. 2000: (4)(a), (4)(c), (6), and (7) amended and (4)(b.5) added, p. 685, § 2, effective May 23. L. 2009: (4)(c)(III) and (8) added, (HB 09-1092), ch. 38, p. 152, §§ 2, 3, effective August 5. L. 2018: (2.4), (2.7), (6.5), (7)(e), and (9) to (11) added, (3)(a), (3)(c), (3)(d), (4)(a), (4)(b), (4)(c)(I), (4)(c)(II), and (6) amended, and (7)(c)(V) repealed, (SB 18-167), ch. 256, p. 1563, § 2, effective August 8.

9-1.5-104. Injunctive relief. (Deleted by amendment)


9-1.5-104.2. Underground damage prevention safety commission - creation - review of violations - enforcement - rules. (1) (a) There is hereby created the underground damage prevention safety commission in the department of labor and employment. The safety commission is transferred to the department by a type 2 transfer as that term is defined in section 24-1-105. The safety commission shall:

(I) Advise the notification association and other state agencies, the general assembly, and local governments on:

(A) Best practices and training to prevent damage to underground utilities;
(B) Policies to enhance public safety, including the establishment and periodic updating of industry best standards, including marking and documentation best practices and technology advancements; and

(C) Policies and best practices to improve efficiency and cost savings to the 811 program, including the review, establishment, and periodic updating of industry best standards, to ensure the highest level of productivity and service for the benefit of both excavators and owners and operators; and

(II) Review complaints alleging violations of this article 1.5 involving practices related to underground facilities and order appropriate remedial action or penalties.

(b) The safety commission and the notification association shall enter into a memorandum of understanding to facilitate implementation and administration of this section and sections 9-1.5-104.4, 9-1.5-104.7, and 9-1.5-104.8. The memorandum of understanding must include provisions outlining the roles and responsibilities of the safety commission regarding statewide enforcement and the roles and responsibilities of the notification association in administering the notification association as outlined in section 9-1.5-105.

(c) Notwithstanding the powers and duties assigned to the safety commission, this section and section 9-1.5-104.4 do not apply to a home rule county, city and county, municipality, or power authority established pursuant to section 29-1-204 (1), and nothing in this article 1.5 authorizes the safety commission to impose a penalty on or enforce a recommendation or remedial action regarding an alleged violation of this article 1.5 against a home rule county, city and county, municipality, or power authority; except that:

(I) The safety commission shall:

(A) Inform a home rule county, city and county, municipality, or power authority of an alleged violation of this article 1.5; and

(B) At the request of the applicable home rule county, city and county, municipality, or power authority, suggest corrective action; and

(II) Nothing in this subsection (1)(c) prohibits a home rule county, city and county, municipality, or power authority from participating in proceedings of the safety commission.

(d) The governing body of a home rule county, city and county, municipality, or power authority established pursuant to section 29-1-204 (1) shall adopt by resolution, ordinance, or other official action either:

(I) Its own damage prevention safety program similar to that established pursuant to this article 1.5; or

(II) A waiver that delegates its damage prevention safety program to the safety commission.

(2) (a) The governor shall appoint the following fifteen members of the safety commission, taking into consideration nominations made pursuant to this subsection (2)(a), subject to consent by the senate:

(I) One individual nominated by Colorado Counties, Inc., to represent counties;

(II) One individual nominated by the Colorado Municipal League to represent municipalities;

(III) One individual nominated by the Special District Association of Colorado to represent special districts;

(IV) One individual nominated by Colorado's energy industry to represent energy producers;
(V) One individual nominated by the Colorado Contractors Association to represent contractors;
(VI) Two individuals nominated by the excavator members of the notification association to represent excavators;
(VII) One individual nominated by the American Council of Engineering Companies of Colorado to represent engineers;
(VIII) One individual nominated by investor-owner utilities to represent investor-owner utilities;
(IX) One individual nominated by the Colorado Rural Electric Association to represent rural electric cooperatives;
(X) One individual nominated by the Colorado Pipeline Association to represent pipeline companies;
(XI) One individual nominated by the Colorado telecommunications and broadband industry to represent telecommunications and broadband companies;
(XII) One individual nominated by the Colorado Water Utility Council to represent water utilities;
(XIII) One individual nominated by the department of transportation to represent transportation; and
(XIV) One individual nominated by the commissioner of agriculture who is actively engaged in farming or ranching.

(b) The governor shall make initial appointments by January 1, 2019. The members' terms of office are three years; except that the initial term of one of the members appointed pursuant to:
(I) Subsections (2)(a)(I) to (2)(a)(V) of this section is one year; and
(II) Subsections (2)(a)(VI) to (2)(a)(X) of this section is two years.

(c) Within six months after its creation, the safety commission shall adopt bylaws and provide for those organizational processes that are necessary to complete the safety commission's tasks.

(d) The safety commission may promulgate rules to implement this section and sections 9-1.5-104.4, 9-1.5-104.7, and 9-1.5-104.8 and may revise the rules as needed.

(3) The safety commission shall meet at least once every three months. The safety commission shall operate independently of the notification association; however, the notification association and the department of labor and employment shall provide administrative support to the safety commission in performing its duties as outlined in this section.

(4) The safety commission may review complaints of alleged violations of this article 1.5. Any person may bring a complaint to the safety commission regarding an alleged violation. A person who brings a frivolous complaint, as determined by the safety commission, commits a minor violation and is subject to a fine as authorized by section 9-1.5-104.4.

(5) To review a complaint of an alleged violation, the safety commission shall appoint at least three and not more than five of its members as a review committee. The review committee must include the same number of members representing excavators and owners or operators and at least one member who does not represent excavators or owners or operators. A safety commission member who has a conflict of interest with regard to a particular matter shall recuse himself or herself from serving on a review committee with regard to that matter.
(6) (a) Before reviewing a complaint, the review committee shall notify the person
making the complaint and the alleged violator of its intent to review the complaint and of the
opportunity for both parties to participate. The notification must include the hearing date for the
complaint, which must be scheduled for a date within ninety days after the date on which the
safety commission received the complaint, and a statement that the parties may submit written or
oral comments at the hearing. The hearing date can be postponed by mutual agreement of the
parties to a date that is acceptable to the review committee. The complaining party may
voluntarily withdraw the complaint prior to a hearing by the review committee. The safety
commission shall promulgate rules governing the conduct of hearings under this section.

(b) The review committee shall determine whether a violation of the law has occurred
and, if appropriate, recommend remedial action consistent with the guidance developed pursuant
to section 9-1.5-104.4 (2). A recommendation of remedial action that includes a fine requires a
unanimous vote of the review committee. The review committee shall not recommend remedial
action or a fine against a homeowner, rancher, or farmer, as defined in section 42-20-108.5,
unless the review committee finds by clear and convincing evidence that a violation of the law
has occurred. Within seven business days after the completion of the hearing, the review
committee shall provide to the safety commission in writing a report of its findings of facts, its
determination of whether a violation of the law has occurred, and any recommendation of
remedial action or penalty.

(7) The safety commission is bound by the review committee's findings of fact and
decision, but the safety commission may adjust the review committee's recommendation of
remedial action or penalty if an adjustment is supported by at least twelve members of the safety
commission. Within ten business days after the safety commission meeting to review the
findings and recommendations of the review committee, the safety commission shall provide in
writing to the person making the complaint and the alleged violator a summary of the review
committee's findings and the safety commission's final determination with respect to any
required remedial action or penalty. The decision of the safety commission is final agency action
subject to review by the district court pursuant to section 24-4-106.

(8) If a decision by the safety commission involves a fine authorized by section 9-1.5-
104.4, the safety commission shall invoice for and collect the fine indicating that a violation of
this article 1.5 has been committed by a person or involving the underground facilities of a
person. The safety commission may enforce the fine assessed under this article 1.5 as provided
in section 24-30-202.4.

(9) (a) If a person does not comply with the safety commission's decision, the safety
commission, represented by the attorney general, may enforce this article 1.5 by bringing an
action in the Denver district court. In an action brought by the safety commission pursuant to this
section, the court may award the safety commission all costs of investigation and trial, including
reasonable attorney fees fixed by the court.

(b) Any costs incurred by the safety commission as a result of administering this article
1.5, including legal services, shall be paid from the safety commission fund created in section 9-
1.5-104.8. Any costs and fees awarded by the court pursuant to this subsection (9) shall be
deposited in the safety commission fund created in section 9-1.5-104.8.

Source: L. 2018: Entire section added, (SB 18-167), ch. 256, p. 1568, § 3, effective
August 8.
9-1.5-104.3. Alternative dispute resolution. The notification association shall create a voluntary alternative dispute resolution program in consultation with its members and all affected parties. The alternative dispute resolution program must be available to all owners or operators, excavators, and other interested parties regarding disputes arising from damage to underground facilities, including any cost or damage incurred by the owner or operator or the excavator as a result of any delay in the excavation project while the underground facility is restored, repaired, or replaced, exclusive of civil penalties set forth in and fines assessed pursuant to section 9-1.5-104.5 or 9-1.5-104.4, that cannot be resolved through consultation and negotiation. The alternative dispute resolution program must include mediation, arbitration, or other appropriate processes of dispute resolution. The issue of liability and amount of damages under Colorado law may be decided by an appointed arbitrator or by the parties in mediation. Nothing in this section changes the basis for civil liability for damages.


9-1.5-104.4. Penalties - guidance. (1) A person who violates this article 1.5 is subject to a fine of not more than five thousand dollars for an initial violation and not more than seventy-five thousand dollars for each subsequent violation within a twelve-month period.

(2) In the performance of its duties regarding any complaint, the safety commission is encouraged to consider training, support services, or other remediation measures that will improve the behavior of the party and further the goals of this article 1.5 to ensure the safety of all participants and Coloradans. The safety commission shall develop guidance for the recommendation of remedial actions that are consistent with the following principles:

(a) Guidance shall be developed to help the review committee in determining whether an alleged violation should be classified as a minor, moderate, or major violation;

(b) Alternatives to fines may be considered, especially for a party that the safety commission has not found to be responsible for a violation in the previous twelve months; and

(c) In considering the appropriate remedial action, the safety commission may consider the number of violations relative to the number of notifications received.

(3) The maximum fines for the three different classifications of violations are as follows:

| Number of violations within the previous twelve months |
|-----------------|-----------------|-----------------|-----------------|
| Minor           | Moderate         | Major           |
| One             | Two             | Three           | Four            |
| $250            | $500            | $1,000          | $5,000          |
| $1,000          | $2,500          | $5,000          | $25,000         |
| $5,000          | $25,000         | $50,000         | $75,000         |

(4) The following are not subject to a fine otherwise authorized pursuant to this section:

(a) With regard to an excavation occurring on a ranch or farm, a rancher or a farmer, as defined in section 42-20-108.5, unless the excavation is for a nonagricultural purpose; and

(b) With regard to a failure to notify the notification association or the affected owner or operator and to damage to an underground facility during excavation, a homeowner, rancher, or farmer, as defined in section 42-20-108.5, working on the homeowner's, rancher's, or farmer's property.

9-1.5-104.5. Civil penalties - applicability. (1) (a) Every owner or operator of an underground facility in this state shall join the notification association pursuant to section 9-1.5-105.

(b) Any owner or operator of an underground facility who does not join the notification association in accordance with paragraph (a) of this subsection (1) shall be liable for a civil penalty of two hundred dollars.

(c) (I) If any underground facility located in the service area of an owner or operator is damaged as a result of such owner or operator's failure to comply with paragraph (a) of this subsection (1), the court shall impose upon such owner or operator a civil penalty in the amount of five thousand dollars for the first offense and up to twenty-five thousand dollars for each subsequent offense within a twelve-month period after the first offense. Upon a first offense, the owner or operator shall be required by the court to complete an excavation safety training program with the notification association.

(II) If any owner or operator fails to comply with paragraph (a) of this subsection (1) on more than three separate occasions within a twelve-month period from the date of the first failure to comply with paragraph (a) of this subsection (1), then the civil penalty shall be up to seventy-five thousand dollars.

(d) If any underground facility is damaged as a result of the owner or operator's failure to comply with paragraph (a) of this subsection (1) or failure to use reasonable care in the marking of the damaged underground facility, such owner or operator shall be presumably liable for:

(I) Any cost or damage incurred by the excavator as a result of any delay in the excavation project while the underground facility is restored, repaired, or replaced, together with reasonable costs and expenses of suit, including reasonable attorney fees; and

(II) Any injury or damage to persons or property resulting from the damage to the underground facility. Any such owner or operator shall also indemnify and defend the affected excavator against any and all claims or actions, if any, for personal injury, death, property damage, or service interruption resulting from the damage to the underground facility.

(2) (a) Any person who intends to excavate shall notify the notification association pursuant to section 9-1.5-103 prior to commencing any excavation activity. For purposes of this paragraph (a), excavation shall not include an excavation by a rancher or a farmer, as defined in section 42-20-108.5, C.R.S., occurring on a ranch or farm unless such excavation is for a nonagricultural purpose.

(b) Any person, other than a homeowner, rancher, or farmer, as defined in section 42-20-108.5, C.R.S., working on such homeowner's, rancher's, or farmer's property, who fails to notify the notification association or the affected owner or operator pursuant to paragraph (a) of this subsection (2) shall be liable for a civil penalty in the amount of two hundred dollars.

(c) (I) If any person, other than a homeowner, rancher, or farmer, as defined in section 42-20-108.5, C.R.S., working on such homeowner's, rancher's, or farmer's property, fails to comply with paragraph (a) of this subsection (2) and damages an underground facility during excavation, such person shall be liable for a civil penalty in the amount of five thousand dollars for the first offense and up to twenty-five thousand dollars for each subsequent offense within a
twelve-month period after the first offense. Upon a first offense, such person shall be required to complete an excavation safety training program with the notification association.

(II) If any person fails to comply with paragraph (a) of this subsection (2) on more than three separate occasions within a twelve-month period from the date of the first failure to comply with paragraph (a) of this subsection (2), then the civil penalty shall be up to seventy-five thousand dollars.

d) If any person, other than a homeowner, rancher, or farmer, as defined in section 42-20-108.5, C.R.S., working on such homeowner's, rancher's, or farmer's property, fails to comply with paragraph (a) of this subsection (2) or fails to exercise reasonable care in excavating or performing routine maintenance and damages an underground facility during such excavation or routine maintenance, such person shall be presumably liable for:

(I) Any cost or damage incurred by the owner or operator in restoring, repairing, or replacing its damaged underground facility, together with reasonable costs and expenses of suit, including reasonable attorney fees; and

(II) Any injury or damage to persons or property resulting from the damage to the underground facility. Any such person shall also indemnify and defend the affected owner or operator against any and all claims or actions, if any, for personal injury, death, property damage, or service interruption resulting from the damage to the underground facility.

e) Paragraph (d) of this subsection (2) shall not apply to a person who commences excavation affecting an underground facility if the owner or operator of the underground facility has failed to comply with paragraph (a) of subsection (1) of this section or has failed to use reasonable care in the marking of the affected underground facility.

(3) (a) An action to recover a civil penalty under this section may be brought by an owner or operator, excavator, aggrieved party, district attorney, or the attorney general. Venue for such an action shall be proper in the district court for the county in which the owner or operator, excavator, or aggrieved party resides or maintains a principal place of business in this state or in the county in which the conduct giving rise to a civil penalty occurred.

(b) Any civil penalty imposed pursuant to this section, including reasonable attorney fees, shall be paid to the prevailing party.

(c) The penalties and remedies provided in this article 1.5 are in addition to any other remedy at law or equity available to an excavator or to the owner or operator of a damaged underground facility, and sections 9-1.5-104.2 and 9-1.5-104.4, regarding the safety commission's enforcement authority, do not limit or restrict any other remedy at law or equity available to an excavator or to the owner or operator of a damaged underground facility.

d) No civil penalty shall be imposed under this section against an excavator or owner or operator who violates any of the provisions of this section if the violation occurred while the excavator or owner or operator was responding to a service outage or other emergency; except that such penalty shall be imposed if such violation was willful or malicious.

(4) Nothing in this article shall be construed to impose an indemnification obligation on any public entity or to alter the liability of public entities as provided in article 10 of title 24, C.R.S.

(5) In determining the liability for or the amount of any damages or civil penalty pursuant to this article, a court or arbitrator shall consider the nature, circumstances, and gravity of the alleged violation and the alleged violator's degree of culpability, history of prior violations, and level of cooperation with the requirements of this article.
9-1.5-104.7. Damage prevention fund. (1) The damage prevention fund, referred to in this section as the "fund", is hereby created in the state treasury. The fund consists of:
(a) All receipts from money directed by law to be deposited to the fund;
(b) All fines collected pursuant to section 9-1.5-104.4; and
(c) Any other money that the general assembly may appropriate or transfer to the fund.
(2) The state treasurer shall credit all interest and income derived from the deposit and investment of money in the fund to the fund.
(3) Only the safety commission may authorize expenditures from the fund. Subject to annual appropriation by the general assembly, the safety commission may use money deposited in the fund only to:
(a) Develop and disseminate educational programming designed to improve worker and public safety relating to excavation and underground facilities; and
(b) Provide grants to persons who have developed educational programming that the notification association and the safety commission deem appropriate for improving worker and public safety relating to excavation and underground facilities.


9-1.5-104.8. Safety commission fund. (1) The safety commission fund, referred to in this section as the "fund", is hereby created in the state treasury. The fund consists of:
(a) All receipts from money directed by law to be deposited to the fund, including costs and fees awarded by a court pursuant to section 9-1.5-104.2 (9)(b); and
(b) Any other money that the general assembly may appropriate or transfer to the fund.
(2) The state treasurer shall credit all interest and income derived from the deposit and investment of money in the fund to the fund.
(3) Only the safety commission may authorize expenditures from the fund. Subject to annual appropriation by the general assembly, the safety commission may use money deposited in the fund only to pay for its expenses in administering this article 1.5.


9-1.5-105. Notification association - structure and funding requirements - duties of owners and operators - report - repeal. (1) There is hereby created a nonprofit corporation in the state of Colorado, referred to in this article 1.5 as the "notification association", which consists of all owners or operators of underground facilities. All owners and operators shall join the notification association and shall participate in a statewide program that utilizes a single, toll-
free telephone number 811 that excavators can use to notify the notification association of pending excavation plans.

(2) All underground facility owners and operators are members of the notification association. The notification association shall provide members that were not tier one members on or before August 8, 2018, with electronic notifications beginning on January 1, 2019, at no cost for twenty-four months. On or before January 1, 2021, all owners and operators become full members of the notification association and are entitled to receive full service benefits as part of membership as specified in this article 1.5. Nothing precludes a tier two member from becoming a tier one member with the two-year waiver of no-cost notifications at any time before January 1, 2021. Until December 31, 2020, membership is organized as follows:

(a) "Tier one" members who shall be full members of the notification association and shall receive full service benefits as part of such membership as specified in this article. Any owner or operator required to be a member of the association who was a member on February 1, 1993, shall be designated a tier one member without further action by such member.

(b) (I) "Tier two" members who shall be limited members and shall receive limited services as a part of such membership as specified in this article. Tier two members shall pay a one-time membership fee of twenty-five dollars to the notification association to partially defray the costs incurred by the association in organizing pursuant to this article. The notification association shall not assess any charges, costs, or fees to any tier two member other than the one-time membership fee.

(II) All tier two members shall provide the association with accurate information regarding the boundaries of such member's service area, the type of underground facility that may be encountered within such service area, and the name, address, and telephone number of a person who shall be the designated contact person for information regarding such member's underground facilities. A tier two member shall also provide geographical information concerning underground facilities it owns or operates which are not located within the designated service area to the notification association.

(III) Not later than January 1, 1994, the notification association shall provide any person who contacts the association regarding information concerning underground facilities owned or operated by a tier two member with the name of the person specified in subparagraph (II) of this paragraph (b).

(IV) The following owners or operators of underground facilities who are not designated as tier one members pursuant to paragraph (a) of this subsection (2) shall be designated as tier two members:

(A) Electric cooperative associations;
(B) Special districts organized under title 32, C.R.S.;
(C) Cable television operators;
(D) Municipalities and counties; and
(E) Telecommunications local exchange providers with fewer than fifty thousand access lines.

(2.1) (a) Subsection (2) of this section and this subsection (2.1) are repealed, effective January 1, 2021.

(b) On or before March 1, 2020, the notification association shall provide a report to the senate transportation committee and the house of representatives transportation and energy committee, or their successor committees, about its efforts to prepare for tier two members
transitioning to tier one membership. The report must include, but need not be limited to, the steps that have been implemented to ensure efficiencies in notification procedures and operations, a cost analysis of the transition, and information regarding any new technological advances adopted to improve efficiencies. In preparing the report, the notification association shall solicit input from members.

(2.3) Repealed.

(2.4) Effective January 1, 2021, all underground facility owners and operators are members of the notification association. All members are full members of the notification association and are entitled to receive full service benefits as part of membership as specified in this article 1.5.

(2.5) The notification association may accept any organization, person, or entity which has an interest in the purposes and functions of the association as a member whether specifically enumerated in this article or not. Any such member shall comply with the bylaws of the association.

(2.6) (a) The notification association shall prepare annual reports on its activities, as follows:

(I) A statistical summary of the information reported to it pursuant to section 9-1.5-103 (7)(b); and

(II) An annual, independent financial audit of its operations.

(b) The notification association shall provide a copy of both reports created under paragraph (a) of this subsection (2.6) to its members and shall provide the report created under subparagraph (I) of paragraph (a) of this subsection (2.6) to the public utilities commission of the state of Colorado.

(3) (a) (I) Except as provided in subsection (2) of this section, each member of the notification association shall provide all of the locations of any underground facilities that the member owns or operates to the notification association, and the association shall maintain the information on file for use by excavators.

(II) This subsection (3)(a) is repealed, effective January 1, 2021.

(b) Effective January 1, 2021, each member of the notification association shall provide general information regarding all of the locations of any underground facilities that the member owns or operates, for excavation notification purposes only, and the member's contact information, both of which shall be updated annually, to the notification association, and the association shall maintain the information on file in a manner that ensures the confidentiality and security of the information.

(c) Information regarding the location of underground facilities provided to the notification association by an owner or operator or to the safety commission by the notification association is exempt from the "Colorado Open Records Act", part 2 of article 72 of title 24, pursuant to section 24-72-204 (2)(a)(VIII)(A) regarding specialized details of critical infrastructure.

(4) (a) (I) The notification association is governed by a board of directors, which must be representative of the membership of the association.

(II) (A) Until December 31, 2020, the board must have at least one director that is a tier two member.

(B) This subsection (4)(a)(II) is repealed, effective January 1, 2021.
The board of directors shall be elected by the membership of the association pursuant to the bylaws of the association.

The notification association shall be incorporated and operated as a nonprofit corporation pursuant to the "Colorado Revised Nonprofit Corporation Act", articles 121 to 137 of title 7, C.R.S.

(6) This section does not apply to:
(a) Any owner or occupant of real property under which underground facilities are buried if the facilities are used solely to furnish service or commodities to the real property and no part of the facilities is located in a public street, county road, alley, or right-of-way dedicated to public use; or
(b) Any homeowner.

**Source:** L. 81: Entire article added, p. 522, § 1, effective October 1. L. 93: Entire article amended, p. 503, § 1, effective September 1. L. 97: (5) amended, p. 761, § 27, effective July 1, 1998. L. 2000: IP(2) amended and (2.6) R&RE, pp. 690, 691, §§ 5, 6, effective May 23. L. 2018: (1), IP(2), (3), (4), and (6) amended, (2.1) and (2.4) added, and (2.3) repealed, (SB 18-167), ch. 256, p. 1575, § 6, effective August 8.

9-1.5-106. Notice requirements - repeal. (1) The notification association created in section 9-1.5-105 shall:
(a) Receive and record notifications from excavators concerning intended excavation activities including sites, dates, and the nature of any intended excavation;
(b) Maintain a record of each notice of intent to excavate for a minimum of three years; and
(c) File the notification received regarding any proposed excavation site and the notification provided regarding such excavation site, including the date and time of each such notification, by reference number.
(2) The notification association shall establish and maintain a damage prevention safety program and shall conduct periodic public awareness campaigns.
(3) (a) (I) The notification association shall provide prompt notice of any proposed excavation to each affected tier one member that has any underground facilities in the area of the proposed excavation site. The notification association shall also provide the excavator with the name and telephone number of each tier two member that has any underground facilities in the area of the proposed excavation.
   (II) This subsection (3)(a) is repealed, effective January 1, 2021.
   (b) Effective January 1, 2021, the notification association shall provide prompt notice of any proposed excavation to each affected member that has any underground facilities in the area of the proposed excavation site.

**Source:** L. 93: Entire article amended, p. 505, § 1, effective September 1. L. 2018: (3) amended, (SB 18-167), ch. 256, p. 1577, § 7, effective August 8.

9-1.5-107. Notice of removal of underground facilities. At least ten days before beginning an excavation to remove an underground facility that is a gas transmission pipeline that has been abandoned or is unused and is not located in a public road, street, alley, or right-of-
way dedicated to public use, the excavator shall notify each owner of record and occupant of the real property where such underground facility is located. The notice shall state the commencement, extent, and duration of the excavation in addition to the information required by section 9-1.5-103 (3)(c) and shall be served in the same manner as personal service under the Colorado rules of civil procedure; except that, if such personal service cannot be made through the use of due diligence, notice may be served by mail to the owner's or occupant's last-known address. If a valid mailing address is not available through the use of due diligence, notice may be made by publication in a newspaper published in the county in which the property is located. For purposes of this section, an underground facility is not considered abandoned or unused if it is in operation for its intended purpose or is being actively maintained with reasonable anticipation of a future use.


9-1.5-108. Repeal - sunset review. (1) This section and sections 9-1.5-104.2, 9-1.5-104.4, 9-1.5-104.7, and 9-1.5-104.8 are repealed, effective September 1, 2028.

   (2) Before the repeal, the functions of the underground damage prevention safety commission related to underground facilities specified in sections 9-1.5-104.2, 9-1.5-104.4, 9-1.5-104.7, and 9-1.5-104.8 are scheduled for review in accordance with section 24-34-104.


ARTICLE 2

Safety Glazing Materials

9-2-101 to 9-2-106. (Repealed)

Source: L. 86: Entire article repealed, p. 502, § 125, effective July 1.

Editor's note: This article was numbered as article 2 of chapter 80, C.R.S. 1963. For amendments to this article prior to its repeal in 1986, consult the Colorado statutory research explanatory note and the table itemizing the replacement volumes and supplements to the original volume of C.R.S. 1973 beginning on page vii in the front of this volume.

ARTICLE 2.5

High Voltage Power Lines - Safety Requirements

9-2.5-101. Definitions. As used in this article, unless the context otherwise requires:

   (1) "Authorized person" means:

      (a) An employee of a public utility which produces, transmits, or delivers electricity;
(b) An employee of a public utility which provides and the work of which relates to communication services or an employee of a state, county, or municipal agency which has authorized circuit construction on or near the poles or structures of a public utility;

c) An employee of an industrial plant whose work relates to the electrical system of the industrial plant;

d) An employee of a cable television or communication services company or an employee of a contractor of a cable television or communication services company if specifically authorized by the owner of any necessary poles to make cable television or communication services attachments;

e) An employee or agent of a state, county, or municipal agency which has or the work of which relates to overhead electrical lines or circuit construction or conductors on poles or structures of any type.

(2) "High voltage" means voltage in excess of six hundred volts measured between conductors or between a conductor and the ground.

(3) "Overhead line" means all bare or insulated electrical conductors installed above the ground.

(4) "Person or business entity" means a party contracting to perform any function or activity upon any land, building, highway, or other premises.

(5) "Public utility" includes public service corporations, municipally owned electric systems, and districts subject to article XXV of the Colorado constitution.

Source: L. 83: Entire article added, p. 441, § 1, effective July 1.

9-2.5-102. Activity near overhead line - safety restrictions. (1) Unless danger against contact with high voltage overhead lines has been effectively guarded against as provided by section 9-2.5-103, a person or business entity shall not, individually or through an agent or employee, perform or require any other person to perform any function or activity upon any land, building, highway, or other premises if at any time during the performance of any function or activity it could reasonably be expected that the person performing the function or activity could move or be placed within ten feet of any high voltage overhead line or that any equipment, part of any tool, or material used by the person could be brought within ten feet of any high voltage overhead line during the performance of any function or activity.

(2) No person shall operate an aircraft within ten feet of any high voltage overhead line.


9-2.5-103. Activity in close proximity to lines - clearance arrangements - procedure - payment - notice. (1) If any person or business entity desires to temporarily carry on any function, activity, work, or operation in closer proximity to any high voltage overhead line than that which is permitted by this article, the person or business entity responsible for performing the work shall promptly notify the public utility operating the high voltage overhead line. The person or business entity may perform the work only after satisfactory mutual arrangements, including coordination of work and construction schedules, have been made between the public utility operating the lines and the person or business entity responsible for performing the work.
In cases where the person or business entity responsible for doing the work is doing so under contract or agreement with a governmental entity, and the governmental entity and the public utility operating the lines have already made satisfactory mutual arrangements, further arrangements for that particular activity are not required. Arrangements may include placement of temporary mechanical barriers to separate and prevent contact between material, equipment, or persons and the high voltage overhead lines or temporary deenergization and grounding or temporary relocation or raising of the high voltage overhead lines. The public utility operating the line shall promptly provide to the person or entity responsible for doing the work or having the work done an estimate of the amount to be charged for providing temporary clearances.

(2) (a) The person or business entity responsible for performing the work in the vicinity of the high voltage overhead lines shall pay any actual expenses of the public utility operating high voltage overhead lines in providing arrangements for clearances, except when prior arrangements for payment have been made between a governmental entity for whom the work is to be done and the public utility operating the lines and except in instances where the public utility operating high voltage overhead lines has installed lines within fifteen feet of an existing fixture or structure after the fixture or structure has been in place at a permanent location. The public utility is not required to provide the arrangements for clearances until an agreement for payment has been made; except that, if there is a dispute over the amount to be charged by the utility for providing arrangements for clearance, the utility shall commence with providing temporary clearance as if agreement had then been reached. If agreement for payment has not been reached within fourteen days after completion of temporary clearance, the public utility and the person or business entity responsible for doing the work shall resolve such dispute by arbitration or other legal means. Unless otherwise agreed to by the person or business entity responsible for doing the work, the public utility shall commence construction for temporary clearances within three working days after the date an agreement for payment, if required, has been reached or, if no payment is required, within five working days after the date of the request of the person responsible for the work. Once initiated, the clearance work shall continue without interruption until completed. Should the public utility fail to provide for temporary clearances or safety measures in a timely manner, the public utility shall be liable for costs or loss of production of the person or business entity requesting assistance to work in close proximity to high voltage overhead lines.

(b) A person requesting that the utility clear high voltage overhead lines shall not work near the lines until the utility notifies such person that the clearance is completed. If the location or the conditions of the planned work near a high voltage overhead line changes, the person shall notify the utility of such changes and cease all work until the utility has completed any additional clearance measures that may be necessary.

(3) In locations where identity of the public utility operating the high voltage overhead lines is not easily known, the Colorado public utilities commission shall, upon request, provide the name, address, and telephone number of such utility for notification purposes.

Source: L. 83: Entire article added, p. 442, § 1, effective July 1. L. 2003: (2) amended, p. 1412, § 1, effective April 29.
9-2.5-104. Violation. (1) (a) A person who violates this article may be subject to a civil penalty not to exceed one thousand dollars, to be imposed by any court of competent jurisdiction and credited to the general fund.

(b) A person who violates this article more than once may be subject to a civil penalty not to exceed two thousand dollars for each violation, to be imposed by a court of competent jurisdiction and credited to the general fund. A person who violates this article more than once may be liable for reasonable attorney fees and costs incurred in the prosecution of the violations as determined by the court.

(2) If a violation of this article results in physical or electrical contact with any high voltage overhead line, the person or business entity violating this article shall be liable to the owner or operator of the high voltage overhead line for damages to the facilities caused by the contact and for the liability incurred by the owner or operator due to the contact.

(3) Provisions of subsection (2) of this section notwithstanding, any person or business entity who has made arrangements for safety clearances and who commences any prohibited activity, work, or operation prior to such safety clearances having been made shall be liable for any damages incurred as a result of physical or electrical contact with the high voltage overhead line.

Source: L. 83: Entire article added, p. 443, § 1, effective July 1. L. 2003: (1) and (2) amended, p. 1413, § 2, effective April 29.

9-2.5-105. Exemptions. (1) Except as provided in subsection (2) of this section, this article does not apply to construction, reconstruction, operation, or maintenance by an authorized person of overhead electrical or communication circuits or conductors and their supporting structures, or to electrical generating, transmission, or distribution systems, or to communication systems, or to the collection of trash and refuse using equipment designed for that purpose, or to highway vehicles or agricultural equipment, including aerial applicators licensed pursuant to section 35-10-106, C.R.S., which in normal use may incidentally pass within the ten-foot clearance limitation, or to governmental entities responding to any emergency situation.

(2) (a) Highway vehicles shall not be operated within four and one-half feet of a high voltage overhead line unless the person or business entity operating the highway vehicle has complied with sections 9-2.5-102 and 9-2.5-103.

(b) This subsection (2) shall not apply to highway vehicles operated by the Colorado department of transportation responding to emergency situations.


9-2.5-106. Compliance with national electrical safety code - due care. Proof of compliance with the requirements of an applicable national electrical safety code standard, as published by the institute of electrical and electronics engineers or a successor entity, that is or was in effect at the time of the installation of the overhead line, establishes the highest degree of care in the defense of a negligence claim asserted by any person or entity that is exempt from this article pursuant to section 9-2.5-105.
ARTICLE 3

Fire Extinguishers - Sale and Use

9-3-101. Use of toxic fire-extinguishing agents prohibited. No person, partnership, association, or corporation shall use or install for use in any place of public assemblage, public or private school, hospital, institution, business or office building, apartment building, penal institution, nursing or convalescent home, factory, mill, workshop, bakery, hotel, motel, store, boarding or bunkhouse, theater, motor vehicle used for the transportation of students or passengers for hire, or establishment wherein laborers are employed any fire extinguisher or fire-extinguishing device containing carbon tetrachloride or an active agent having a level of vapor toxicity equal to or greater than carbon tetrachloride. Fire extinguishers acceptable under this article are those covered in national fire protection association's bulletin #10, dated May 19, 1967, entitled "Standard for the Installation of Portable Fire Extinguishers", and national fire protection association's bulletin #10A, dated May 19, 1967, entitled "Maintenance and Use of Portable Fire Extinguishers".


9-3-102. Sale of illegal fire extinguishers prohibited. No person shall sell, give, or offer for sale any fire extinguisher or fire-extinguishing device containing or designed to contain any active agent prohibited in section 9-3-101, if such fire extinguisher or fire-extinguishing device is intended for installation and use in any building or motor vehicle referred to in section 9-3-101, or is a grenade type or fusible link release device for use in any of said buildings or motor vehicles.


9-3-103. Enforcement. The sheriffs of every county in this state, the fire chiefs of every town, city, and fire protection district, and the safety inspectors appointed by the executive director of the department of labor and employment have full and concurrent jurisdiction to investigate violations of this article and enforce the provisions thereof.


9-3-104. Violation - penalty. Any person who violates any provision of this article is guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine of not more than one hundred dollars, or by imprisonment in the county jail for a term of not more than thirty days, or by both such fine and imprisonment.

9-3-105. District attorney to prosecute. Every district attorney to whom there is presented, or who in any way procures satisfactory evidence of any violation of the provisions of this article, shall cause appropriate proceedings to be commenced and prosecuted in the proper courts, without delay, for the enforcement of the penalties as provided in section 9-3-104.


ARTICLE 4

Boiler Inspection

Editor's note: This article was numbered as article 3 of chapter 17, C.R.S. 1963. The substantive provisions of this article were repealed and reenacted in 1971, resulting in the addition, relocation, and elimination of sections as well as subject matter. For amendments to this article prior to 1971, consult the Colorado statutory research explanatory note beginning on page vii in the front of this volume.

9-4-101. Definitions. As used in this article, unless the context otherwise requires:

(1) "A.S.M.E. boiler and pressure vessel code" means the boiler and pressure vessel code developed by the boiler and pressure vessel committee of the American society of mechanical engineers with amendments, addenda, and interpretations thereto, made and approved by the council of said society, 1968 edition, a copy of which code is on file in the office of the boiler inspection section of the division of oil and public safety.

(1.5) "A.S.M.E. review and survey" means the review and survey of the manufacturers quality control system for the certification of authorization for the use of the A.S.M.E. applicable code symbol stamp.

(2) "Boiler" means a closed pressure vessel in which a fluid is heated for use external to itself by the direct application of heat resulting from the combustion of fuel, solid, liquid, or gaseous, or by the use of electricity or nuclear energy.

(2.5) "Chief boiler inspector" means the person appointed by the director to oversee the boiler inspection section created in section 9-4-102.

(3) "Colorado boiler and pressure vessel code" is used to designate the accepted reference for construction, installation, operation, and inspection of boilers and pressure vessels and will be referred to as the "Colorado boiler and pressure vessel code", which includes the A.S.M.E. boiler and pressure vessel codes and the national board inspection code.

(4) "Condemned boiler" means a boiler which has been inspected and declared unsafe or disqualified as to legal requirements by an inspector qualified to take such action and to which has been applied a stamping or marking designating its rejection.

(5) "Director" means the director of the division of oil and public safety or his or her designee.

(6) "External inspection" means an inspection made when a boiler is in operation.

(7) "Hot-water heating boiler" means a boiler operated at pressure not exceeding one hundred sixty PSIG and temperature not exceeding two hundred fifty degrees Fahrenheit for water.
(8) "Hot-water supply boiler" means a boiler used to supply hot water operated at pressure not exceeding one hundred sixty PSIG and temperatures not exceeding two hundred fifty degrees Fahrenheit at or near the boiler outlet.

(9) "Internal inspection" means an inspection made when a boiler is shut down with all handholes or manholes opened for inspection of its interior.

(10) "Locomotive boiler" means a boiler mounted on a self-propelled track carrier and which is used to furnish motivating power for traveling on rails.

(11) "Miniature boiler" means any boiler which does not exceed any of the following limits:
   (a) Sixteen inches inside diameter of shell;
   (b) Five cubic feet gross volume exclusive of casing and insulation;
   (c) One hundred pounds PSIG maximum working pressure.

(12) "National board inspection code" means the "manual for boiler and pressure vessel inspections" published in 1970 by the national board of boiler and pressure vessel inspectors, 10th edition, and subsequent revisions.

(13) "Nonstandard boiler" means any boiler which does not qualify as a standard boiler.

(14) "Owner or user" means any person, firm, corporation, or business entity of whatever nature owning or operating any boiler within this state.

(14.3) "Owner-user inspection organization" means an owner or user of pressure-retaining items who maintains a regularly established inspection department, and whose organization and inspection procedures meet the requirements of the national board of boiler and pressure vessel inspectors rules or the American petroleum institute's API 510 program and are acceptable to the director.

(14.5) "Owner-user inspector" means an inspector who holds a valid national board of boiler and pressure vessel inspectors owner-user inspector commission and who has passed the examination prescribed by the national board or is an American petroleum institute certified inspector under a jurisdictionally approved owner-user inspection organization.

(15) "Portable boiler" means an internally fired boiler which is primarily intended for temporary locational use, the construction and usage of which is obviously portable for use in multiple locations.

(16) "Power boiler" means any boiler exceeding the miniature boiler size which generates steam or vapor at a pressure of more than fifteen pounds per square inch gauge (PSIG).

(16.5) "Pressure vessel" means a pressure vessel or a container for the containment of pressure, either internal or external. Except as exempted in section 1910.172 of the Colorado occupational safety and health general standards, such pressure may be obtained from an external source or by the application of heat from a direct or indirect source or by any combination of such methods. The scope in relation to the geometry of pressure-containing parts shall terminate at the following: The first circumferential joint for welding end connections, or the face of the first flange in bolted flanged connections, or the first threaded joint in that type of connection.

(17) "Reinstalled boiler" means a boiler removed from its original setting and reerected at the same location or erected at a new location without change of ownership.

(18) "Relief valve" means an automatic pressure-relieving device actuated by static pressure upstream of the valve which opens farther with an increase in pressure over the opening pressure. It is used primarily for liquid service.
(19) "Safety relief valve" means an automatic pressure-actuated relieving device suitable for use either as a safety valve or relief valve, depending on application.

(20) "Safety valve" means an automatic pressure-relieving device activated by static pressure upstream of the valve and characterized by full-opening pop action. It is used for steam, gas, or vapor service.

(21) "Secondhand boiler" means a boiler in which both location and ownership have been changed after primary use.

(22) "Section" means the boiler inspection section of the division of oil and public safety.

(23) "Service and domestic-type water heater" means a water heater of either instantaneous or storage type used for heating or combined heating and storage of hot water for domestic or sanitary purposes or for space heating in which none of the following limitations is exceeded:

(a) Heat input of two hundred thousand BTUs per hour;
(b) Fluid temperature of two hundred ten degrees Fahrenheit;
(c) Normal internal fluid capacity of one hundred twenty gallons.

(24) "Shop inspection" means inspection of new construction of boilers or pressure vessels, and shall include review of the specifications, determination that such construction is in accordance with the applicable codes, and certification to the national board and to the A.S.M.E. that such completed new construction is eligible to be stamped with the appropriate A.S.M.E. symbol.

(25) "Special boiler inspector" means an inspector who has received and maintained in force a commission as inspector issued by the national board of boiler and pressure vessel inspectors and authorized by the boiler inspection section to inspect or insure boilers in the state of Colorado.

(26) "Standard boiler" means a boiler which bears the stamp of the state of Colorado or another state which has adopted a standard boiler construction equivalent to that required by the Colorado boiler and pressure vessel code or a boiler which bears the A.S.M.E. stamp.

(27) "State boiler inspector" means any boiler inspector employed by the division of oil and public safety.

(28) "Steam-heating boiler" means a boiler operated at pressure not exceeding fifteen PSIG for steam.

Source: L. 71: R&RE, p. 267, § 1. C.R.S. 1963: § 17-3-1. L. 76: (28) amended and (1.5) and (16.5) added, p. 362, § 1, effective July 1. L. 2001: (1), (22), and (27) amended, p. 1134, § 56, effective June 5. L. 2009: (23)(b) amended, (HB 09-1309), ch. 234, p. 1071, § 1, effective May 4. L. 2011: (2.5) added and (5) amended, (HB 11-1050), ch. 8, p. 16, § 1, effective August 10. L. 2012: (14.3) and (14.5) added, (HB 12-1217), ch. 51, p. 184, § 1, effective August 8.

9-4-102. Boiler inspection section - created - director - chief boiler inspector - inspectors - qualifications. (1) The director shall carry out the provisions of this article. The director may appoint a chief boiler inspector to oversee the boiler inspection section, which is hereby created in the division of oil and public safety. The chief boiler inspector and each state boiler inspector must be qualified from practical experience in the construction, maintenance, repair, or operation of boilers as a mechanical or safety engineer, steam engineer, boilermaker,
or boiler inspector of not less than five years' actual experience to enable him or her to judge the safety of boilers for use as such. Neither the chief boiler inspector nor any state boiler inspector shall be interested directly or indirectly in the manufacture, ownership, or sale of boilers or boiler supplies.

(2) The chief boiler inspector and state boiler inspectors shall be reimbursed for necessary traveling expenses as provided by law.


9-4-103. Duties - rules. (1) The director shall keep in his or her office a complete and accurate record of the names of owners or users of boilers inspected, giving a full description of the boiler, the pressure allowed, the date when last inspected, and by whom. The director or chief boiler inspector shall investigate and report to the division of oil and public safety the cause of any boiler explosion that occurs within the state. Definitions and rules for the safe construction, installation, inspection, operation, maintenance, and repair of boilers and pressure vessels in the state of Colorado, in addition or supplemental to the existing rules, shall be formulated by the section under the direction of the chief boiler inspector and shall become effective upon approval by the director.

(2) The definitions and rules so formulated for new construction shall be based upon and at all times follow the generally accepted nationwide engineering standards, formulas, and practices established and pertaining to boiler and pressure vessel construction and safety, and the section, with the approval of the director of the division of oil and public safety, may adopt an existing codification thereof known as the boiler and pressure vessel code of the American society of mechanical engineers, and when so adopted and incorporated by reference pursuant to section 24-4-103 (12.5), C.R.S., shall constitute a part of the whole of the definitions and rules of the section.

(3) The section, under the direction of the director, shall formulate rules establishing a schedule for the inspection of boilers and pressure vessels and may formulate other rules governing the inspection, operation, maintenance, and repair of boilers and pressure vessels in addition and supplemental to those rules that are part of the Colorado boiler construction code as originally enacted and amended. The rules so formulated shall be based upon and at all times follow the generally accepted nationwide engineering standards and may be based upon those portions of an existing published codification of such rules known as the inspection code of the national board of mechanical engineers and pressure vessel inspectors as are considered by the section to be properly applicable. Rules formulated by the section and identification of those portions of the national board inspection code which are declared to be applicable shall be made available to all persons directly affected by a publication which will be prepared and issued, upon request, to such persons by the section.

(4) Inspectors shall carefully inspect every boiler used or proposed to be used in this state for steaming, hot-water heating purposes, or hot-water supply, including all attachments and connections, in accordance with the inspection schedule established pursuant to subsection (3) of this section.
9-4-104. Exemptions. (1) The following are exempt from the provisions of this article:
   (a) Boilers located in private residences;
   (b) Boilers located in apartment houses having less than six family units;
   (c) Any city or town where boiler inspectors of comparable capability to state boiler
       inspectors are employed, where adequate records of boiler inspections are maintained, and where
       there is in effect a boiler inspection code comparable to that of the state pursuant to the
       ordinances of said city or town. A city or town not now providing such service may, upon
       application to the director of the division of oil and public safety with submission of proof of
       such comparability, be authorized by the director of the division of oil and public safety to
       establish a boiler inspection system that is exempt from the provisions of this article.
   (d) Service and domestic-type water heaters;
   (e) Boilers owned or operated by the federal government;
   (f) Locomotive boilers of carriers subject to the federal locomotive inspection law.


9-4-105. Inspections of boilers. (1) Inspectors making internal inspections of boilers
shall give the owner or user not less than five days' prior notice of the time when they will make
such inspections.
   (2) An inspector may, upon seeing conditions that, in the inspector's discretion, indicate
that there has been deterioration of any pressure-containing portion of a boiler or pressure vessel,
assess the leak tightness capability of a boiler or pressure vessel by conducting a pressure test in
accordance with the pressure testing considerations and guidance contained in the national board
inspection code. The owner or user of the pressure-retaining boiler or pressure vessel shall
provide any necessary labor and equipment required to apply the pressure test prescribed by the
inspector.
   (3) If at any time an inspector finds a boiler or pressure vessel which, according to the
Colorado boiler and pressure vessel code, is unsafe after inspection of same, he shall condemn
and forbid its future use until satisfactory repairs are made or said boiler is replaced.


9-4-106. Owner to report boilers - wrongful use - inspection of new installations. (1)
It is the duty of the owner of boilers or user of boilers, except those boilers exempt from the provisions of
this article under section 9-4-104, used or which are to be used in this state, to report to the
section the location of newly installed or relocated boilers.
   (2) Before the installers of any boiler have boilers placed in service, they shall notify the
section, which, within ten days or as soon thereafter as possible from the date of receiving such
notification, shall send an inspector to examine said boilers to determine that the construction,
material, bracing, fuel and fluid supply systems, control apparatus, combustion air and ventilating air, electric wiring, piping, and all other parts of such boilers are such as to assure the safety of the boilers.

(3) Upon completion of installation, all boilers shall be inspected by a state boiler inspector. At the time of inspection, each boiler shall be assigned a serial number by the inspector, which serial number shall be stamped on or affixed to the boiler.

(4) The serial number and letters, whether stamped on or affixed to the boiler, shall not be less than five-sixteenths of an inch in height, and the serial number shall be preceded by the letters "Colo". The stamping shall not be concealed by lagging or paint and shall be exposed at all times. Metal tags shall be furnished by the section on which the assigned number may be stamped. The tag shall be securely affixed to the boiler in the area of the manufacturer's identification and must be used when the metal of which the boiler is made may be damaged by direct stamping.

(5) The owners or users of boilers, or engineers in charge of same, shall not allow a greater pressure in any boiler than is stated on the certificate of inspection issued by the section. No person or business entity shall use any boiler that has been condemned as unsafe by a state boiler inspector. No person or business entity shall operate a boiler without a valid certificate of inspection.


9-4-106.5. Owner to report boilers taken out of service. (1) It is the duty of the owner or user of boilers used in this state, except those boilers exempt from the provisions of this article under section 9-4-104, to report to the section the location and state serial number of boilers that have been taken out of service but not removed from the premises. For purposes of this article, a boiler is not "taken out of service" if it is temporarily shut down for routine maintenance or minor repairs.

(2) The section, under the direction of the director, shall formulate rules for the safe removal from service of boilers condemned pursuant to section 9-4-105 (3) or voluntarily taken out of service by the owner or user.

(3) A boiler that has been condemned or voluntarily taken out of service may be placed back in service, subject to any applicable requirements for satisfactory repair, imposed pursuant to section 9-4-105 (3), and subject to compliance with section 9-4-106. For purposes of section 9-4-106, such a boiler shall be treated as a new boiler.


9-4-107. Certificate. (1) If, upon inspection, a boiler is found to comply with the Colorado boiler and pressure vessel code, the owner or user thereof shall pay directly to the section such fee as is prescribed by section 9-4-109, and the division of oil and public safety shall issue to such owner or user an inspection certificate bearing the date of inspection and the date of expiration of the certificate and specifying the maximum pressure under which the boiler may be operated.

(2) An inspection certificate is valid for the period stated on the face of the certificate.
The certificate of inspection or a copy of the certificate of inspection shall be posted in the room containing the boiler inspected or, in the case of a portable boiler, shall be kept in a metal container to be fastened to the boiler. Failure to properly exhibit the certificate of inspection will result in another inspection of the boiler and demand for inspection fees.


9-4-108. Violation by owner or user - penalty - enforcement. (1) If the owner of any boiler fails to report the location of such boiler to the section, the owner is guilty of a misdemeanor, and, if the owner or his agent fails to have said boiler ready for internal inspection as provided in this article, said owner shall be liable to pay fees and expenses of the inspector incurred in the inspection of any such boiler.

(2) Any owner who fails or refuses to comply with all requirements or directions of this article pertaining to notification of boiler placement, replacement, or operation; condones operation of condemned boilers; refuses a reasonable request to inspect any boiler used for heating or water supply service or any similar use; refuses to pay inspection and expenses or penalties or license fees; operates any boiler or similar device in defiance of a division of oil and public safety order or an order of the director shall, upon notice, cease to use or operate or allow the use or operation of any approved or nonapproved boiler or water-heating equipment owned by him or her until permission to resume use of such equipment is granted by the director.

(3) Actions shall be instituted by the attorney general or the district attorney, or may be instituted by the city attorney of any city, to prosecute such acts in violation of this article within his jurisdiction as may come to his knowledge or to enforce the provisions of this article independently and without specific direction of the director. Each such violation shall be a separate offense.

(4) Any person convicted of a violation of this article shall be punished by a fine of not more than one thousand dollars, or by imprisonment in the county jail for a period of not more than one year, or by both such fine and imprisonment.


9-4-108.5. Variances. Any owner or user may apply to the director for a rule or order for a variance from the standards, rules, regulations, or requirements of this article, upon providing such information as prescribed by the director. The director shall issue such rule or order if he determines that the proponent of the variance has demonstrated that the construction, installation, and operation of the boiler or pressure vessel will be as safe as if the standards, rules, regulations, or requirements were complied with. The rule or order so issued shall prescribe the construction, installation, operation, maintenance, and repair conditions that the owner or user must maintain. Such a rule or order may be modified or revoked upon application by an owner or user or by the director on his own motion at any time after six months from its issuance.
9-4-109. Fees for boiler and pressure vessel inspection certificates. (1) (a) (I) There shall be paid for the issuance of a certificate of boiler or pressure vessel inspection of each individual boiler or pressure vessel, regardless of how it is joined or connected, according to this article by the owner or user of said boiler or pressure vessel, such fees as shall be established by the director of the division of oil and public safety by rule; except that such fees shall not exceed the amount necessary to accumulate and maintain in the boiler inspection fund a reserve sufficient to defray the division's administrative expenses for a period of two months, and in no event shall the basic fee for an annual inspection exceed one hundred fifty dollars for an internal inspection or eighty-five dollars for an external inspection. The basic fee for a biennial or triennial inspection shall not exceed eighty-five dollars. The division shall not charge for an inspection other than to assess the fees established pursuant to this subsection (1). Any fees established pursuant to subparagraphs (III) to (V) of this paragraph (a) or pursuant to paragraph (b) of this subsection (1) shall be in addition to the basic fee.

(II) (Deleted by amendment, L. 2001, p. 529, § 1, effective July 1, 2001.)

(III) In addition to the basic fee established in subparagraph (I) of this paragraph (a), the division may assess a reinspection fee for any boiler condemned pursuant to section 9-4-105 (3). The reinspection fee shall be assessed and collected for each reinspection until the repairs are deemed satisfactory in accordance with section 9-4-105 (3).

(IV) In addition to the basic fee established in subparagraph (I) of this paragraph (a), the division may assess a disconnection inspection fee.

(V) In addition to the basic inspection fee established in subparagraph (I) of this paragraph (a), the division shall assess a certificate of boiler operation issuance fee not to exceed twenty-five dollars per certificate.

(b) There shall be paid, for the services provided by the national board of boiler and pressure vessel commissioned inspectors, fees as provided in the following schedule:

(I) Secondhand boiler or equipment at the request of the owner for certificate $30.00 plus expenses

(II) National board shop inspection or A.S.M.E. quality control survey

$100.00 1/2 day,
$200.00 full day plus travel and subsistence expense (1/2 day minimum).

(2) The section may prorate the boiler inspection fees. Twenty-five percent of the inspection fee shall be charged for a period up to and including twenty-five percent of the certificate term. Fifty percent of the inspection fee shall be charged for periods up to and including fifty percent of the certificate term. Seventy-five percent of the inspection fee shall be charged for periods up to and including seventy-five percent of the certificate term. The full fee shall be charged for periods exceeding seventy-five percent of the certificate term.

(2.5) Repealed.

(3) All boiler or pressure vessel inspection certificate fees shall be paid within thirty days from the date of inspection to the department of labor and employment. Upon failure to pay the department of labor and employment, the chief boiler inspector shall issue an order to the owner or user to cease and desist the use or operation or allowing the use or operation of the boiler or pressure vessel until permission to resume use of such equipment is granted by the director.
All fees collected by the department of labor and employment under the provisions of this article shall be used to defray the salaries and operating expenses incurred in the administration of this article and shall be appropriated for such purposes by the general assembly. Such moneys shall be transferred to the state treasurer, who shall deposit the same to the credit of the boiler inspection fund, which fund is hereby created.

If any person who is required to pay a fee pursuant to subsection (1) of this section fails or refuses to remit such fee, the department of labor and employment shall proceed at once to collect the fee by employing such legal processes as may be necessary for that purpose.

The state treasurer shall invest any portion of the boiler inspection fund which is not needed for immediate use. All interest earned upon such invested portion shall be credited to the fund and used for the same purposes and in the same manner as other moneys in the fund. Such moneys may be invested in the types of investments authorized in sections 24-36-109, 24-36-112, and 24-36-113, C.R.S.


Editor's note: Amendments to subsection (1)(a)(I) by House Bill 01-1373 and House Bill 01-1279 were harmonized.

9-4-110. Special inspectors. (1) In addition to the boiler inspectors authorized by this article, the section shall, upon request of any company authorized to insure against loss from explosion of boilers in this state, issue to any boiler inspectors of said company commissions as special boiler inspectors. Each such inspector, before receiving a commission, shall satisfy the division of oil and public safety that such inspector is properly qualified to perform such inspections. Possession of a valid commission as inspector issued by the national board of boiler and pressure vessel inspectors shall be considered to be proper qualification.

(2) Such special boiler inspectors shall receive no salary from, nor shall any of their expenses be paid by, the state, and continuance of a special boiler inspector's commission shall be conditioned upon such special boiler inspector's continuing in the employ of the boiler insurance company duly authorized as aforesaid and upon the maintenance of the standards imposed by the division of oil and public safety. Such special boiler inspectors shall perform their functions in accordance with the instructions for special boiler inspectors formulated by the section.

(3) Such special boiler inspectors shall inspect all boilers insured by their respective companies and, when so inspected, the owners or users of such insured boilers shall pay Colorado boiler inspection fees for the issuance of a certificate of inspection.
(4) Each company employing such special boiler inspectors, within thirty days following each boiler inspection made by such inspectors, shall file a report of such inspection with the section upon appropriate forms promulgated by the division of oil and public safety.

(5) If the division of oil and public safety has reason to believe that a special boiler inspector is no longer qualified to hold an appointment or commission, the division of oil and public safety or its selected agent, upon not less than ten days' written notice to the inspector and the inspector's employer, shall hold a hearing at which such inspector and the inspector's employer shall have an opportunity to be heard. If, as a result of such hearing, the division of oil and public safety or its selected agent finds that such inspector is no longer qualified to hold an appointment or commission, the division of oil and public safety, or upon recommendation of its selected agent, shall revoke or suspend such appointment or commission.

(6) A person whose appointment or commission has been suspended shall be entitled to apply, after ninety days from the date of such suspension, for reinstatement of such appointment or commission.


9-4-110.5. Owner-user inspection organizations - registration. (1) A person, firm, partnership, or corporation operating boilers or pressure vessels may seek approval and registration as an owner-user inspection organization by filing an application with the director on prescribed forms.

(2) The applicant shall show the name of the organization and its principal address and the name and address of the person or persons having supervision over inspections made by the organization on the application and registration. The applicant shall report changes in supervisory personnel to the director within thirty days after the change.

(3) Each owner-user inspection organization shall:

(a) Conduct inspection of its nonexempt boilers and pressure vessels, utilizing only qualified inspection personnel;

(b) Retain on file at the location where equipment is inspected a true record or copy of the report of each inspection signed by the owner-user inspector who made the inspection;

(c) Promptly notify the director of any boiler or pressure vessel that does not meet requirements for safe operation;

(d) Maintain inspection records that include a list of nonexempt boilers and pressure vessels, showing the serial number and the abbreviated description as may be necessary for identification, the date of the last inspection of each unit, the approximate date of the next inspection, and documentation of all repairs. Such inspection records shall be readily available for examination by the director, the chief boiler inspector, or their designee during business hours.

(e) Transmit a statement annually to the director, on a date mutually agreed upon. The individual having supervision over the inspections made during the period covered shall sign the statement and shall include the number of vessels inspected during the year and shall certify that each inspection was conducted in accordance with the inspection requirements in the Colorado boiler and pressure vessel rules.
A state-issued certificate of inspection is required for boilers and pressure vessels inspected by an owner-user inspection organization when all of the requirements in this section are met.

An individual or organization performing an inspection pursuant to this section shall have liability insurance appropriate for the size and scope of the relevant inspection.

**Source:** L. 2012: Entire section added, (HB 12-1217), ch. 51, p. 184, § 2, effective August 8.

**9-4-111. Penalty - inspector fails to perform duty.** An inspector of boilers for every failure to perform his duties is guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine of not less than one hundred dollars nor more than one thousand dollars, or by imprisonment in the county jail for a period of not less than two months nor more than one year, or by both such fine and imprisonment.

**Source:** L. 71: R&RE, p. 275, § 1. C.R.S. 1963: § 17-3-11.

**9-4-112. Regulations common to all types and services of boilers.** (1) Each boiler shall be supported by masonry or structural supports of sufficient strength and rigidity to safely support the boiler. There shall be no excessive vibration in either the boiler or its connecting piping.

(2) All boilers shall be so located that adequate space on each side will be provided for proper operation of the boiler and its appurtenances, for the inspection of all surfaces, tubes, water walls, piping, valves, and other equipment, and for their necessary maintenance and repair.

(3) Inflammable or volatile materials shall not be stored in boiler rooms. Gas meters shall not be installed in boiler rooms.

(4) There shall be provided to all boiler installations sufficient air to assure adequate combustion of fuel. There shall be ventilating air provided to prevent undue overheating in the boiler room. Nationally accepted standards such as the publications of the national fire protection association shall be followed in determining the adequacy of combustion and ventilating air.

(5) Safety or safety relief valves, or both, shall be of adequate capacity to prevent accumulation of excess pressure with fixed settings not in excess of the maximum allowable working pressure of the boiler to which they are attached. All new safety relief valves shall bear stamping which indicates that they have been capacity-rated according to national board standards and that they have been constructed according to A.S.M.E. standards.

(6) The use of weighted-lever safety valves shall be prohibited, and these valves shall be replaced by direct spring-loaded safety or safety relief valves that conform to the requirements of the A.S.M.E. boiler and pressure vessel code.

(7) Safety valves having either a seat or disc of cast-iron construction are prohibited.

(8) The safety or safety relief valve shall be connected directly to the hottest part of the boiler, independent of any other connection, without a shutoff valve of any description between the safety or safety relief valve and the boiler.

(9) Each automatically fired boiler shall be equipped with a flame failure safeguard device which will positively discontinue flow of fuel to the firing chamber in event of absence of
flame. Discontinuation must occur in time to prevent an explosive accumulation of fuel in the firing chamber and connecting passages.

(10) Every safety or safety relief valve shall be connected to the boiler in an upright position with spindle vertical and shall be equipped with a try lever to test opening of the valve.

(11) When a discharge pipe is attached to a safety or safety relief valve, it shall not be reduced less than the valve outlet and shall be as short and straight as possible and arranged to avoid undue stresses on the valve. There shall be no shutoff valve in such discharge pipe.

(12) The discharge opening of safety or safety relief valves shall be so located that the released fluids and vapors cannot come into harmful contact with attendants or other persons. All safety or safety relief valve discharges shall be located or piped to clear running boards or platforms. Ample provision for gravity drain shall be made in the discharge pipe at or near each safety valve and where condensation may collect. Any discharge pipe extending above the safety or safety relief valve shall be equipped with a drain hole which will prevent accumulation of fluid above the valve disc.

(13) All electric wiring to boilers and to electrically operated automatic devices and control mechanisms shall be of a high temperature resistant insulation, and wiring shall be in conduit or other approved covering.

(14) All fuel and fluid piping valves and appliances shall be of materials listed in nationally approved standards, installed in a workmanlike manner, with such support as is necessary to prevent vibration. They shall be maintained so as to be free of leakage.

(15) Repairs shall be made in accordance with the regulations set forth in the national board inspection code. Major repairs shall be reported to the section before being performed. The major repair procedure and the shop performing the repair must be approved by the section or the authorized insurer and an inspection made by a state or special boiler inspector before the boiler is used.

(16) All boilers, unless exempt by this article, are subject to regular inspections as provided for in section 9-4-103 (4). Each boiler shall be prepared by the owner or user for inspections or hydrostatic test whenever necessary when notified by the inspector or the section. The owner or user shall prepare each boiler for internal inspection, when so requested by a state boiler inspector, in the manner prescribed in the national board inspection code.

(17) If the boiler is jacketed so that longitudinal seams of shells, drums, or domes cannot be seen, enough of the jacketing, setting, wall, or other form of casing or housing shall be removed to permit the inspection of the size of the rivets, pitch of the rivets, and other data necessary to determine the safety of the boiler if such information cannot be determined by other means.

(18) No person shall remove or tamper with any safety appliances prescribed by this article except for the purpose of making repairs.

(19) All insurance companies insuring boilers operated in this state shall notify the section within thirty days after any insurance policy insuring a boiler has been written, canceled, not renewed, or suspended because of unsafe conditions.

(20) If upon an external inspection there is evidence of a leak or crack, enough of the covering of the boiler shall be removed to permit a boiler inspector to determine the safety of the boiler; or, if the covering cannot be removed immediately, he may order the operation of the boiler stopped until such time as the covering can be removed and proper examination made.
9-4-113. New power boiler installations. (1) No power boiler, except those exempt by this article, shall be installed in this state unless it has been constructed, inspected, and stamped in conformity with the rules for construction of power boilers of the A.S.M.E. boiler and pressure vessel code and is registered with the national board of boiler and pressure vessel inspectors, and inspected in accordance with the requirements of this article and the rules and regulations of the section.

(2) A power boiler having the standard stamping of another state that has adopted a standard of construction equivalent to the standard provided in this article may be accepted by the director; however, the person or firm desiring to install the boiler 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.

(3) All new power boiler installations and reinstalled boilers shall be installed in accordance with the requirements of the A.S.M.E. boiler and pressure vessel code and, in addition, in accordance with the requirements of this section.

(4) All power boilers heated with gas, oil, or mechanical firing, except forced flow steam generators designed to operate without a fixed water level and stoker- or hand-fired coal-burning units which are constantly attended, shall be provided with an automatic low-water fuel cutout and with an automatic fuel-regulating control, controlled by boiler pressure or temperature, or both.

(5) All new power boiler rooms shall be constructed to have at least two means of exit. Each exit shall be remotely located from the other. Each elevation shall have at least two means of egress, each remotely located from the other.


9-4-114. Existing power boiler installations. (1) The maximum allowable working pressure of standard boilers shall be determined by the applicable sections of the codes under which they were constructed and stamped. The maximum allowable working pressure on the shell of a nonstandard boiler or drum shell shall be determined by the strength of the weakest section of the structure computed in accordance with formulas provided by the national board of boiler and pressure vessel inspectors or any other nationally recognized engineering authority.

(2) Each power boiler having not more than five hundred square feet of water-heating surface shall have at least one approved safety valve. Each boiler having more than five hundred square feet of water-heating surface shall have two or more approved safety valves.

(3) The safety valve capacity of each power boiler shall be that which will discharge all the steam that can be generated by the boiler without allowing the pressure to rise more than six percent above the highest pressure any valve is set, and in no case to more than six percent above the maximum allowable working pressure.

(4) Power boilers equipped with one safety valve shall have the safety valve set at or below the maximum allowable working pressure. If additional valves are used, the highest pressure setting on additional valves shall not exceed the maximum allowable working pressure by more than three percent.

(5) When two or more power boilers operating at different pressures and safety valve settings are interconnected, the lower pressure boilers or interconnected piping shall be equipped with safety valves of sufficient capacity to prevent overpressure, considering the generating capacity of the boiler with the lowest allowable pressure.

(6) All power boilers shall have a water-feed supply which will permit the boilers being fed at any time while under pressure.

(7) Power boilers that are fired with solid fuel not in suspension and having more than five hundred square feet of water-heating surface shall have at least two means of feeding water. Each source of feeding shall 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, and one such source of feeding shall be steam-operated.

(8) Power boilers fired by gaseous, liquid, or solid fuel in suspension and having less than five hundred square feet of water-heating surface may be equipped with a single source of feeding water if:
   
   (a) Means are provided for immediate shutoff of heat release;
   
   (b) The boiler furnace and fuel system do not retain sufficient stored heat to cause damage to the boiler if the water-feed supply is interrupted.

(9) Power boilers that have a water-heating surface of not more than one hundred square feet shall not have water-feed piping and connection to the boiler smaller than one-half inch pipe size. For boilers having a water-heating surface of more than one hundred square feet, the water-feed piping and connection to the boiler shall not be less than three-fourths inch pipe size. The feed water shall be introduced into a boiler in such a manner that the water will not be discharged directly against surface-exposed gases of high temperature or to direct radiation from the fire or near any riveted joints of the furnace sheets or shell. The water-feed pipe shall 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 shall be a regulating valve on the branch to each boiler between the check valve and the source of supply. In all cases where returns are fed back to the boiler by gravity, a check valve and stop valve shall be on each return line, the stop valve placed between the boiler and the check valve, and both shall be located as close to the boiler as practicable.

(10) Fire-actuated plugs, if used, shall conform to the requirements of the A.S.M.E. boiler and pressure vessel code for power boilers.

(11) No outlet connections, except for damper regulator, feed-water regulator, low-water fuel cutout, drains, or steam gauges, shall be placed on the piping that connects the water column or gauge glass to the boiler. The water column shall be provided with a drain valve of at least three-fourths of an inch pipe size.

(12) Each power boiler, except forced flow steam generators designed to operate without a fixed water level, shall have at least one water-gauge glass; except that boilers operated at pressures over four hundred PSI shall be provided with two water-gauge glasses which may be connected to a single water column or connected directly to the drum, in which case they shall conform to A.S.M.E. requirements. The gauge-glass connections and pipe connections shall not be less than one-half inch pipe size. Each water-gauge glass will be fitted with a drain cock or valve. When the boiler operating pressure exceeds one hundred PSI, the glass will be fitted with a globe or gate-valved drain.
The lowest visible part of the water-gauge glass shall be at least two inches above the lowest permissible water level, which level shall be that at which there will be no danger of overheating any part of the boiler when in operation at that level. This subsection (13) does not apply to forced flow steam generators which are designed to operate without a fixed water level.

Each power boiler shall have a steam gauge, with dial range not less than one and one-half times the maximum allowable working pressure, connected to the steam space or to the steam connection to the water column. The steam gauge shall 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.

Each power boiler shall be provided with a one-fourth inch nipple and globe valve connected to a steam space for the exclusive purpose of attaching a test gauge when the boiler is in service so the accuracy of the gauge may be ascertained.

Steam-gauge connections shall be suitable for the maximum allowable working pressure and steam temperature; if the temperature exceeds four hundred degrees Fahrenheit, brass or copper pipe or tubing shall not be used.

When a steam-gauge connection longer than eight feet becomes necessary, a shutoff valve may be used near the boiler if the valve is of the outside-screw-and-yoke type and is locked open when the boiler is in operation. The line shall be of ample size with provisions for free blowing.

Each steam-discharge outlet, except a safety valve, shall be fitted with a stop valve located as close as practicable to the boiler. When such outlets are over two-inch pipe size, the valve used on the connection shall be the outside-screw-and-yoke rising spindle type to indicate, at a distance, the position of its spindle, whether it is closed or open. The wheel may be carried either on the yoke or attached to the spindle.

When power boilers provided with manholes are connected to a common steam main, the steam connection from each boiler shall be fitted with two stop valves having ample free-blow drain between them. The discharge of this drain shall be visible to the operator while manipulating the valves and shall be piped clear of the boiler setting. The stop valve shall consist preferably of one automatic nonreturn valve set next to the boiler and a second valve of the outside-screw-and-yoke type; or two valves of the outside-screw-and-yoke type may be used.

Each power boiler shall have a blow-off pipe fitted with a valve or cock. All fittings and pipe shall conform to the applicable section of the A.S.M.E. boiler and pressure vessel code.

Provisions shall be made for the expansion and contraction of steam mains connected to power boilers by providing substantial anchorage at suitable points so undue strain shall not be transmitted to the boiler. Steam reservoirs shall be used on steam mains when heavy pulsations of the steam currents cause vibration of the boiler shell plates.

All power boilers heated with gas, oil, or mechanical firing, except stoker- or hand-fired coal-burning units which are constantly attended, shall be provided with an automatic low-water fuel cutout and with an automatic fuel-regulating control, controlled by boiler pressure.

All cases not specifically covered by this article shall be treated as new installations or may be referred to the director for instructions concerning the requirements.

9-4-115. New miniature boiler installations. (1) No miniature boiler, except those exempted by rules promulgated by the division of oil and public safety, shall be installed in this state unless it has been constructed, inspected, and stamped in conformity with the rules of construction of miniature boilers of the A.S.M.E. boiler and pressure vessel code and is registered with the national board of boiler and pressure vessel inspectors and inspected in accordance with this article.

(2) A miniature boiler having the standard stamping of another state that has adopted a standard of construction equivalent to the standard of the state of Colorado may be accepted by the director; however, the person or firm desiring to install the boiler 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.

(3) All new boiler installations and reinstalled boilers shall be installed in accordance with the requirements of the A.S.M.E. boiler and pressure vessel code and this article.

(4) Upon completion of the installation, all boilers shall be inspected by a state or special boiler inspector. At the time of inspection, each boiler shall be assigned a serial number by the inspector, which serial number shall be stamped on or affixed to the boiler as provided by section 9-4-106 (3).


9-4-116. Existing miniature boiler installations. (1) Miniature boilers shall be installed in accordance with the provisions in section 9-4-113 unless a special exemption is stated in this article or otherwise provided by the director.

(2) The maximum allowable working pressure on the shell or drum of a miniature boiler shall be determined by the provisions of section 9-4-114 (1).

(3) The factor of safety and the construction of miniature boilers, except where otherwise specified, shall conform to that required for power boilers.

(4) Each miniature boiler shall be equipped with a spring-load, pop-type safety valve not less than one-half inch pipe size connected directly to the boiler.

(5) The safety valve shall have sufficient capacity to 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.

(6) In cases where the miniature boiler is supplied with feed water directly from a pressure main or system without the use of a mechanical feeding device, the safety valve shall 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 shall not be considered mechanical feeding devices.

(7) Each miniature boiler designed for operation with a definite water level shall be equipped with a glass water-gauge for determining the water level.

(8) Miniature boilers operated in a closed system where there is insufficient space for the usual glass water-gauge may use water-level indicators of the glass bull's-eye type.

(9) Every miniature boiler shall be provided with at least one water-feed pump or other water-feeding device, except where it is connected to a water main carrying sufficient pressure to
feed the boiler or where it is operated with no extraction of steam, such system being commonly known as a closed system.

10. The water-feed pipe shall be provided with a check valve and a stop valve no less in size than that of the pipe.

11. Feed water shall not be introduced through the water column or gauge-glass connection while the boiler is under pressure.

12. Pressure of a feed water system greater than the maximum allowable working pressure of the boiler shall be fitted with a pressure-reducing valve before feed water is introduced into the boiler.

13. Each miniature boiler shall be provided with a blow-off connection, not less than one-half inch iron pipe size, connected directly to the lowest water space.

14. Blow-off piping shall not be galvanized and shall be provided with a valve or cock.

15. Each miniature boiler shall be equipped with a steam-gauge having its dial graduated to not less than one and one-half times the maximum allowable working pressure. The gauge shall be connected to the steam space or to a steam connection to the water column. The gauge or connection shall contain a siphon or equivalent device which will develop and maintain a water seal that will prevent steam from entering the gauge tube. The minimum size of a siphon, if used, shall be one-fourth inch inside diameter.

16. The steam piping from a miniature boiler shall be provided with a stop valve located as close to the boiler shell or drum as is practicable, except where the boiler and steam receiver are operated as a closed system.

17. For miniature boiler installations which are gas-fired, the burners shall conform to the requirements of the American gas association and the A.S.M.E. boiler and pressure vessel code.

18. The heating element for electrically heated steam boilers, closed system, shall be so constructed that the temperature will not exceed one thousand two hundred degrees Fahrenheit.

19. All miniature boilers heated with gas, oil, or electrical energy shall be provided with an automatic low-water fuel cutout and with an automatic fuel-regulating control, controlled by boiler pressure.

20. All cases not specifically covered by this article shall be treated as new installations or may be referred to the director for instructions concerning the requirement.


9-4-117. New heating boilers and hot-water supply boilers installations. No heating boiler or hot-water supply boiler, except those exempt by this article, shall be installed in this state unless it has been constructed, inspected, and stamped in conformity with the rules for construction of low-pressure heating boilers of the A.S.M.E. boiler and pressure vessel code and is approved, registered, and inspected in accordance with the requirements of this article.


9-4-118. Existing heating boilers and hot-water supply boilers installations. (1) The maximum allowable working pressure of a boiler built in accordance with the A.S.M.E. boiler
and pressure vessel code shall in no case exceed the pressure indicated by the manufacturer's identification stamped or cast on the boiler or a plate secured to it.

(2) The maximum allowable working pressure on the shell of a nonstandard, riveted heating boiler shall be determined in accordance with section 9-4-114 (1) covering existing power boiler installations. In no case shall the maximum allowable working pressure of a steam-heating boiler exceed fifteen pounds per square inch gauge, or a hot-water boiler exceed one hundred sixty pounds per square inch gauge, at a temperature not exceeding two hundred fifty degrees Fahrenheit.

(3) The maximum allowable working pressure of a nonstandard steel or wrought-iron heating boiler of welded construction shall not exceed fifteen pounds per square inch gauge. For other than steam service, the maximum allowable working pressure shall be calculated in accordance with the rules for construction of low-pressure heating boilers of the A.S.M.E. boiler and pressure vessel code.

(4) The maximum allowable working pressure of a nonstandard boiler composed principally of cast iron shall not exceed fifteen pounds per square inch gauge for steam service or thirty pounds per square inch gauge for hot-water service.

(5) The maximum allowable working pressure of a nonstandard boiler having cast-iron shell or heads and steel wrought-iron tubes shall not exceed fifteen pounds per square inch gauge for steam service or thirty pounds per square inch gauge for water service.

(6) A radiator in which steam pressure is generated at a pressure of fifteen pounds per square inch gauge or less is a low-pressure boiler.

(7) Each steam-heating boiler shall have one or more officially rated valves of the spring pop-type adjusted to discharge at a pressure not to exceed fifteen PSI. The safety valves shall be arranged so that they cannot be reset to relieve at a higher pressure than the maximum allowable working pressure of the boiler.

(8) No safety valve for a steam-heating boiler shall be smaller than three-fourths of an inch except in case the boiler and radiating surfaces are a self-contained unit.

(9) The safety valve capacity for each steam-heating boiler shall be such that with the fuel-burning equipment installed the pressure cannot rise more than five pounds above the maximum allowable working pressure.

(10) Each hot-water boiler shall have not less than one officially rated pressure relief valve set to relieve at or below the maximum allowable working pressure of the boiler. Each hot-water supply boiler shall have not less than one officially rated relief valve or not less than one officially rated pressure-temperature relief valve of the automatic-reseating type set to relieve at or below the maximum allowable working pressure of the boiler. Relief valves shall be so constructed that they cannot be reset to relieve at a higher pressure than the maximum permitted pressure.

(11) Seats and discs of safety relief valves shall be of material suitable to resist corrosion. No materials subject to deterioration or vulcanization when subjected to saturated steam temperature corresponding to capacity test pressure shall be used in any safety relief valve.

(12) No safety relief valve shall be smaller than three-fourths of an inch nor larger than four and one-half inches pipe size.

(13) When the size of the boiler requires a safety relief valve larger than four and one-half inches in diameter, two or more valves having the required combined capacity shall be used.
(14) Each steam-heating boiler shall have a steam gauge connected to its steam space, or to its water column, or to its steam connection. The gauge or connection shall have a siphon or equivalent device which will develop and maintain a water seal that will prevent steam from entering the gauge tube. The connection shall be so arranged 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 lever handle arranged to be parallel to the pipe in which it is located when the cock is open.

(15) Each hot-water heating boiler or hot-water supply boiler shall 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, when the cock is open, shall be parallel to the pipe in which it is located.

(16) The scale on the dial of the pressure or altitude gauge for a hot-water heating boiler shall be graduated to not less than one and one-half nor more than three times the maximum allowable working pressure.

(17) The scale on the dial of a steam-heating boiler gauge shall be graduated to not less than thirty PSIG nor more than sixty PSIG, and travel of the pointer from zero to thirty PSIG pressure shall be at least three inches.

(18) In addition to the mandatory requirements for a pressure relief device, each hot-water heating or hot-water supply boiler shall be fitted with a temperature-actuated control, which will control the rate of combustion to prevent the temperature of the water from rising above two hundred fifty degrees Fahrenheit at or near the boiler outlet. The control shall be constructed so that it cannot be set or reset to permit operation of the firing equipment when the temperature of the water is higher than two hundred degrees Fahrenheit.

(19) When a pressure-actuated control is used on a steam-heating boiler, it shall operate to prevent the steam pressure from rising above fifteen PSIG.

(20) Each automatically fired steam or vapor-system heating boiler shall be equipped with an automatic low-water fuel cutoff, so located as to automatically cut off fuel supply when the surface of the water falls to the lowest safe water line.

(21) Each steam-heating boiler shall have one or more water-gauge glasses attached to the water column or boiler by means of valved fittings with the lower fitting provided with a drain valve of the straightway type with opening not less than one-fourth inch diameter to facilitate cleaning. Gauge-glass replacement shall be possible under pressure.

(22) If, in the judgment of an inspector, a steam-heating or hot-water supply boiler is unsafe for operation at the pressure previously approved, the pressure shall be reduced, proper repair made, or the boiler retired from service.


ARTICLE 5

Standards for Accessible Housing

Editor's note: This article was amended with relocations in 2003, resulting in the addition, relocation, and elimination of sections as well as subject matter. For amendments to this article prior to 2003, consult the Colorado statutory research explanatory note and the table itemizing the replacement volumes and supplements to the original volume of C.R.S. 1973
9-5-101. Definitions. As used in this article 5, unless the context otherwise requires:

(1) "Accessibility point" means a unit of value exchanged for different levels of accessible dwelling types to satisfy the requirements for dwelling accessibility contained in this article.

(2) "Accessible route" means an interior or exterior circulation path that complies with ICC/ANSI A117.1.

(3) Repealed.

(4) "Detached residence" means a one- or two-family residence that is separated from adjacent dwellings by an unobstructed physical space. A one- or two-family residence that is separated from an adjacent dwelling by a physical space of less than three feet shall not be considered a detached residence.

(5) "Ground story level" means the lowest story in a dwelling unit containing habitable rooms or areas with an accessible entrance located on an accessible route that contains living, sleeping, cooking, bathing, and toilet facilities. For the purposes of this article, a basement shall not be considered the ground story level if the finished basement floor is located more than four feet below the exterior finished grade determined at any point along the exposed periphery of the dwelling unit.

(5.5) "ICC/ANSI A117.1" means the "Accessible and Usable Buildings and Facilities" standard, or any successor standard, promulgated and amended from time to time by the international code council.

(6) "Project" means the total number of parcels and buildings in a development planned or constructed by the same developer, builder, or entity on one site or contiguous sites, and also includes all parcels and structures that are parts of the same planned development application or agreement. The separation of contiguous individual buildings, units, lots, tracts, or parcels of land by a property line or by a public or private road shall not create a separate project.

(7) "Property" means the site, parcels of land, plats, lots, tracts, individual dwelling units, existing and proposed structures, and the built environment.

(8) "Residential dwelling unit" means any portion of a building that contains living facilities, including a room or rooms in a facility that have shared cooking, bathing, toilet, or laundry facilities such as dormitories, shelters, assisted living facilities, and boarding homes. "Residential dwelling unit" also means facilities that include provisions for sleeping, cooking, bathing, and toilet facilities for one or more persons and are used for extended stays, such as time-shares and extended-stay motels. "Residential dwelling unit" does not mean a guest room in a motel or hotel.

(9) "Technically infeasible", in reference to a proposed alteration to a building or facility, means that the proposed alteration is not implemented because:

(a) An existing structural condition or conditions make such alteration labor- or cost-prohibitive;

(b) The building or facility is in strict compliance with minimum accessibility requirements for new construction and, due to existing physical or site constraints, such alteration would negatively impact such compliance.
"Type A dwelling unit" means a dwelling unit designed in accordance with ICC/ANSI A117.1, section 1002, or any successor section within ICC/ANSI A117.1.

"Type A multistory dwelling unit" means a multiple-story dwelling unit with a ground story level designed in accordance with ICC/ANSI A117.1, section 1002, or any successor section within ICC/ANSI A117.1, and, if provided, accessible laundry facilities on the ground story level.

"Type B dwelling unit" means a dwelling unit with a ground floor level designed in accordance with ICC/ANSI A117.1, section 1003, or any successor section within ICC/ANSI A117.1.

"Type B multistory dwelling unit" means a multiple-story dwelling unit with a ground story level that is designed in accordance with ICC/ANSI A117.1, section 1003, or any successor section within ICC/ANSI A117.1, and, if provided, accessible laundry facilities on the ground story level.

"Type B visitable ground floor" means a multiple-story dwelling unit with an accessible entrance and toilet facility designed in accordance with ICC/ANSI A117.1, section 1003, or any successor section within ICC/ANSI A117.1.

"Undue hardship" means a substantial and unusual hardship that is the direct result of unique physical site conditions such as topography or geology, or that is the direct result of other unique or special conditions encountered on a property, but that are not typically encountered in the jurisdiction in which such property is located. Constraints, complications, or difficulties that may arise by complying with these statutory standards for accessibility but that do not constitute an undue hardship shall not serve to justify the granting of an exception or variance.

Source: L. 2003: Entire article amended with relocations, p. 1415, § 1, effective April 29. L. 2017: IP, (2), and (10) to (14) amended, (3) repealed, and (5.5) added, (HB 17-1067), ch. 19, p. 62, § 1, effective August 9.

9-5-102. Disabilities covered - purpose. (1) This article is intended to provide accessibility standards for residential projects designed to serve persons with nonambulatory disabilities, semianbulatory disabilities, sight disabilities, hearing disabilities, disabilities of incoordination, and aging.

(2) Design criteria. Design criteria must comply with ICC/ANSI A117.1.


Editor's note: This section is similar to former §§ 9-5-103 and 9-5-104 as they existed prior to 2003, and the former § 9-5-102 was relocated to § 9-5-103.

9-5-103. Applicability of standards - enforcement. (1) The standards and specifications set forth in this article shall apply to all buildings and facilities used for housing that are constructed in whole or in part by the use of state, county, or municipal funds or the funds of any political subdivision of the state or that are constructed with private funds. All such buildings and facilities to be constructed from plans on which architectural drawings are started

Colorado Revised Statutes 2019 Page 46 of 66 Uncertified Printout
after July 1, 1975, from any one of these funds or any combination thereof shall conform to each of the standards and specifications prescribed in this article. The governmental unit responsible for the enforcement of this article shall grant exceptions to or modify any particular standard or specification when it is determined that it is impractical and would create an undue hardship. Any such exception or modification of the provisions of this article shall be made in writing as a matter of public record. These standards and specifications shall be adhered to in those buildings and facilities that are constructed or proposed on or after April 29, 2003. This article shall apply to permanent buildings.

(2) The jurisdiction with responsibility for enforcement of this article pursuant to section 9-5-104 shall designate a board of appeals to hear and resolve appeals of orders, decisions, or determinations made by the enforcing agency regarding the application and interpretation of this article.

(3) Any building or facility that would have been subject to this article but was under construction prior to July 1, 1976, must comply with the following:

(a) If the walls or defining boundaries of an element or space are altered, then the altered element or space shall comply with the applicable provisions of section 9-5-105, unless such alteration is technically infeasible. If full compliance with this article is technically infeasible, compliance shall be implemented up to the point of technical infeasibility. No alteration shall be undertaken that negatively impacts accessibility of a building or facility pursuant to ICC/ANSI A117.1. This subsection (3)(a) shall not be construed to require the moving of any existing walls not otherwise planned to be moved.

(b) Any additions to a building or facility shall be treated as new construction for the purposes of enforcement of this article.

(4) The general assembly finds and declares that the standards and specifications set forth in this article are of statewide concern. Nothing in this article shall prohibit any municipality or other governmental subdivision from making and enforcing standards and specifications that are more stringent, and thus provide greater accessibility, than those set forth in this article.


Editor's note: This section is similar to former § 9-5-102 as it existed prior to 2003, and the former § 9-5-103 was relocated to § 9-5-102.

9-5-104. Responsibility for enforcing standards. (1) The responsibility for enforcement of this article is as follows:

(a) For factory-built residential structures as defined in section 24-32-3302 (10), C.R.S., the division of housing created in section 24-32-704, C.R.S.;

(b) In a political subdivision that does not have a local building code, the division of housing created in section 24-32-704, C.R.S.;

(c) For all other housing or in a political subdivision that has adopted a building code, by the building department, or its equivalent, of the political subdivision having jurisdiction.
9-5-105. Exemptions for certain privately funded projects. (1) Accessible dwelling units shall be provided as required in this article; except that this article does not apply to privately funded projects for the construction of a detached residence or residences or to other types of residential property containing less than seven residential units.

For the purpose of determining the number of accessibility points required pursuant to subsection (2) of this section, the accessible dwelling unit types shall have the following point values:

<table>
<thead>
<tr>
<th>Accessible dwelling unit type:</th>
<th>Accessibility point value per dwelling unit:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type A dwelling unit</td>
<td>6</td>
</tr>
<tr>
<td>Type A multistory dwelling unit</td>
<td>5</td>
</tr>
<tr>
<td>Type B dwelling unit</td>
<td>4</td>
</tr>
<tr>
<td>Type B multistory dwelling unit</td>
<td>3</td>
</tr>
<tr>
<td>Type B visitable ground floor</td>
<td>1</td>
</tr>
</tbody>
</table>

(2) Residential projects. (a) A project shall be assigned accessibility points based on the number of units contained within the project as follows:

<table>
<thead>
<tr>
<th>Number of units within the project:</th>
<th>Accessibility points required:</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-6</td>
<td>0</td>
</tr>
<tr>
<td>7-14</td>
<td>6</td>
</tr>
<tr>
<td>15-28</td>
<td>12</td>
</tr>
<tr>
<td>29-42</td>
<td>18</td>
</tr>
<tr>
<td>43-57</td>
<td>24</td>
</tr>
<tr>
<td>58-71</td>
<td>30</td>
</tr>
<tr>
<td>72-85</td>
<td>36</td>
</tr>
<tr>
<td>86-99</td>
<td>42</td>
</tr>
<tr>
<td>100-114</td>
<td>48</td>
</tr>
<tr>
<td>115-128</td>
<td>54</td>
</tr>
<tr>
<td>129-142</td>
<td>60</td>
</tr>
<tr>
<td>143-157</td>
<td>66</td>
</tr>
<tr>
<td>158-171</td>
<td>72</td>
</tr>
<tr>
<td>172-185</td>
<td>78</td>
</tr>
<tr>
<td>186-199</td>
<td>84</td>
</tr>
<tr>
<td>etc.</td>
<td>+6 additional points every 14 units or fraction thereof</td>
</tr>
</tbody>
</table>
(b) A project shall include enough accessible dwelling units to achieve at least the specified number of accessibility points required pursuant to paragraph (a) of this subsection (2). A project may use any combination of accessible dwelling unit types to comply with this section.

Source: L. 2003: Entire article amended with relocations, p. 1420, § 1, effective April 29.

Editor's note: This section is similar to former § 9-5-111 as it existed prior to 2003.

9-5-106. Implementation plan. The builder of any project regulated by this article shall create an implementation plan that guarantees the timely and evenly phased delivery of the required number of accessible units. Such plan shall clearly specify the number and type of units required and the order in which they are to be completed. Such implementation plan shall be subject to approval by the entity with enforcement authority in such project's jurisdiction. The implementation plan shall not be approved if more than thirty percent of the project is intended to be completed without providing a portion of accessible units required by section 9-5-105; except that, if an undue hardship can be demonstrated, or other guarantees provided are deemed sufficient, the jurisdiction having responsibility for enforcement may grant exceptions to this requirement. The implementation plan shall be approved by the governmental unit responsible for enforcement before a building permit is issued.


ARTICLE 5.5
Elevator and Escalator Certification

9-5.5-101. Short title. This article shall be known and may be cited as the "Elevator and Escalator Certification Act".


9-5.5-102. Legislative declaration. The general assembly hereby declares that in order to ensure minimum safety standards throughout Colorado, the regulation of conveyances is a matter of statewide concern. Nothing in this article shall be construed to prevent a local jurisdiction from regulating conveyances.


9-5.5-103. Definitions. As used in this article, unless the context otherwise requires:
(1) "Accredited national conveyance association" means a conveyance association that is accredited to certify conveyance inspectors by a nationally recognized standards association, including, without limitation, ASME or ASCE.
(2) "Administrator" means the director of the division of oil and public safety within the department of labor and employment or the director's designee.

(3) "Approved local jurisdiction" means a local jurisdiction that has been approved by the administrator pursuant to section 9-5.5-112.

(4) "ASCE" means the American society of civil engineers or its successor.

(5) "ASCE 21" means the American society of civil engineers automated people mover standards published as "ASCE standard number ASCE 21-96" as amended by ASCE.

(6) "ASME" means the American society of mechanical engineers or its successor.

(7) "ASME A17.1" means the safety code for elevators and escalators published as "A17.1 - 2000 Safety Code for Elevators and Escalators" as amended by ASME international.

(8) "ASME A17.3" means the safety code for elevators and escalators published as "A17.3 - 2002 Safety Code for Existing Elevators and Escalators" as amended by ASME international.

(9) "ASME A18.1" means the safety code for elevators and escalators published as "A18.1 - 2003 Safety Standard for Platform Lifts and Stairway Chairlifts" as amended by ASME international.

(10) "Certificate of operation" means a document issued by the administrator or an approved local jurisdiction for a conveyance indicating that the conveyance has been inspected by the administrator, an approved local jurisdiction, or a licensed third-party conveyance inspector and approved under this article.

(11) "Conveyance" means a mechanical device to which this article applies pursuant to section 9-5.5-104.

(12) "Conveyance contractor" means a person who engages in the business of erecting, constructing, installing, altering, servicing, repairing, or maintaining conveyances.

(13) "Conveyance helper or apprentice" means a person who works under the general direction of a certified conveyance mechanic.

(14) "Conveyance mechanic" means a person who erects, constructs, installs, alters, services, repairs, or maintains conveyances.

(15) "Dormant conveyance" means a conveyance that has been temporarily placed out of service.

(16) "Licensee" means a person who is licensed as a conveyance contractor, conveyance mechanic, or conveyance inspector pursuant to this article.

(17) "Local jurisdiction" means a city, county, or city and county or any agent thereof.

(18) "Private residence" means a separate dwelling, or a separate apartment in a multiple-apartment dwelling, that is occupied by members of a single-family unit.

(18.5) "Private residence conveyance" means a powered passenger conveyance that is limited in size, capacity, rise, and speed and is designed to be installed in a private residence or in a multiple-family dwelling as a means of access to a private residence.

(19) "Single-family residence" means a private residence that is a separate building or an individual residence that is part of a row of residences joined by common sidewalls.

(20) "Third-party conveyance inspector" means a disinterested conveyance inspector who is retained to inspect a conveyance but is not employed by or affiliated with the owner of the conveyance nor the conveyance mechanic whose repair, alteration, or installation is being inspected.
9-5.5-104. Scope. (1) Except as provided in subsection (2) of this section, this article applies to the design, construction, operation, inspection, testing, maintenance, alteration, and repair of the following equipment:
   (a) Hoisting and lowering mechanisms equipped with a car or platform that moves between two or more landings. Such equipment includes elevators and platform lifts, personnel hoists, and dumbwaiters.
   (b) Power-driven stairways and walkways for carrying persons between landings. Such equipment includes, but is not limited to, escalators and moving walks.
   (c) Automated people movers as defined in ASCE 21.
   (2) This article 5.5 does not apply to the following:
      (a) Material hoists;
      (b) Manlifts;
      (c) Mobile scaffolds, towers, and platforms;
      (d) Powered platforms and equipment for exterior and interior maintenance;
      (e) Conveyors and related equipment;
      (f) Cranes, derricks, hoists, hooks, jacks, and slings;
      (g) Industrial trucks within the scope of ASME publication B56;
      (h) Items of portable equipment that are not portable escalators;
      (i) Tiering or piling machines used to move materials between storage locations that operate entirely within one story;
      (j) Equipment for feeding or positioning materials at machine tools, printing presses, and other similar equipment;
      (k) Skip or furnace hoists;
      (l) Wharf ramps;
      (m) Railroad car lifts or dumpers;
      (n) Line jacks, false cars, shafters, moving platforms, and similar equipment used by a certified conveyance contractor for installing a conveyance;
      (o) Conveyances at facilities regulated by the mine safety and health administration in the United States department of labor, or its successor, pursuant to the "Federal Mine Safety and Health Act of 1977", Pub.L. 91-173, codified at 30 U.S.C. sec. 801 et seq., as amended;
      (p) Elevators within the facilities of gas or electric utilities that are not accessible to the public;
      (q) A passenger tramway as defined in section 12-150-103 (5);
      (r) Conveyances in a single-family residence; or
      (s) Stairway chair lifts as defined in ASME A18.1 - 2005.
   (3) This article shall not be construed to prohibit a local jurisdiction from regulating conveyances if the local jurisdiction has standards that meet or exceed the standards established by this article.
9-5.5-105. Similar or higher standards authorized. This article shall not be construed to prevent the use of systems, methods, or devices of equivalent or superior quality, strength, fire resistance, code effectiveness, durability, and safety to those required by this article if technical documentation demonstrates such equivalency or superiority.


9-5.5-106. License required. (1) (a) A person shall not erect, construct, alter, replace, maintain, remove, or dismantle a conveyance within a building or structure unless the person is licensed as a conveyance mechanic and is working under the supervision of a certified conveyance contractor. A person shall not wire a conveyance unless the person is licensed as a conveyance mechanic and is working under the supervision of a certified conveyance contractor. No other license shall be required for work described in this paragraph (a).

(b) A person shall not be required to be a certified conveyance contractor or licensed conveyance mechanic to remove or dismantle conveyances that are destroyed as a result of a complete demolition of a secured building or structure or where the hoistway or wellway is demolished back to the basic support structure and no access that endangers the safety of a person is permitted.

(c) A conveyance helper or apprentice shall not be required to be licensed when working under the supervision of a licensed conveyance mechanic.

(2) A person shall not inspect a conveyance within a building or structure, including but not limited to a private residence, for purposes of the issuance of a certificate of operation unless licensed as a conveyance inspector.


9-5.5-107. License qualifications - contractor - mechanic - inspector. (1) (a) To be licensed, a person shall apply solely with the administrator. An applicant shall not be licensed as a conveyance mechanic unless the applicant possesses a certificate of completion of a conveyance mechanic program as approved by the administrator.

(b) In lieu of qualifying pursuant to paragraph (a) of this subsection (1), an applicant shall qualify if the applicant holds a valid license from another state having standards that, at a minimum, are substantially similar to those imposed by this article as determined by the administrator.

(c) In lieu of qualifying pursuant to paragraph (a) of this subsection (1), an applicant shall qualify if the applicant:

(I) Has passed an examination, as determined by the administrator, on the codes and standards that apply to conveyances; and

(II) Furnishes to the administrator acceptable evidence that the applicant worked as a conveyance mechanic for at least three years without direct supervision.

(d) Repealed.
(2) (a) An applicant shall not be licensed as a conveyance inspector unless the applicant is certified to inspect conveyances by a nationally recognized conveyance association.

(b) Repealed.

(c) In lieu of qualifying pursuant to paragraph (a) of this subsection (2), an applicant appointed or designated as a conveyance inspector shall qualify if the applicant is eligible to, and intends to, become nationally certified within one year. A license issued pursuant to this section shall expire upon the termination of employment with the local jurisdiction or after one year from the date of licensure, whichever occurs first. A license issued pursuant to this paragraph (c) shall not be eligible for renewal unless the applicant has obtained national certification.

(3) (a) A person who is not qualified to be a conveyance contractor shall not be certified as a conveyance contractor.

(b) To qualify to be a certified conveyance contractor, an applicant shall demonstrate the following qualifications:

(I) The applicant shall employ at least one licensed conveyance mechanic; and

(II) The applicant shall comply with the insurance requirements in section 9-5.5-115.

(c) Repealed.


Editor's note: (1) Subsection (1)(d)(II) provided for the repeal of subsection (1)(d), effective July 1, 2008. (See L. 2007, p. 1416.)

(2) Subsection (2)(b)(II) provided for the repeal of subsection (2)(b), effective July 1, 2011. (See L. 2007, p. 1416.)

9-5.5-108. License - rules - issuance - renewal - fee. (1) (a) Upon the administrator's approval of an application, the administrator shall license the conveyance contractor, conveyance mechanic, or conveyance inspector.

(b) The administrator shall promulgate rules requiring a conveyance mechanic to obtain at least eight hours of continuing education every two years.

(2) (a) When an emergency exists in this state due to a disaster, act of God, or work stoppage and the number of certified conveyance mechanics in the state is insufficient to deal with the emergency, a certified conveyance contractor may respond as necessary to assure the safety of the public. A person who, in the judgment of a certified conveyance contractor, has an acceptable combination of documented experience and education to perform conveyance work without direct supervision shall seek an emergency conveyance mechanic certification from the administrator within five business days after commencing work for which certification as a conveyance mechanic is required.

(b) The administrator shall issue emergency conveyance mechanic certifications pursuant to paragraph (a) of this subsection (2). The certified conveyance contractor recommending a person for an emergency conveyance mechanic certification shall furnish such proof of the person's competency as the administrator may require.

(c) Each emergency conveyance mechanic certification shall be, and shall state that it is, valid for sixty days after the date of issuance and for such particular conveyances or
geographical areas as the administrator may designate. Such certification shall entitle the holder to the rights of a certified conveyance mechanic. The administrator shall renew an emergency conveyance mechanic certification during the existence of an emergency. No fee shall be charged for the issuance or renewal of an emergency conveyance mechanic certification.

(3) (a) A certified conveyance contractor shall notify the administrator when there are no certified conveyance mechanics available to perform conveyance work. The certified conveyance contractor may request that the administrator issue a temporary conveyance mechanic certification to a person who, in the judgment of the certified conveyance contractor, has an acceptable combination of documented experience and education to perform conveyance work without direct supervision. Any such person shall immediately seek a temporary conveyance mechanic certification from the administrator and shall pay such fee as the administrator shall determine.

(b) Each such certification shall be, and shall state that it is, valid for thirty days after the date of issuance and while employed by the certified conveyance contractor who certified the individual as qualified. The certification shall be renewable as long as there is a shortage of licensed conveyance mechanics.

(4) Except for certified inspectors who qualified during the immediately preceding twelve months, the administrator shall not renew a certification issued under this section unless the person meets the qualifications for certification under section 9-5.5-107.

(5) The administrator shall establish and collect annual fees for licenses issued pursuant to this section. The fees shall be in an amount to offset the direct and indirect costs of administering this article.


9-5.5-109. License discipline. (1) A certification issued pursuant to this article may be suspended or revoked upon a finding by the administrator of any of the following:

(a) A false statement in the application concerning a material matter;

(b) Fraud, misrepresentation, or bribery in applying for certification;

(c) Failure to notify the owner or lessee of a conveyance and the administrator or approved local jurisdiction, if any, of a condition not in compliance with this article; or

(d) A violation of any provision of this article or of any rule adopted pursuant to this article.

(2) The suspension or revocation of a license shall be made as a result of a notice of violation in accordance with section 8-20-104, C.R.S.

(3) The administrator shall not issue a license to a person whose license has been revoked within the last two years.


9-5.5-110. Accident reports. The owner shall report to the administrator or an approved local jurisdiction, within twenty-four hours, any accident that results in serious injury to an individual.
9-5.5-111. Registration of existing conveyances - fund. (1) On or before August 1, 2008, the owner or lessee of every existing conveyance shall register the conveyance with the administrator. The registration shall include the type, rated load and speed, name of manufacturer, location, intended purpose for use, and such additional information as the administrator may require. Conveyances constructed or completed after July 1, 2008, shall be registered before they are placed in service.

(2) (a) The administrator shall set annual fees on conveyances for which the administrator has issued the current certificate of operation in an amount necessary to offset the costs of registration and of the administration of this article in accordance with section 24-4-104, C.R.S.

(b) Fees collected pursuant to this article shall be transmitted to the state treasurer, who shall credit the same to the conveyance safety fund, referred to in this article as the "fund", which is hereby created in the state treasury. Moneys in the fund shall be subject to annual appropriation by the general assembly and shall be used to implement this article. The moneys in the fund and interest earned on the moneys in the fund shall not revert to the general fund or be transferred to any other fund.

9-5.5-112. Compliance - rules. (1) The administrator shall promulgate rules for the construction, alteration, repair, service, and maintenance of conveyances. Except as provided in subsection (3) of this section, such rules shall conform to the following standards:

(a) ASCE 21;
(b) ASME A17.1;
(c) ASME A17.3; and
(d) ASME A18.1.

(2) (a) The administrator shall determine whether a local jurisdiction's standards are equal to or greater than those of this article. If so, then the administrator shall enter into a memorandum of agreement with the local jurisdiction that approves the jurisdiction's authority to regulate conveyances.

(b) The administrator may establish a schedule for a local jurisdiction to adopt updated standards, equaling or exceeding the standards imposed under subsection (1) of this section, which shall be adopted within a reasonable amount of time as needed for a local jurisdiction to update its standards.

(3) (a) (I) Except as provided in subparagraph (II) of this paragraph (a), the administrator shall promulgate rules exempting a conveyance installed before July 1, 2008, from compliance with ASME A17.3 until approval is required by section 9-5.5-113 for substantial alteration or remodeling of the conveyance.

(II) The administrator shall, in cooperation with local jurisdictions, promulgate rules that authorize the administrator or a local jurisdiction to require an elevator to comply with any portion of ASME A17.3 necessary to protect against a material risk to the public safety.
In promulgating the rules required by subsection (1) of this section, the administrator may adopt changes to the standards listed in subsection (1) of this section that the administrator deems to be in the public interest, including, without limitation, adopting modifications to, changing the applicability of, exempting conveyances from, changing inspector witnessing requirements of, and defining events that trigger the applicability of all or a portion of the standards.


9-5.5-113. Conveyance - installation and repair - notice of construction and initial inspection. (1) The owner or lessee of a conveyance shall not erect, construct, install, or alter a conveyance within a building or structure unless it conforms to the rules adopted by the administrator under this article and the work is performed by a certified conveyance contractor.

(2) The owner or lessee of a conveyance shall not erect, construct, or install a conveyance within a building or structure unless a notice, including the construction plans, has been sent to the administrator or approved local jurisdiction at least thirty days prior to construction and the administrator or approved local jurisdiction has approved the construction.

(3) The owner or lessee of the property where a new or altered conveyance is located shall not operate or permit it to be operated unless:

(a) The conveyance has passed an initial inspection conducted by the administrator, approved local jurisdiction, or third-party inspector;

(b) The person conducting the inspection determines that the conveyance is safe and complies with the rules adopted by the administrator or approved local jurisdiction; and

(c) The administrator or approved local jurisdiction has issued a certificate of operation for the conveyance.


9-5.5-114. Periodic inspections and registrations - rules. (1) (a) The administrator shall promulgate rules requiring the owner or lessee of a conveyance to periodically certify that the conveyance is safe and complies with the rules adopted by the administrator or approved local jurisdiction. Upon such certification, the administrator or approved local jurisdiction shall issue a certificate of operation for the conveyance.

(b) and (c) (Deleted by amendment, L. 2010, (HB 10-1231), ch. 75, p. 256, § 7, effective August 11, 2010.)

(2) Upon request, the administrator shall provide notice to the owner of a private residence where a conveyance is located with relevant information about conveyance safety requirements. The penalty provisions of this article shall not apply to private residence owners.

(3) The administrator shall promulgate rules requiring the owner of the conveyance to have it periodically inspected by a third-party conveyance inspector and the periodic expiration of certificates of operation.
(4) The administrator shall promulgate rules allowing the continued operation of a private residence conveyance that was installed prior to January 1, 2008, in a building that is not a single-family residence.

(5) The owner or lessee of a conveyance shall not permit the conveyance to be operated unless the owner or lessee obtains a certificate of operation from the administrator or approved local jurisdiction.

(6) The owner or lessee shall pay a fee in an amount determined by the administrator for a certificate of operation issued by the administrator. The administrator shall set the fee in accordance with section 24-4-103, C.R.S., to approximate the actual cost of issuing a certificate of operation.


9-5.5-115. Insurance. (1) Each conveyance contractor shall submit to the administrator an insurance policy, certificate of insurance, or certified copy of either issued by an insurance company authorized to do business in Colorado. Such policy shall provide general liability coverage of at least one million dollars for injury or death in each occurrence and coverage for at least five hundred thousand dollars for property damage in each occurrence. In addition, a conveyance contractor shall submit evidence of the insurance coverage mandated by the "Workers' Compensation Act of Colorado", articles 40 to 47 of title 8, C.R.S.

(2) Certified conveyance inspectors shall submit to the administrator an insurance policy, certificate of insurance, or certified copy of either issued by an insurance company authorized to do business in Colorado. Such policy shall provide general liability coverage of at least one million dollars for injury or death in each occurrence and coverage for at least five hundred thousand dollars for property damage in each occurrence.

(3) The administrator shall not certify a conveyance contractor or conveyance inspector unless the applicant has delivered the policy, certified copy, or certificate of insurance required by this section in a form approved by the administrator. A certified conveyance contractor or conveyance inspector shall notify the administrator at least ten days before a material alteration, amendment, or cancellation of a policy is made.

(4) This section shall not apply to a local jurisdiction or the employee of a local jurisdiction in the performance of the employee's official duties.


9-5.5-116. Enforcement - rules. (1) The administrator may adopt rules to administer and enforce this article. The administrator may use certified conveyance inspectors for any investigation of an alleged violation of the rules or this article. The administrator may appoint an advisory board to assist in the formulation of rules authorized by this section.

(2) A person may request an investigation into an alleged violation of the rules or this article, or of a danger posed by any conveyance, by giving notice to the administrator of such violation or danger. Such notice shall be in writing, shall set forth with reasonable particularity
the grounds for the notice, and shall be signed by the person making the request. Upon the request of a person signing the notice, such person's name shall not appear on any copy of such notice or any record published, released, or made available.

(3) Upon receipt of such notification, if the administrator determines that there are reasonable grounds to believe that such violation or danger exists, the administrator shall investigate in accordance with this article to determine if such violation or danger exists. If the administrator determines that there are no reasonable grounds to believe that a violation or danger exists, the administrator shall notify the party in writing of such determination.


9-5.5-117. Liability. This article shall not be construed to relieve or lessen the responsibility or liability of a person owning, operating, controlling, maintaining, erecting, constructing, installing, altering, inspecting, testing, or repairing a conveyance for damages to person or property caused by a defect, nor does the state of Colorado assume any such liability or responsibility by the adoption or enforcement of this article.


9-5.5-118. Criminal penalties. A person who violates section 9-5.5-106 or 9-5.5-111 commits a class 3 misdemeanor and, upon conviction, shall be punished as provided in section 18-1.3-501, C.R.S.


9-5.5-119. Dangerous conveyance - administrative orders. (1) (a) If, upon the inspection of a conveyance, the conveyance is found to be in a dangerous condition, an immediate hazard to those riding or using it, or designed or operated in an inherently dangerous manner, the certified conveyance inspector shall notify:
   (I) The owner;
   (II) The approved local jurisdiction; and
   (III) If the conveyance is not within an approved local jurisdiction, the administrator.

   (b) Upon being notified pursuant to paragraph (a) of this subsection (1), the administrator or approved local jurisdiction shall order such alterations or additions as may be deemed necessary to eliminate the danger.

   (2) (a) In lieu of repairing or altering a dangerous conveyance pursuant to subsection (1) of this section, an owner or a lessee may have the conveyance made dormant. A dormant conveyance shall not be used until it is made safe in compliance with this article. In order to qualify under this subsection (2), the owner or lessee of a dormant conveyance shall:
      (I) Remove the fuses and lock the mainline disconnect switch in the "off" position;
      (II) Park the car and close and latch the hoistway doors;
      (III) Have a certified conveyance inspector place a wire seal on the mainline disconnect switch; and
      (IV) Prevent the conveyance from being used.
(b) A conveyance shall not be made dormant for more than five years. Upon making a conveyance dormant, a certified conveyance inspector shall report the fact to the administrator.

**Source:** L. 2007: Entire article added, p. 1422, § 1, effective January 1, 2008.

**9-5.5-120. Repeal of article.** This article is repealed, effective July 1, 2022. Prior to the repeal, the functions of the administrator are subject to review pursuant to section 24-34-104, C.R.S.


**EXPLOSIVES**

**ARTICLE 6**

**Explosives**

**9-6-101. Explosives on passenger vehicles and trains.** It is unlawful to transport, carry, convey, or deliver to be transported, carried, or conveyed, or to cause to be delivered to be transported, carried, or conveyed any of the substances or articles known as dynamite, nitroglycerine, or glycerine oil, nitroleum or blasting oil, or nitrated oil, or powder mixed with any such oil, or fiber saturated with any such article or substance in any vehicle used or employed in transporting passengers, or in any train of cars used in transporting passengers; except that an ordinary freight train with a caboose or passenger car used as a caboose shall not be construed as a train of cars used in transporting passengers within the meaning of sections 9-6-101 to 9-6-104.


**9-6-102. Packing for shipment.** It is unlawful to ship, send, or forward nitroglycerine, glycerine oil, nitrated oil, nitroleum or blasting oil, or to transport any of the same upon any vehicle of any description, or to deliver the same to be transported, carried, or conveyed unless the same is securely enclosed, deposited, or packed in a metallic vessel surrounded by plaster of paris or other material that is nonexplosive when saturated with such oil or substance, and separate from all other substances, and the outside of the package containing the same is marked or labeled in a conspicuous manner with the words "nitroglycerine - dangerous".


**9-6-103. Violation - penalty.** Any person who knowingly violates any of the provisions of sections 9-6-101 and 9-6-102 commits a class 6 felony and shall be punished as provided in section 18-1.3-401, C.R.S.
9-6-104.  Death by negligence.  When the death of any person is caused by the explosion of any of the articles or substances named in section 9-6-101 while the same is being delivered to any carrier or while the same is being transported or is being removed from the vehicle on which it has been transported or conveyed or on which it has been placed for transportation, every person who knowingly and unlawfully placed, or aided, or permitted the placing of such article or substance on such vehicle, or delivered the same, or caused the same to be delivered contrary to the provisions of sections 9-6-101 to 9-6-104, commits a class 4 felony and shall be punished as provided in section 18-1.3-401, C.R.S.


Editor's note: The effective date for amendments made to this section by chapter 216, L. 77, was changed from July 1, 1978, to April 1, 1979, by chapter 1, First Extraordinary Session, L. 78, and was subsequently changed to July 1, 1979, by chapter 157, § 23, L. 79. See People v. McKenna, 199 Colo. 452, 611 P.2d 574 (1980).

Cross references: For the legislative declaration contained in the 2002 act amending this section, see section 1 of chapter 318, Session Laws of Colorado 2002.

9-6-105.  Marking for sale.  (1)  It is unlawful for any person, partnership, or corporation to sell or offer for sale, or take or solicit orders of sale for, or purchase or use, or have on hand or in store for the purpose of sale or use in this state any high explosive that can be detonated by means of a detonator, including without limitation dynamite, detonating cord, cast primers, and cap-sensitive emulsions, slurries, and water gels, or any cartridge or bag containing a blasting agent, or any container used for the packaging of detonators and blasting caps, unless on each container or bag of any such high explosive, blasting agent, detonator, or blasting cap and on each wrapping of the explosive cartridge contained within, there is plainly stamped or printed the name and place of business of the person, partnership, or corporation by which the same was manufactured and a date code or other code identifying the origin of manufacture.


Editor's note: The effective date for amendments made to this section by chapter 216, L. 77, was changed from July 1, 1978, to April 1, 1979, by chapter 1, First Extraordinary Session, L. 78, and was subsequently changed to July 1, 1979, by chapter 157, § 23, L. 79. See People v. McKenna, 199 Colo. 452, 611 P.2d 574 (1980).

Cross references: For the legislative declaration contained in the 2002 act amending this section, see section 1 of chapter 318, Session Laws of Colorado 2002.
(2) It is unlawful to intentionally remove, alter, or obscure the printed or stamped manufacturer's name and date codes or other identifying codes on the containers used to contain any high explosives, blasting agents, detonators, or blasting caps or on any wrappings thereof.

(3) Mixed binary explosives shall not be subject to the provisions of this section.


9-6-106. Date of manufacture - wrapping. (1) It is unlawful for any person, partnership, or corporation to have more than two different dates or identifying codes on any high explosive that can be detonated by means of a detonator, including without limitation dynamite, detonating cord, cast primer, cap-sensitive emulsion, slurries, and water gels, or on any cartridges or bags containing blasting agents, or on any container used for the packaging of detonators or blasting caps.

(2) It is also unlawful for any person, partnership, or corporation to package any explosives in any container or wrapping formerly used by any other person, partnership, or corporation in the packing of high explosives, detonators, blasting caps, or cartridges or bags containing blasting agents.

(3) The name and place of business of the manufacturer and the date codes or other codes identifying the origin of manufacture shall be the same on the packing container as on each of the high explosive cartridges or blasting agent cartridges within such packing container.


9-6-107. Violation - penalty. If any person, partnership, or corporation violates any of the provisions of sections 9-6-105 and 9-6-106, such person, the members of such partnership, or the officers or agents of such corporation are guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine of not more than five thousand dollars, or by imprisonment in the county jail for not more than one year, or by both such fine and imprisonment.


9-6-108. Applicability. Consumer fireworks and display fireworks, as defined in 27 CFR 555.11 of the United States department of justice, bureau of alcohol, tobacco, firearms, and explosives, or any of its successor agencies, shall not be subject to the provisions of this article.

9-7-101. **Short title.** This article shall be known and may be cited as the "Explosives Act".

**Source:** L. 70: p. 185, § 1. **C.R.S. 1963:** § 53-7-1.

9-7-102. **Legislative declaration.** The general assembly hereby declares that the purpose of this article 7 is to provide for safety inspections to assure suitable control of the procurement of and access to explosives and, at the same time, to avoid undue limitations upon the manufacture, sale, transport, or legitimate use of explosives. To avoid a duplication of supervision, inspection, and enforcement by various governmental agencies, no person, firm, partnership, or corporation that is subject to regulation under articles 20 to 54 of title 34, C.R.S., or 30 CFR part 56, 57, 75, or 77 shall be subject to this article 7. Fireworks subject to part 20 of article 33.5 of title 24 shall not be subject to regulation under this article 7.

**Source:** L. 70: p. 185, § 1. **C.R.S. 1963:** § 53-7-2. **L. 2006:** Entire section amended, p. 249, § 1, effective March 31. **L. 2017:** Entire section amended, (SB 17-222), ch. 245, p. 1027, § 2, effective August 9.

9-7-103. **Definitions.** As used in this article, unless the context otherwise requires:

1. Repealed.
2. (1.5) "Department" means the department of labor and employment.
3. (2) "Division" means the division of oil and public safety in the department of labor and employment.
4. (3) "Explosive" or "explosive device" means any material or container containing a chemical compound or mixture that is commonly used or intended for the purpose of producing an explosion and that contains any oxidizing and combustible materials or other ingredients in such proportions, quantities, or packing that an ignition by fire, by friction, by concussion, or by detonation of any part of the compound or mixture may cause such a sudden generation of highly heated gases that the resultant gaseous pressures are capable of producing destructive effects on contiguous objects, but shall not mean the components for handloading rifle, pistol, and shotgun ammunition and/or rifle, pistol, and shotgun ammunition.
5. (4) "Incendiary device" means any flammable material or container containing a flammable liquid or material whose ignition by fire, friction, concussion, detonation, or other method produces destructive effects primarily through combustion rather than explosion.
6. (5) "Molotov cocktail" means a breakable container containing an explosive or flammable liquid or other substance, having a wick or similar device capable of being ignited, and may be described as either an explosive or incendiary device. A molotov cocktail is not intended to mean a device commercially manufactured primarily for the purpose of illumination or other such uses.

**Source:** L. 70: p. 185, § 1. **C.R.S. 1963:** § 53-7-3. **L. 86:** (1) repealed, p. 502, § 125, effective July 1. **L. 2001:** (2) amended, p. 1138, § 65, effective June 5. **L. 2004:** (1.5) added, p. 1169, § 3, effective May 27.
9-7-104. Enforcement. (1) The division shall enforce this article and for such purposes shall:

(a) Issue permits to applicants found by the division, after inspection and investigation, to be qualified for such permit under this article and the rules of the division;

(b) Deny, suspend, or revoke permits upon a finding of noncompliance or violation of this article or of the applicable rules;

(c) Hold hearings upon the application of any person aggrieved by any order of the division with respect to the denial, suspension, or revocation of any permit;

(d) Inspect, during normal business hours, any building, structure, or premises subject to this article, and, upon the discovery of any violation of this article or the applicable rules, issue such orders as are necessary for the safety of workers and the public, and, in the case of imminent hazard, apply for an injunction in the appropriate district court.

(2) The division may inspect blast sites or request a blast demonstration in a controlled environment pursuant to rules promulgated by the director of the division.


9-7-105. Duties of director of division. (1) The director of the division shall promulgate rules and regulations to implement the provisions of this article. Such rules and regulations may include requirements not mentioned specifically in this article but which are reasonably necessary for the safety of workers, the public, and the protection of property. The procedure for the promulgation of such rules and regulations shall be in accordance with the provisions of section 24-4-103, C.R.S.

(2) Any person aggrieved by a decision or order of the director of the division may seek judicial review pursuant to the provisions of section 24-4-106, C.R.S.


9-7-106. Explosives permits. (1) It is a violation of this article to manufacture, sell, purchase, store, transport, or use explosives without first obtaining from the division a permit.

(2) Permits issued under this article shall not be transferable, and shall be readily available for inspection by representatives of the division and law enforcement officials.

(3) The division may place such restrictions and limitations on permits as it deems necessary.

(4) Nothing in this article shall authorize the issuance of a permit for an explosive or incendiary device commonly known as a molotov cocktail, and no permit may be issued for the manufacture, sale, storage, transportation, or use of such device.

(5) No permit shall be required for the occasional purchase of explosives by a person for normal agricultural purposes, if such person is personally known by the seller of such explosives, and a record is kept of such transaction by the seller, including the specific purpose for which such explosives will be used, the location of the proposed use, the signature of the purchaser, and the certification of the seller as to his personal knowledge of the purchaser. Violation of the record requirement of this section shall cause the seller's permit to be cancelled.
(6) No division-issued permit shall be required for a person, firm, partnership, or corporation whose use and storage of explosive materials is for the purpose of underground mining, surface or underground metal mining, or surface or underground coal mining and whose use and storage of explosive materials is regulated by 30 CFR part 56, 57, 75, or 77.


9-7-107. Fees. An application for initial issuance or renewal of a thirty-six-month permit under this article shall be accompanied by a fee as established by the director of the division; except that the director of the division by rule or as otherwise provided by law may reduce the amount of the fee if necessary pursuant to section 24-75-402 (3), C.R.S., to reduce the uncommitted reserves of the fund to which all or any portion of the fee is credited. After the uncommitted reserves of the fund are sufficiently reduced, the director of the division by rule or as otherwise provided by law may increase the amount of the fee as provided in section 24-75-402 (4), C.R.S.


9-7-108. Issuance of permit - renewal - criminal history record check. (1) Permits issued under this article shall be valid for up to thirty-six months after the date of issue unless sooner revoked or suspended. Permits may be issued on a conditional basis, subject to revocation or suspension based on the occurrence or nonoccurrence of an event specified by the division. Permits may be renewed on or before their expiration date upon the payment of the required fee.

(2) Prior to the issuance of a permit pursuant to this article, each applicant for a permit shall submit his or her set of fingerprints to the department. The department shall conduct a criminal history record check of each applicant. If, as a result of such check, the department finds that further investigation is necessary, the department shall forward the fingerprints to the Colorado bureau of investigation for the purpose of conducting a state and national fingerprint-based criminal history record check utilizing the records of the Colorado bureau of investigation and the federal bureau of investigation. The costs associated with the fingerprint-based criminal history record check shall be paid by the applicant to the Colorado bureau of investigation. The department shall consider the information resulting from the criminal history record checks in its determination as to whether the division shall issue a permit to the applicant. Nothing in this section shall preclude the department from making further inquiries into the background of the applicant.

9-7-108.3. Transition to three-year permits - repeal. (Repealed)


Editor's note: Subsection (2) provided for the repeal of this section, effective July 1, 2002. (See L. 2000, p. 165.)

9-7-108.5. Disposition of fees. All fees collected by the division pursuant to this article shall be transmitted to the state treasurer, who shall credit the same to the public safety inspection fund created pursuant to section 8-1-151, C.R.S.


9-7-109. Records. Every person holding a permit issued under this article shall keep such records as may be required by the division. Records shall be maintained for not less than two years following the year in which the record is made. All such records shall be open to inspection by the division or its representatives during normal business hours.


9-7-110. Revocation or suspension of permit. A violation of this article or the rules and regulations promulgated pursuant thereto, shall constitute grounds for the revocation or suspension of a permit issued under this article.


9-7-111. Failure to obtain permit - penalty. Except as provided in section 9-7-106 (5), any person who manufactures, sells, stores, transports, or uses explosives without first obtaining a permit therefor under the provisions of this article is guilty of a misdemeanor and, upon conviction thereof, shall be punished by a fine of not less than twenty-five dollars nor more than five hundred dollars, or by imprisonment in the county jail for not more than one year, or by both such fine and imprisonment.


9-7-112. Unlawful use of explosives or incendiaries - penalty. (Repealed)


9-7-113. Use of flammable gases in home marijuana cultivation - prohibited. A local government may ban the use of a compressed, flammable gas as a solvent in the extraction of THC or other cannabinoids in a residential setting.
**Source:** L. 2013: Entire section added, (SB 13-283), ch. 332, p. 1889, § 1, effective May 28.

**SPECIAL SAFETY PROVISIONS**

**ARTICLE 10**

Ventilation of Garages and Shops

9-10-101 to 9-10-105. (Repealed)

**Source:** L. 96: Entire article repealed, p. 554, § 3, effective April 24.

**Editor's note:** This article was numbered as article 17 of chapter 13, C.R.S. 1963. For amendments to this article prior to its repeal in 1996, consult the Colorado statutory research explanatory note and the table itemizing the replacement volumes and supplements to the original volume of C.R.S. 1973 beginning on page vii in the front of this volume.