

This is an unofficial compilation prepared by the Division of Industrial Relations which incorporates the additions, amendments and repeal of regulations as of the approval of the Permanent Regulation LCB File No. R033-20 on January 21, 2021 and R026-23 on September 16, 2024.

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CHAPTER 512 - INSPECTION AND SAFETY OF MINES

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GENERAL PROVISIONS

NAC 512.010 Definitions. ([NRS 512.131](#)) As used in this chapter, unless the context otherwise requires, the words and terms defined in [NAC 512.013](#) to [512.140](#), inclusive, *and section 2 of this regulation [R033-20]* have the meanings ascribed to them in those sections.

(Supplied in codification; A by Div. of Mine Inspection, 12-2-82; 8-26-83; A by Div. of Industrial Relations by R141-98, 1-28-2000; R125-08, 5-30-2012; R033-20 01-21-2021)

NAC 512.013 “Administrator” defined. ([NRS 512.131](#)) “Administrator” means the Administrator of the Division.

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000)

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NAC 512.015 “Chief” defined. ([NRS 512.131](#)) “Chief” means the chief administrative officer of the Mine Safety and Training Section.
(Added to NAC by Div. of Mine Inspection, eff. 8-26-83)

NAC 512.027 “Division” defined. ([NRS 512.131](#)) “Division” means the Division of Industrial Relations of the Department of Business and Industry.
(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000)

NAC 512.064 “Employer” defined. ([NRS 512.131](#)) “Employer” means a person or organization who hires one or more persons to work for wages or salary.
[Inspector of Mines, Part 5 No. 2 + Part 6 No. 2 + Part 7 No. 2, eff. 8-13-75]

NAC 512.069 “Enforcement Section” defined. ([NRS 512.131](#)) “Enforcement Section” means the Mine Safety and Training Section of the Division, or its successor.
(Added to NAC by Div. of Industrial Relations by R125-08, eff. 5-30-2012)

NAC 512.091 “Mercury extraction area” defined. ([NRS 512.131](#)) “Mercury extraction area” means an area where mercury is removed during the processing of ore.
(Added to NAC by Div. of Industrial Relations by R125-08, eff. 5-30-2012)

NAC 512.XXX “Mechanical Compliance Section” defined. “Mechanical Compliance Section” has the meaning ascribed to it in NAC 455C.012.
(Added to NAC by Div. of Industrial Relations by R033-20, eff. 1-21-2021)

NAC 512.094 “Mine” defined. ([NRS 512.131](#)) “Mine” has the meaning ascribed to it in [NRS 512.006](#).
[Inspector of Mines, Part 5 No. 2 + Part 6 No. 2 + Part 7 No. 2, eff. 8-13-75]

NAC 512.100 “Operator” defined. ([NRS 512.131](#)) “Operator” has the meaning ascribed to it in [NRS 512.007](#) ~~+~~, and includes, without limitation:

- 1. Any person or organization commencing, operating, controlling or supervising any mining activity; and***
- 2. Any individual owner, lessor, lessee, agent, manager, worker, contractor, subcontractor, independent contractor, partnership, association or corporation or subsidiary of a corporation charged with the responsibility for the support of the operation of a mine.***

[Inspector of Mines, Part 5 No. 2 + Part 6 No. 2 + Part 7 No. 2, eff. 8-13-75; A by R033-20, 01-21-2021]

NAC 512.140 “Worker” defined. ([NRS 512.131](#)) “Worker” has the meaning ascribed to it in [NRS 512.009](#).
[Inspector of Mines, Part 5 No. 2 + Part 6 No. 2 + Part 7 No. 2, eff. 8-13-75]

HEALTH AND SAFETY STANDARDS

NAC 512.150 Applicability. ([NRS 512.131](#))

1. The provisions of [NAC 512.150](#) to [512.178](#), inclusive, ***and sections 3 and 4 of this regulation [R033-20]*** are designed to protect life, promote health and safety and prevent accidents in mines in Nevada. These sections apply to all open-pit or underground metal and nonmetallic mine and sand, gravel and crushed stone operations.

2. These standards do not appear in 30 C.F.R. Parts 55 to 57, inclusive, or in [NAC 512.010](#) to [512.140](#), inclusive. Therefore, operators should refer to [NAC 512.150](#) to [512.178](#), inclusive, ***and sections 3 and 4 of this regulation [R033-20]*** as supplemental to the other

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applicable federal and state standards mentioned in this subsection.

3. A violation of a provision of [NAC 512.150](#) to [512.178](#), inclusive, *or sections 3 and 4 of this regulation [R033-20]* subjects the operator or worker to a notice or order pursuant to [NRS 512.190](#).

[Inspector of Mines, Part 1 Purpose & Scope, eff. 8-13-75]—(NAC A by Div. of Mine Inspection, 12-2-82; A by R033-20, 01-21-2021)

NAC 512.151 Federal regulations adopted by reference. ([NRS 512.131](#))

1. The following federal regulations, as they existed on May 30, 2012, are hereby adopted by reference:

- (a) 29 C.F.R. §§ 1910.134 and 1910.1000; and
- (b) 30 C.F.R. Parts 47, 49, 56, 57 and 62.

2. A copy of the regulations may be obtained from the Department of Business and Industry, Division of Industrial Relations, Mine Safety and Training Section, 400 West King Street, Suite 210, Carson City, Nevada 89703, free of charge. The regulations are also available, free of charge, from the Government Printing Office at the Internet address <http://www.gpoaccess.gov/cfr/>.

3. Each revision of these regulations shall be deemed approved by the Division unless the Division disapproves the revision within 30 days after the date of adoption.

(Added to NAC by Div. of Mine Inspection, eff. 12-2-82; A by Div. of Industrial Relations by R125-08, 5-30-2012)

NAC 512.154 Underground mines: Requirements for fresh air and ventilation. ([NRS 512.131](#))

1. The operator of every underground mine shall provide and maintain a ventilation of at least 200 cubic feet per minute of fresh air for each person working in the mine.

2. Every operator shall do everything reasonably in his or her power to furnish and encourage the use of any appliances for allaying dust.

3. The air currents going into underground working, must, under all conditions, have sufficient volume and velocity to direct and carry away smoke and harmful gases from blasting, and any other gases or dusts which might contaminate the atmosphere to a degree in excess of the accepted minimum.

4. In any underground workings where the Chief considers it necessary for the welfare of the employees, mechanically produced and positively controlled air currents must be provided.

5. Internal combustion engines must not be used underground unless an application for the use has been filed with the Chief and is approved.

6. If an application to use an internal combustion engine underground is approved by the Chief, the designated equipment may be used only so long as it is operated and maintained in accordance with recommendations made public from time to time by the United States Bureau of Mines and only upon the condition that whenever safe conditions of air quality are not maintained, the operator stops operation of the equipment until proper conditions of air quality are again established, either by increasing ventilation or by correcting mechanical imperfections in the equipment, whichever is found to be the cause of the undesirable conditions.

[Inspector of Mines, Part 1 No. 5 subsecs. a-f, eff. 8-13-75]—(NAC A by Div. of Mine Inspection, 8-26-83)

NAC 512.1543 Underground mines: Ground support. ([NRS 512.131](#)) The operator of an underground mine shall use ground support when ground conditions in the underground mine indicate that ground support is necessary.

(Added to NAC by Div. of Industrial Relations by R125-08, eff. 5-30-2012)

NAC 512.1546 Underground mines: Ground support plan. ([NRS 512.131](#))

1. The operator of an underground mine shall:

- (a) Develop and maintain a ground support plan that conforms to the requirements of

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this section;

(b) Provide training concerning the ground support plan to each worker who is assigned to perform excavation of the underground mine;

(c) For each worker who is required to receive training, keep a written record of the amount and type of training completed by each worker and the name of the instructor for the training; and

(d) Provide the Enforcement Section with a copy of the ground support plan and any changes to the plan.

2. The ground support plan must:

(a) Be prepared by the engineering staff that is employed by or contracted with the operator of the underground mine;

(b) Provide that ground support be designed, installed and maintained to control the ground where a person may travel or work in the underground mine;

(c) Provide that any damaged, loosened or dislodged timbers or steel sets used for ground support that create a hazardous condition to a person be repaired or replaced before any travel or work is permitted into that area;

(d) Specify the methods and measures of primary ground support and secondary ground support that will be used during underground mine excavation for the development, production or exploration of ore; and

(e) Provide an engineering plan, map or drawing of the proposed height and width of mining excavations, including, without limitation, information relating to:

(1) Geologic strata;

(2) Geologic faults;

(3) Any naturally occurring water encountered; and

(4) Underground areas that are in horizontal or vertical proximity to the proposed area of excavation.

3. The ground support plan is subject to the requirements of 30 C.F.R. § 57.3203, as adopted by reference in [NAC 512.151](#), and any certification required pursuant to that section must be made available to the Enforcement Section.

4. As used in this section:

(a) “Primary ground support” means ground support that is designed, engineered, installed and maintained to provide maximum stabilization of the ground where a person works or travels within an underground mine, including, without limitation, during the excavation and extraction process.

(b) “Secondary ground support” means any rock fixture, wood timber, steel, arch, spilling, shotcrete with wire mesh, rock bolt bearing plate and wire mesh that is used in addition to the primary ground support.

(Added to NAC by Div. of Industrial Relations by R125-08, eff. 5-30-2012)

NAC 512.1549 Main shafts and raises; operator of underground mine to prepare written plan to provide secondary power supply source. ([NRS 512.131](#))

1. All main shafts and raises equipped with hoisting machinery for personnel must be:

(a) Equipped with one compartment that is partitioned off and set aside as a ladderway;

(b) Equipped with secondary or emergency hoisting machinery in the main shaft that is supplied by a secondary power supply source which supplies power to the primary hoisting machinery;

(c) Supplemented with hoisting machinery in an additional shaft that is supplied by a secondary power supply source which does not supply power to the main shaft and is connected by not fewer than two underground passageways to the main shaft or ventilation shaft; or

(d) Connected by a drift or decline to the surface that does not require hoisting machinery for movement.

2. An operator of an underground mine shall prepare a written plan to provide a secondary power supply source to a primary hoisting machine within not more than 8 hours after the failure of a primary power supply source. The operator shall submit the plan to the Enforcement Section

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for approval. Any proposed modification to the plan must be submitted to and approved by the Enforcement Section before the modification becomes effective.

3. As used in this section, “secondary power supply source” means a source of power which is separate from the primary power supply source and which is constructed and installed or designed for emergency installation and use in the event of failure of the primary power supply source.

(Added to NAC by Div. of Industrial Relations by R125-08, eff. 5-30-2012)

NAC 512.156 Repair or adjustment of electrical equipment. ([NRS 512.131](#)) All repairs, adjustments or other work on any type of electrical equipment must be performed by competent persons.

[Inspector of Mines, Part 1 No. 12 subsecs. a-d, eff. 8-13-75]—(NAC A by Div. of Mine Inspection, 8-26-83)

NAC 512.158 Ladders and ladderways. ([NRS 512.131](#))

1. The distance between the top of one rung and the top of the next rung on ladders must be 12 inches, and the distance between the centers of the ladder rungs must not exceed 12 inches.

2. Any ladderway which adjoins any chute compartment must be separated from the chute by a tight partition of sufficient strength and size to hold rock or other material from running into the ladderway.

3. When work is being carried on immediately above any chute ladderway, the ladderway must be protected by a solid bulkhead, for the protection of employees using the passageway, against falling rock or material. Entrance to the stope or other working place must be provided at the side of the ladderway immediately below the bulkhead.

[Inspector of Mines, Part 1 No. 11 subsecs. a, c-g, i, k & m-q, eff. 8-13-75]—(NAC A by Div. of Mine Inspection, 8-26-83; A by Div. of Industrial Relations by R125-08, 5-30-2012)

NAC 512.162 Haulageways. ([NRS 512.131](#)) Haulageways must be maintained in good condition, free of dips, bumps, obstructions, debris and dusty or dangerous conditions which may interfere with safe operation of haulage equipment.

[Inspector of Mines, Part 1 No. 9 subsecs, a-d, eff. 8-13-75]—(NAC A by Div. of Mine Inspection, 8-26-83)

NAC 512.164 Code of bell signals for hoisting. ([NRS 512.131](#))

1. At all mines where hoisting apparatus is used in the State of Nevada, the following code of bell signals must be adopted and used:

(a) COMMAND SIGNALS

		1
Stop.....	Bell	
Lower Conveyance.....		2 Bells
Raise Conveyance.....		3 Bells
		3-1
Hoist Persons.	Bells	
Lower Persons.....	Bells	Relea se
Hoist Slowly with Caution.....	Bells	Conv eyanc e.
Lower Slowly with Caution.....	Bells Bells
Hoist Muck or Materials Only	Bells	

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Repeat.	Bells	3-2
		3-3-1
		3-3-2
		1-2-1
		2-1-2
		2-2-2

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The conveyance must not be moved without a command signal. When persons are to be hoisted or lowered, they must enter the conveyance and close the door and then give the signal for the desired level, followed by “Hoist Persons” (3-1 Bells) or “Lower Persons” (3-2 Bells). Additional signals are:

For blasting, 3-2-1 Bells, which the hoisting engineer shall acknowledge by raising and lowering the conveyance slightly.

For an emergency, 9 Bells, followed by ringing the mine level signal for the level where the emergency exists.

(b) MINE LEVEL SIGNALS

Shaft Collar.....	1-2 Bells
First Level.....	2-1 Bells
Second Level.....	2-2 Bells
Third Level.....	2-3 Bells
Fourth Level.....	2-4 Bells
Fifth Level.....	2-5 Bells
Sixth Level.....	4-1 Bells
Seventh Level.....	4-2 Bells
Eighth Level.....	4-3 Bells
Ninth Level.....	4-4 Bells
Tenth Level.....	4-5 Bells

2. One copy of this code of bell signals must be posted on the gallows-frame, one before the engineer and one at each station. Other bell signals which are not in conflict with this code may be used for local conditions, but a table showing such other signals must be posted in connection with this code.

[Inspector of Mines, Part 1 No. 19 subsecs. a-c, e & g, eff. 8-13-75]—(NAC A by Div. of Mine Inspection, 8-26-83)

NAC 512.165 Hoisting engineers. ([NRS 512.131](#)) Each hoisting engineer shall inform himself or herself of the safety laws pertaining to mining and all bell signals used in operating a cage, skip or bucket.

(Added to NAC by Div. of Mine Inspection, eff. 8-26-83)

NAC 512.166 Raise climbing machines. ([NRS 512.131](#)) Raise climbing machines, that require driving of raises without maintaining a timbered passageway close to the face, must not be used, unless an application has been filed with the Chief and he or she has determined that the particular type of equipment for which the application has been filed can be safely used.

[Inspector of Mines, Part 1 No. 20 subsec. a, eff. 8-13-75]—(NAC A by Div. of Mine Inspection, 8-26-83)

NAC 512.170 Cottrells, baghouses and flues. ([NRS 512.131](#))

1. Before any person enters a Cottrell treater section while it is in operation, the main power supply to the section must be deenergized, tagged out and locked out where possible and the section grounded. The section must remain grounded during the period any persons are within the section.

2. No person may enter a Cottrell, baghouse or flue where there is a possibility of toxic gas or oxygen deficiency unless the person is using a breathing apparatus which is approved by the National Institute for Occupational Safety and Health.

3. No person may enter a baghouse, flue or chamber while it is under pressure unless emergency rescue equipment is available and a person trained in its use is stationed at the point of entrance.

4. Positive tag-out and lock-out procedure where possible must be followed to prevent

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anyone from being trapped inside a Cottrell, baghouse or flue when the doors are closed.

5. All Cottrell rectifiers with exposed high voltage conductors must be enclosed and the enclosure locked.

6. No person may walk on flues unless temporary or permanent walkways are provided.

7. All timber removed must, as soon as practicable, be taken from the mine and not be piled up and permitted to decay underground.

[Inspector of Mines, Part 1 No. 16 subsecs. a, b, d & f-s, eff. 8-13-75]—(NAC A by Div. of Mine Inspection, 8-26-83)

NAC 512.178 Exposure to mercury. ([NRS 512.131](#))

1. An operator shall provide training to each worker who will or may come into contact with mercury before the worker is assigned production work, including, without limitation, training related to:

- (a) The health hazards of mercury;
- (b) The routes of entry of mercury into a person;
- (c) Personal protective equipment;
- (d) The effective measures to control mercury; and
- (e) The appropriate response to the cleanup of spills of mercury.

2. In mercury extraction areas or other areas within the mine where the health and safety of a worker may be at risk from exposure to mercury:

(a) Hoeing tables must be completely enclosed except for the frontal opening and provided with mechanical exhaust ventilation providing a minimum hood face velocity of 100 cubic feet per minute of ventilation continuously during each shift.

(b) Bottling operations must be as automatic as possible to reduce unnecessary exposure to a worker. A pan containing a layer of water must be placed under each mercury flask during the filling of the mercury flask to catch any spilled mercury.

(c) A polysulfide mercury depressant must be applied at least once a month to surface areas where mercury may accumulate and immediately after all mercury spills.

3. At each mill for refining mercury and each mercury extraction area:

(a) The operator shall provide nonabsorbent, smooth and impenetrable floors and sidewalls to a height of at least 6 inches under kilns, cooling towers, hoeing tables, retorts, bottling operations and in any other area where mercury may be spilled or otherwise accumulate on floors.

(b) General dilution ventilation is required in all areas where other methods are not adequate to maintain the mercury in air concentrations below the recommended threshold limit value recommended by the American Conference of Governmental Industrial Hygienists.

(c) While performing operations where exposure to mercury vapors in air concentrations may exceed the recommended limit, workers shall wear devices approved for respiratory protection by the National Institute for Occupational Safety and Health or the Mine Safety and Health Administration.

4. “No Smoking” signs must be posted in mercury extraction areas and other areas where mercury vapors may be present, and workers are prohibited from smoking or eating except in designated areas.

5. A shower and change room must be provided for workers who work in mercury extraction areas, along with adequate locker space for storage of off-duty clothing.

6. The operator shall collect urine samples monthly from workers who work in mercury extraction areas and where mercury-bearing ore is processed. The operator shall submit the urine samples monthly to a medical laboratory for determination of levels of mercury. Workers with a confirmed Biological Exposure Index value of 35 ug/gCRT or more or a single sample confirming mercury levels above 45 ug/gCRT must be removed from further exposure until their levels of mercury return to a normal level of 25 ug/gCRT or less. The operator shall notify the Enforcement Section and take appropriate action if a worker’s creatinine-corrected level of mercury is found to be more than 25 ug/gCRT.

7. The operator shall provide annual physical examinations to any worker for whom a urine

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sample collected pursuant to subsection 6 demonstrates that the worker's level of mercury exceeds 25 ug/gCRT to determine any effects of exposure to mercury vapor.

8. As used in this section:

(a) "Biological Exposure Index" means the concentration of mercury found in the body of a worker, including, without limitation, in the urine, blood or exhaled air of the worker, that corresponds to inhalation exposure at a specific air concentration.

(b) "Medical laboratory" has the meaning ascribed to it in [NRS 652.060](#).

[Inspector of Mines, Part 1 No. 5 subsec. g, eff. 8-13-75]—(NAC A by Div. of Mine Inspection, 8-26-83; A by Div. of Industrial Relations by R125-08, 5-30-2012)

NAC 512.179 Exposure to crystalline silica. ([NRS 512.131](#)) An operator shall ensure that no worker is exposed to crystalline silica, including, without limitation, cristobalite, quartz or tridymite in the form of respirable dust of more than 0.05 mg/m³ of an 8-hour time-weighted average.

(Added to NAC by Div. of Industrial Relations by R125-08, eff. 5-30-2012)

NAC 512.185 Execution of notices of violations and orders for withdrawal. ([NRS 512.131](#)) A person so designated by the Chief may sign notices and orders issued pursuant to [NRS 512.190](#).

(Added to NAC by Div. of Mine Inspection, eff. 9-19-90)

NAC 512.XXX Opening and closing of mine operations. For the purposes of subsection 3 of NRS 512.160, the Administrator deems the opening and closing of mine operations to include, without limitation:

1. The construction, repair or demolition of any private ways or roads appurtenant to a mine; and

2. The operation, construction, repair or demolition of any structures, equipment, machinery, apparatus or other property upon the surface or underground used to facilitate the work of exploring, developing or extracting minerals or mineral commodities, other than solid fuels, in or from any deposit.

(Added to NAC by Div. of Industrial Relations by R033-20, eff. 1-21-2021)

SERIOUS ACCIDENTS

NAC 512.190 "Serious accident" interpreted. ([NRS 512.131](#), [512.220](#)) As used in [NRS 512.220](#), the Administrator will interpret the phrase "serious accident" to include, without limitation:

1. The death of a person;
2. An injury to a person that has a reasonable potential to cause death;
3. The entrapment of a person for more than 30 minutes;
4. An unplanned inundation by a liquid or gas;
5. An unplanned ignition or explosion of gas or dust;
6. An unplanned fire that is not extinguished within 30 minutes after discovery;
7. An unplanned ignition or explosion of a blasting agent or explosive;
8. The unplanned fall of a roof which occurs at or above the zone of anchorage in active workings where roof bolts are in use or which impairs ventilation or impedes passage of persons;
9. An outburst of coal or rock that causes the withdrawal of persons from the mine or the disruption of regular mining activity for more than 1 hour;
10. An unstable condition at an impoundment, refuse pile or culm bank that requires emergency action to prevent the failure of the impoundment, refuse pile or culm bank or causes the evacuation of an area;

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EXPLANATION — Matter in *italics* is new; matter in brackets ~~[omitted material]~~ is material to be omitted.

11. The failure of an impoundment, refuse pile or culm bank;
12. Damage to hoisting equipment in a shaft or slope that endangers a person or interferes with the use of the hoisting equipment for more than 30 minutes;
13. Any event that causes death or bodily injury to a person who is not at the mine when the event occurred; and
14. Damage to haulage or support equipment used in a mine which endangers a person. (Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000)

NAC 512.193 Reporting requirements. ([NRS 512.131](#), [512.160](#), [512.220](#))

1. An operator of a mine shall report a serious accident that occurs at the mine immediately to the ~~[Administrator]~~ *Chief* at ~~[(775) 687-5243.]~~ *(775) 684-7085*.
 2. An operator shall:
 - (a) Investigate any serious accident, occupational injury or occupational illness that occurs at the mine; and
 - (b) Submit a report relating to the investigation to the Administrator within 10 business days after the serious accident, *occupational* injury or occupational illness occurs.
 3. As used in this section:
 - (a) “Occupational illness” means an illness or disease of a worker which may have resulted from working at the mine or for which an award of compensation is made.
 - (b) “Occupational injury” means an injury to a worker which occurs at a mine for which medical treatment is administered, or which results in death, or loss of consciousness, inability to perform all job duties on any day after an injury, temporary assignment to other duties, or transfer to another job.
- (Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R033-20, 01-21-2021)

BOILERS AND PRESSURE VESSELS

General Provisions

NAC 512.XXX Applicability. The provisions of NAC 455C.204, 455C.250, 455C.252, 455C.268, 455C.274, 455C.296 and 455C.300 apply to boilers and pressure vessels governed by the provisions of NAC 512.500 to 512.585, inclusive.

(Added to NAC by Div. of Industrial Relations by R026-23, eff. 09-16-2024)

NAC 512.500 Definitions. ([NRS 455C.110](#), [512.131](#)) As used in [NAC 512.500](#) to ~~[512.594.]~~ *512.585*, inclusive, *and sections 6, 7, and 8 of this regulation [R026-23]* unless the context otherwise requires, the words and terms defined in [NAC 512.502](#) to [512.558](#), inclusive, *and sections 6, 7, and 8 of this regulation [R026-23]* have the meanings ascribed to them in those sections.

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R101-02, 12- 15-2004; R026-23, 09-16-2024)

NAC 512.502 “Authorized inspection entity” defined. ([NRS 455C.110](#), [512.131](#))

“Authorized inspection entity” means:

1. The *Mechanical Compliance Section*;

2. *The Enforcement Section*;

~~[2.]~~ 3. An insurance company that:

(a) Is licensed in this State to write insurance for a boiler or pressure vessel; and

(b) Employs or contracts with a special inspector who has been issued a certificate; or

~~[3.]~~ 4. An inspection organization that employs or contracts with a special inspector who has been issued a certificate.

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R101-02, 12- 15-2004; R026-23, 09-16-2024)

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EXPLANATION — Matter in *italics* is new; matter in brackets [~~omitted material~~] is material to be omitted.

NAC 512.504 “Boiler” defined. ([NRS 455C.110](#), [512.131](#)) “Boiler” [~~means a closed vessel in which water or another liquid is heated, steam or vapor is generated or steam is superheated, or any combination thereof, under pressure or vacuum, for use external to the boiler by the direct application of energy from the combination of fuels or from electricity. The term includes, without limitation, a fired unit for heating or vaporizing liquids other than water if the unit is separate from the processing system and is complete within itself.~~] *has the meaning ascribed to it in NAC 455C.026.*

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R026-23, 09-16-2024)

NAC 512.506 “Boiler inspector” defined. ([NRS 455C.110](#), [512.131](#)) “Boiler inspector” [~~means a person who:~~

1. ~~Inspects boilers or pressure vessels;~~

2. ~~Holds a commission; and~~

3. ~~Is employed or retained as an independent contractor by an authorized inspection entity.]~~

has the meaning ascribed to it in NAC 455C.028.

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R101-02, 12-15-2004; R026-23, 09-16-2024)

NAC 512.508 “Certificate” defined. ([NRS 455C.110](#), [512.131](#)) “Certificate” [~~means a certificate to work as a special inspector that is issued by the Occupational Safety and Health Administration of the Division pursuant to [NAC 455C.130.](#)~~] *has the meaning ascribed to it in NAC 455C.030.*

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R101-02, 12-15-2004; R026-23, 09-16-2024)

NAC 512.510 “Code” defined. ([NRS 455C.110](#), [512.131](#)) “Code” means ~~†:~~

1. ~~The *Boiler and Pressure Vessel Code* of the American Society of Mechanical Engineers with amendments and interpretations adopted by the Council of the Society and approved and adopted by the Division;~~

2. ~~A code relating to the construction of boiler and pressure vessels that has been approved by the National Board and adopted by the Division; or~~

3. ~~The *National Board Inspection Code.*~~ *any provision set forth in NAC 512.500 to 512.585, inclusive, and sections 6, 7 and 8 of this regulation, including without limitation:*

1. *The provisions of chapter 455C of NAC set forth in section 8 of this regulation [R026-23]; and*

2. *Any provision set forth in a publication adopted by reference in NAC 512.562.*

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R026-23, 09-16-2024)

NAC 512.512 “Commission” defined. ([NRS 455C.110](#), [512.131](#)) “Commission” [~~means the commission issued by the National Board to a person who is authorized to inspect boilers or pressure vessels.~~] *has the meaning ascribed to it in NAC 455C.034.*

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R101-02, 12-15-2004 R026-23, 09-16-2024)

NAC 512.514 “Contractor” defined. ([NRS 455C.110](#), [512.131](#)) “Contractor” has the meaning ascribed to it in [~~NRS 624.020.~~] *NAC 455C.036.*

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R026-23, 09-16-2024)

NAC 512.520 “Heat exchanger” defined. [~~Repealed per R026-23~~]

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EXPLANATION — Matter in *italics* is new; matter in brackets [~~omitted material~~] is material to be omitted.

NAC 512.522 “Heating boiler” defined. [Repealed per R026-23]

NAC 512.524 “High-pressure, high-temperature boiler” defined. [Repealed per R026-23]

NAC 512.526 “Hot water supply boiler” defined. (NRS 455C.110, 512.131) “Hot water supply boiler” [~~means a boiler that is completely filled with water that furnishes hot water to be used outside the boiler at pressures not exceeding 160 PSIG or at temperatures not exceeding 250°F at or near the boiler outlet and which:~~

1. ~~Uses a storage tank to supply hot water to the system;~~
2. ~~Fires on demand to heat water which is supplied directly into the system; or~~
3. ~~Is fired at a rate of not less than 200,000 British thermal units.]~~ *has the meaning ascribed to it in NAC 455C.054.*

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R026-23, 09-16-2024)

NAC 512.528 “Inspection organization” defined. (NRS 455C.110, 512.131) “Inspection organization” [~~means an owner or user of pressure retaining items who maintains an established inspection program and whose organization and inspection procedures comply with the National Board Inspection Code and have been approved by the Enforcement Section.]~~ *has the meaning ascribed to it in NAC 455C.058.*

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R101-02, 12- 15-2004; R026-23, 09-16-2024)

NAC 512.529 “Inspector” defined. (NRS 455C.110, 512.131) “Inspector” means ~~[a]~~ :

1. *A boiler inspector employed by the Enforcement Section* ~~[+]~~ ; *or*
2. *An employee of the Mechanical Compliance Section performing any inspection service pursuant to section 4 of this regulation.*

(Added to NAC by Div. of Industrial Relations by R101-02, eff. 12-15-2004; A by R033-20, 01-21-2021)

NAC 512.XXX “Installation of a new boiler or pressure vessel” defined. “Installation of a new boiler or pressure vessel” means the construction, installation or placing into operation of or contracting for any boiler or pressure vessel on or after January 28, 2000.

(Added to NAC by Div. of Industrial Relations by R026-23, eff. 09-16-2024)

NAC 512.530 “Miniature boiler” defined. [Repealed per R026-23]

NAC 512.532 “National Board” defined. (NRS 455C.110, 512.131) “National Board” [~~means the National Board of Boiler and Pressure Vessel Inspectors.]~~ *has the meaning ascribed to it in NAC 455C.068.*

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R101-02, 12- 15-2004; R026-23, 09-16-2024)

NAC 512.534 “National Board Inspection Code” defined. (NRS 455C.110, 512.131) “National Board Inspection Code” [~~means the manual for boiler and pressure vessel inspectors published by the National Board and adopted by reference in NAC 512.562.]~~ *has the meaning ascribed to it in NAC 455C.070.*

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R101-02, 12- 15-2004; R026-23, 09-16-2024)

NAC 512.536 “New boiler or pressure vessel installation” defined. [Repealed per R026-23]

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NAC 512.538 “Owner or user” defined. ([NRS 455C.110](#), [512.131](#)) ~~[Repealed per R026-23]~~

NAC 512.XXX “Person” defined. “Person” has the meaning ascribed to it in NAC 455C.089.

(Added to NAC by Div. of Industrial Relations by R026-23, eff. 09-16-2024)

NAC 512.540 “Power boiler” defined. ~~[Repealed per R026-23]~~

NAC 512.542 “Pressure vessel” defined. ([NRS 455C.110](#), [512.131](#)) “Pressure vessel” ~~[means a vessel in which pressure is obtained from an external source or by the application of heat from a direct or indirect source. The term includes, without limitation, an unfired steam boiler.]~~ *has the meaning ascribed to it in NAC 455C.084.*

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R026-23, 09-16-2024)

NAC 512.544 “Pressure-retaining item” defined. ~~[Repealed per R026-23]~~

NAC 512.546 “PSIG” defined. ([NRS 455C.110](#), [512.131](#)) “PSIG” ~~[means— pounds per square inch gauge.]~~ *has the meaning ascribed to it in NAC 455C.086.*

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; R026-23, 09-16-2024)

NAC 512.548 “Relief valve” defined. ~~[Repealed per R026-23]~~

NAC 512.550 “Repair” defined. ([NRS 455C.110](#), [512.131](#)) “Repair” ~~[means the work necessary to restore a pressure retaining item to a safe and satisfactory operating condition if there is no deviation from the original design.]~~ *has the meaning ascribed to it in NAC 455C.092.*

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R026-23, 09-16-2024)

NAC 512.552 “Safety relief valve” defined. ([NRS 455C.110](#), [512.131](#)) “Safety relief valve” ~~[means a relieving device that is:~~

- ~~1.— Automatically pressure actuated; and~~
- ~~2.— Suitable for use as a safety valve or relief valve, depending on the application.]~~ *has the meaning ascribed to it in NAC 455C.094.*

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R026-23, 09-16-2024)

NAC 512.554 “Safety valve” defined. ([NRS 455C.110](#), [512.131](#)) “Safety valve” ~~[means an automatic pressure relieving device that:~~

- ~~1.— Is actuated by the static pressure upstream of the valve; and~~
- ~~2.— Has a full opening spring pop type action that is used for gas or vapor service.]~~ *has the meaning ascribed to it in NAC 455C.096.*

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R101-02, 12-15-2004; R026-23, 09-16-2024)

NAC 512.555 “Special inspector” defined. ([NRS 455C.110](#), [512.131](#)) “Special inspector” ~~[means a boiler inspector who holds a certificate and who is employed or retained as an independent contractor by:~~

- ~~1.— An insurance company that is licensed in this State to write insurance for a boiler or pressure vessel; or~~
- ~~2.— An inspection organization.]~~ *has the meaning ascribed to it in NAC 455C.100.*

(Added to NAC by Div. of Industrial Relations by R101-02, eff. 12-15-2004; A by R026-23,

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09-16-2024)

NAC 512.556 “Unfired steam boiler” defined. ~~[Repealed per R026-23]~~

NAC 512.558 “Water heater” defined. (NRS 455C.110, 512.131) “Water heater” ~~[means a hot water supply boiler or a closed vessel in which water is heated by the combustion of fuel, electricity or any other source and withdrawn from the heater for use outside the system of the water heater at pressures not exceeding 160 PSIG and which includes, without limitation, any control or device necessary to prevent the water temperature from exceeding 210°F (99°C).]~~ *has the meaning ascribed to it in section 3 of LCB File No. R033-21.*

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R026-23, 09-16-2024)

NAC 512.560 Authority of Administrator to delegate certain duties. (NRS 512.131)

The Administrator may delegate any duties which the Administrator is assigned pursuant to NAC 512.500 to ~~[512.594,]~~ 512.585, inclusive, *or section 4 of LCB File No. R033-20 or section 6, 7 or 8 of this regulation [R026-23]* to the Mine Safety and Training Section of the Division, or its successor.

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R026-23, 09-16-2024)

NAC 512.XXX Inspection services of the Mechanical Compliance Section.

1. In carrying out his or her duties to inspect pursuant to NRS 512.170 and 512.180, the Administrator may authorize and use the inspection services of the Mechanical Compliance Section to conduct an inspection of equipment, machinery or apparatus which would otherwise be subject to the jurisdiction of the Mechanical Compliance Section if such equipment, machinery or apparatus was not located at a mine as defined in NRS 512.006.

2. If the Administrator uses the inspection services of the Mechanical Compliance Section pursuant to subsection 1:

(a) The Mechanical Compliance Section must present the Enforcement Section with an invoice for the actual expenses incurred in performing the inspection services rendered; and

(b) The Enforcement Section shall reimburse the Mechanical Compliance Section for those expenses.

(Added to NAC by Div. of Industrial Relations by R033-20, eff. 01-21-2021)

NAC 512.562 Adoption by reference of certain publications, codes and sections of codes. (NRS 455C.110, 512.131)

~~[1. The]~~ *For the purposes of NAC 512.500 to 512.585, inclusive, and sections 6, 7 or 8 of this regulation [R026-23], the Administrator hereby adopts by reference ~~[the National Board Inspection Code, 2001 edition and addenda, and any subsequent edition and addenda issued by the National Board of Boiler and Pressure Vessel Inspectors, unless the edition or addenda is disapproved by the Administrator within 60 days after the date the edition is published by the National Board of Boiler and Pressure Vessel Inspectors. The most current edition that has been approved by the Administrator may be determined by contacting the Office of the Administrator. A copy of the 2001 edition may be obtained from the National Board of Boiler and Pressure Vessel Inspectors, 1055 Crupper Avenue, Columbus, Ohio 43229, for the price of \$85.~~*

~~—2. The Administrator hereby adopts by reference the following sections of the ASME Boiler and Pressure Vessel Code, 2001 edition and addenda, and of any subsequent edition and addenda issued by the American Society of Mechanical Engineers, unless the edition or addenda is disapproved by the Administrator within 60 days after the date the edition is published by the~~

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~~American Society of Mechanical Engineers. The most current edition that has been approved by the Administrator may be determined by contacting the Office of the Administrator. A copy of the sections of the 2001 edition and its addenda adopted by reference in this subsection may be obtained from ASME International, 22 Law Drive, P.O. Box 2900, Fairfield, New Jersey 07007-2900, for the price indicated:~~

	Cost
(a) Section I, Power	
Boilers.....	\$295
(b) Section II, Part D:	
Properties.....	435
(c) Section IV, Rules for Construction of Heating	
Boilers.....	280
(d) Section V, Nondestructive	
Examination.....	315
(e) Section VI, Recommended Rules for the Care and Operation of Heating	
Boilers.....	175
(f) Section VII, Recommended Guidelines for the Care of Power	
Boilers.....	180
(g) Section VIII, Pressure Vessels—Division	
1.....	460
(h) Section IX, Welding and Brazing	
Qualifications.....	330
(i) Section X, Fiber Reinforced Plastic Pressure	
Vessels.....	250

~~3. The Administrator hereby adopts by reference *Controls and Safety Devices for Automatically Fired Boilers*, CSD-1, 2002 edition, and any subsequent edition issued by the American Society of Mechanical Engineers, unless the edition is disapproved by the Administrator within 60 days after the date the edition is published by the American Society of Mechanical Engineers. The most current edition that has been approved by the Administrator may be determined by contacting the Office of the Administrator. This publication applies to automatically fired boilers which are directly fired with gas, oil, a combination of gas and oil or electricity. The 2002 edition may be obtained from ASME International, 22 Law Drive, P.O. Box 2900, Fairfield, New Jersey 07007-2900, for the price of \$56.~~

~~4. The Administrator hereby adopts by reference the *Power Piping Code*, B31.1, 2001 edition and addenda, and any subsequent edition and addenda issued by the American Society of Mechanical Engineers, unless the edition is disapproved by the Administrator within 60 days after the date the edition is published by the American Society of Mechanical Engineers. The most current edition that has been approved by the Administrator may be determined by contacting the Office of the Administrator. The 2001 edition and its addenda may be obtained from ASME International, 22 Law Drive, P.O. Box 2900, Fairfield, New Jersey 07007-2900, for the price of \$230.~~

~~5. The Administrator hereby adopts by reference the *National Fuel Gas Code*, ANSI Z223.1/NFPA 54, 2002 edition, and any subsequent edition issued by the National Fire Protection Association, unless the edition is disapproved by the Administrator within 60 days after the date the edition is published by the National Fire Protection Association. The most current edition that has been approved by the Administrator may be determined by contacting the Office of the Administrator. The 2002 edition may be obtained from Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado 80112, for the price of \$69.~~

~~6. The Administrator hereby adopts by reference the *National Electrical Code*, ANSI/NFPA-70, 2002 edition and any subsequent edition issued by the American National Standards Institute, unless the edition is disapproved by the Administrator within 60 days after the date the edition is~~

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EXPLANATION — Matter in *italics* is new; matter in brackets [~~omitted material~~] is material to be omitted.

~~published by the American National Standards Institute. The most current edition that has been approved by the Administrator may be determined by contacting the Office of the Administrator. The 2002 edition may be obtained from Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado 80112, for the price of \$284.~~

~~—7. The Administrator hereby adopts by reference the *Uniform Building Code*, 1997 edition, and any subsequent editions issued by the International Conference of Building Officials, unless the edition is disapproved by the Administrator within 60 days after the date the edition is published by the International Conference of Building Officials. The most current edition that has been approved by the Administrator may be determined by contacting the Office of the Administrator. The 1997 edition may be obtained from the International Conference of Building Officials, 5360 South Workman Mill Road, Whittier, California 90601, for the price of \$227.~~

~~—8. The Administrator hereby adopts by reference the *Uniform Mechanical Code*, 2000 edition, and any subsequent edition issued by the International Conference of Building Officials, unless the edition is disapproved by the Administrator within 60 days after the date the edition is published by the International Conference of Building Officials. The most current edition that has been approved by the Administrator may be determined by contacting the Office of the Administrator. The 2000 edition may be obtained from the International Conference of Building Officials, 5360 South Workman Mill Road, Whittier, California 90601, for a cost of \$70.~~

~~—9. The Administrator hereby adopts by reference the *Uniform Fire Code*, 2000 edition, and any subsequent editions issued by the International Conference of Building Officials, unless an edition is disapproved by the Administrator within 60 days after the date the edition is published by the International Conference of Building Officials. The most current edition that has been approved by the Administrator may be determined by contacting the Office of the Administrator. The 2000 edition may be obtained from the International Conference of Building Officials, 5360 South Workman Mill Road, Whittier, California 90601, for the price of \$94.95.~~

~~—10. The Administrator hereby adopts by reference the *Uniform Plumbing Code*, 2000 edition, and any subsequent edition issued by the International Association of Plumbing and Mechanical Officials, unless the edition is disapproved by the Administrator within 60 days after the date the edition is published by the International Association of Plumbing and Mechanical Officials. The most current edition that has been approved by the Administrator may be determined by contacting the Office of the Administrator. The 2000 edition may be obtained from the International Association of Plumbing and Mechanical Officials, 20001 Walnut Drive South, Walnut, California 91789-2825, for the price of \$89.~~

~~—11. The Administrator hereby adopts by reference the *Standard for the Installation of Oil-Burning Equipment*, ANSI/NFPA 31, 2001 edition, and any subsequent edition issued by the National Fire Protection Association, unless the edition is disapproved by the Administrator within 60 days after the date the edition is published by the National Fire Protection Association. The most current edition that has been approved by the Administrator may be determined by contacting the Office of the Administrator. The 2001 edition may be obtained from Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado 80112, for the price of \$59.~~

~~—12. The Administrator hereby adopts by reference the *Safety Standard for Refrigeration Systems*, ANSI/ASHRAE 15, 2001 edition, and any subsequent edition issued by the American Society of Heating, Refrigeration and Air Conditioning Engineers, unless the edition is disapproved by the Administrator within 60 days after the date the edition is published by the American Society of Heating, Refrigeration and Air Conditioning Engineers. The most current edition that has been approved by the Administrator may be determined by contacting the Office of the Administrator. The 2001 edition may be obtained from Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado 80112, for the price of \$46.] ***the codes, standards and other publications adopted by reference by the Division in NAC 455C.108.***~~

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R101-02, 12-15-2004; R026-23, 09-16-2024)

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EXPLANATION — Matter in *italics* is new; matter in brackets ~~[omitted material]~~ is material to be omitted.

NAC 512.564 Requirements for operation. (NRS 455C.110, 512.131) A new boiler, pressure vessel or water heater must not be operated in this State unless it is [designed, constructed, inspected] :

1. *Designed;*

2. *Constructed;*

3. *Inspected by the Enforcement Section or the Mechanical Compliance Section;* and ~~[installed]~~

4. *Installed,*

➔ in accordance with the *Code* . ~~[and the provisions of NAC 512.500 to 512.594, inclusive.]~~

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R026-23, 09-16-2024)

NAC 512.566 Exemptions from requirements. (NRS 455C.110, 512.131) The provisions of NAC 512.500 to ~~[512.594,]~~ 512.585, inclusive, *and sections 6, 7 and 8 of this regulation* do not apply to:

1. An unfired pressure vessel that meets the requirements of the United States Department of Transportation for the shipment of liquids or gases under pressure.

2. An unfired pressure vessel which has an inside diameter that does not exceed 6 inches (152 millimeters).

3. An unfired pressure vessel used for domestic purposes which contains cold water under pressure, including, without limitation, a vessel containing air, the compression of which serves only as a cushion.

4. A pressure vessel which contains water heated by steam or by any other means if none of the following limitations is exceeded:

(a) An input of heat of 199,999 British thermal units per hour (58,600 watts);

(b) A water temperature of 210 F (99 C); and

(c) A water capacity of 120 gallons (450 liters).

5. A fired storage water heater that is directly fired with oil, gas or electricity if none of the following limitations is exceeded:

(a) An input of heat of 199,999 British thermal units per hour (58,600 watts);

(b) A water temperature of 210 F (99 C); and

(c) A water capacity of 120 gallons (450 liters).

6. An unfired pressure vessel that does not exceed 5 cubic feet in volume and 250 PSIG.

7. A hot water heater constructed of continuous coils, which is used only to produce steam vapor to clean machinery, equipment and buildings, if:

(a) The tubing or pipe size does not exceed three-fourths of an inch in diameter and drums and headers are not attached;

(b) The nominal water containing capacity does not exceed 6 gallons;

(c) The water temperatures do not exceed 350 F; and

(d) Steam is not generated within the coil,

➔ except that the provisions of NAC 512.500 to ~~[512.594,]~~ 512.585, inclusive, and *sections 6, 7 or 8 of this regulation* do apply to safety relief valves on a hot water heater constructed of continuous coils.

8. An unfired pressure vessel and piping containing liquid petroleum gas and liquid natural gas.

9. Any vessel, regardless of its size, that has an internal or external operating pressure less than or equal to 15 PSIG.

10. As used in this section, “fired storage water heater” means a hot water supply boiler used to store or directly supply potable hot water for external use which has:

(a) A 100 percent makeup; and

(b) A firing rate of not less than 200,000 British thermal units.

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R026-23, 09-16-2024)

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EXPLANATION — Matter in *italics* is new; matter in brackets ~~[omitted material]~~ is material to be omitted.

NAC 512.568 Notification of Enforcement Section by insurance company upon commencement of or change to coverage. ([NRS 455C.110](#), [512.131](#)) An insurance company shall notify the Enforcement Section within 30 days after the insurance company commences coverage of or cancels, refuses to renew or suspends the coverage of a boiler or pressure vessel. (Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000)

Inspections

NAC 512.570 Frequency and scope; authority to require preparation for inspection. ([NRS 455C.110](#), [512.131](#))

1. An internal inspection conducted pursuant to this section must consist of as complete an examination as can reasonably be made of the internal and external surfaces of a boiler or pressure vessel while it is not operating and must not be conducted until any plates for a manhole or handhole or other closures of openings used for an inspection are removed. An external inspection conducted pursuant to this section must consist of an examination of the external surfaces of a boiler or pressure vessel and must be performed while the boiler or pressure vessel is in operation. An inspection conducted pursuant to this section must include operational testing of all controls and safety devices.

2. A power boiler and a high-pressure, high-temperature boiler must be inspected internally, if the construction and design of the boiler so allows, at least once each year and externally approximately 6 months after the date of the internal inspection. If an internal inspection is not possible, such a boiler must be inspected externally at least once every 6 months.

3. A low-pressure ~~[steam]~~ *heating* boiler must be inspected externally at least once every year and internally, if the construction and design of the boiler so allows, at least once every 2 years.

4. A hot water heating boiler and a hot water supply boiler must be inspected externally at least once every 2 years and internally, if the construction and design of the boiler so allows, at the request of the inspector or special inspector.

5. A ~~[fired]~~ potable water heater must be inspected externally at least once every 2 years.

6. Any other fired pressure vessel for which a frequency of inspection is not specified in subsections 1 to 5, inclusive, must be inspected internally, if the construction and design of the pressure vessel so allows, at least once each year.

7. Except as otherwise provided in this section, a pressure vessel must be inspected externally at least once every 3 years.

8. An inspector or special inspector may require any boiler or pressure vessel to be prepared for inspection if, in his or her opinion, an inspection is necessary to determine whether the boiler or pressure vessel is operating in a safe manner.

9. As used in this section:

(a) *“External inspection”* has the meaning ascribed to it in [NAC 455C.042](#).

(b) *“Fired pressure vessel”* ~~[means a vessel other than a boiler in which steam or vapor pressure is generated in excess of 15 pounds per square inch by direct firing with a solid, liquid or gaseous fuel or by an electric heating element.~~

~~— (b)]~~ has the meaning ascribed to it in [NAC 455C.046](#).

(c) *“High-pressure, high-temperature water boiler”* has the meaning ascribed to it in [NAC 455C.050](#).

(d) *“Hot water heating boiler”* has the meaning ascribed to it in [NAC 455C.052](#).

(e) *“Internal inspection”* has the meaning ascribed to it in [NAC 455C.062](#).

(f) *“Low-pressure heating boiler”* has the meaning ascribed to it in [NAC 455C.066](#).

(g) *“Potable water heater”* ~~[means a fired heater for the storage of water which has a corrosion-resistant lining and is used to supply potable hot water.]~~ has the meaning ascribed to it in [NAC 455C.081](#).

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(h) *“Power boiler” has the meaning ascribed to it in NAC 455C.082.*

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R101-02, 12- 15-2004; R033-20, 01-21-2021; R026-23, 09-16-2024)

NAC 512.572 Procedure upon determination of unsafe condition. ([NRS 455C.110](#), [512.131](#)) If an inspector or special inspector, upon his or her inspection of a boiler or pressure vessel, finds that the boiler or pressure vessel or any appurtenance thereof is in such condition as to be unsafe, the inspector or special inspector shall immediately notify the owner or user and the Administrator in writing and, as soon as practicable thereafter, submit to the owner or user and the Administrator a report on the defects, which states which repairs or other corrective measures are required. Until the corrections have been made, the boiler or pressure vessel must not be operated. (Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R101-02, 12- 15-2004)

NAC 512.573 Procedure following accident. ([NRS 455C.110](#), [512.131](#)) If an accident occurs that renders a boiler, pressure vessel or pressure-retaining item inoperative, the owner or user shall immediately notify the Enforcement Section at (775) 684-7085. The owner or user shall investigate the accident and submit a report relating to the investigation to the Administrator within 10 business days after the accident. Such a boiler, pressure vessel or pressure-retaining item and any parts thereof must not be removed or disturbed before an inspection has been made by an inspector or special inspector unless human life is endangered or except to limit further damage.

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R101-02, 12- 15-2004)

NAC 512.574 Condemned boiler or pressure vessel. ([NRS 455C.110](#), [512.131](#))

1. An inspector or special inspector shall stamp a boiler or pressure vessel that he or she has inspected and declared unsafe with the letters “XXX” on each side of the number that indicates the registration of the boiler or pressure vessel with the National Board or the number designated by the Enforcement Section. Such a stamp indicates that the boiler or pressure vessel is condemned.

2. A person shall not use or offer for sale in this State a boiler or pressure vessel that has been stamped pursuant to subsection 1.

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R101-02, 12- 15-2004)

Installation and Safety Requirements

NAC 512.575 Requirements for installation. ([NRS 455C.110](#), [512.131](#))

1. A contractor shall submit a written notice to the Administrator before installing a boiler or pressure vessel in this State that is constructed in a manner that meets the standards of this State, the American Society of Mechanical Engineers or the National Board. Except for an existing *boiler or pressure vessel* or a reinstalled boiler or pressure vessel, a boiler or pressure vessel must not be installed in this State unless it has been registered with the National Board.

2. Except as otherwise provided in subsection 4, the notice of installation of a boiler or pressure vessel must include the American Society of Mechanical Engineers’ data report of the manufacturer concerning the construction of the boiler or pressure vessel, or an equivalent standard which is approved by the National Board, unless the boiler is constructed of cast iron.

3. A notice of installation of a new boiler or pressure vessel must include the plans and specifications of the boiler room in which the boiler or pressure vessel is being installed which designates the location of the boiler or pressure vessel. ~~[and which complies with the requirements of NAC 512.579.]~~

4. Before a secondhand *boiler or pressure vessel* or portable boiler or pressure vessel may

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be installed or shipped for installation into this State, the owner or user or the contractor installing the boiler or pressure vessel must submit to the Administrator a notice of installation. The notice of installation must include, without limitation, a report of inspection. The report of inspection must be prepared by a person who holds a commission and who inspected the boiler or pressure vessel. The fittings and appurtenances of the boiler or pressure vessel must comply with the requirements for the installation of a new boiler or pressure vessel.

5. As used in this section:

(a) “Existing boiler or pressure vessel” means any boiler or pressure vessel constructed, installed, placed in operation or contracted for use in this State before January 28, 2000.

(b) “Portable boiler or pressure vessel” ~~[means a boiler that is intended primarily for temporary use and has a construction that allows it to be moved readily from one location to another.]~~ *has the meaning ascribed to it in NAC 455C.080.*

(c) “Reinstalled boiler or pressure vessel” ~~[means a boiler or pressure vessel removed from its original setting and reinstalled at the same location or at a new location with or without a change of ownership.]~~ *has the meaning ascribed to it in NAC 455C.088.*

(d) “Secondhand boiler or pressure vessel” ~~[means a boiler or pressure vessel that has changed ownership and has been moved since its original installation.]~~ *has the meaning ascribed to it in NAC 455C.098.*

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R101-02, 12- 15-2004; R033-20, 01-21-2021; R026-23, 09-16-2024)

NAC 512.577 Requirements for reinstallation. (NRS 455C.110, 512.131)

1. If a boiler or pressure vessel is removed from its original site and reinstalled at the same location or reinstalled at a new location without a change of ownership before reinstallation, the contractor must submit to the Administrator a notice of installation before installing the boiler or pressure vessel. The fittings and appurtenances must comply with the requirements for the installation of a new boiler or pressure vessel.

2. If a standard boiler or pressure vessel is to be moved to another state for temporary use or repair, the owner or user must notify the Administrator in writing before reinstalling the boiler or pressure vessel within this State.

~~3. As used in this section, “standard boiler or pressure vessel” [means a boiler or pressure vessel that:~~

~~(a) Bears the stamp of the American Society of Mechanical Engineers or meets a standard of construction approved by the National Board and adopted by the Division; and~~

~~(b) Is registered with the National Board.]~~ *has the meaning ascribed to it in NAC 455C.102.*

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R026-23, 09-16-2024)

NAC 512.579 Clearance: Generally. [Repealed per R026-23]

NAC 512.581 Clearance: Fired storage and fired coil water heater. [Repealed per R026-23]

NAC 512.583 Platforms or runways. [Repealed per R026-23]

NAC 512.585 Repairs or alterations. (NRS 455C.110, 512.131)

1. A repair or alteration to a boiler or pressure vessel must conform to the applicable provisions of the *Code* or this chapter, and any jurisdictional requirements.

2. If a repair or alteration to a boiler or pressure vessel is necessary, an inspector or special inspector must be consulted regarding the appropriate method for making the repair or alteration. After the repair or alteration is made, the inspector or special inspector shall inspect it pursuant to the *Code*. The person who makes such a repair or alteration shall submit to the Administrator the appropriate “R” form prescribed by the National Board within 30 days after completion of the repair or alteration.

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3. A person who makes a repair or alteration to a boiler or pressure vessel must be qualified pursuant to the *National Board Inspection Code*.

4. A person who makes a repair or alteration to a boiler or pressure vessel by fusion welding to the pressure parts of the boiler or pressure vessel must hold a valid certificate of authorization and stamp designated as “R,” which have been issued by the National Board.

5. A repair or alteration made by fusion welding must not be made to the pressure parts of a boiler constructed of cast iron.

6. A person who is in the business of repairing safety valves must have a certificate of authorization from the National Board for the use of a National Board Pressure Relief Valve Repair stamp, designated by the National Board as a “VR” stamp.

7. As used in this section, “alteration” ~~[means a change in any item described in the data report from the original manufacturer for the boiler or pressure vessel which affects the capability of the boiler or pressure vessel to contain pressure and which includes:~~

~~(a) Changes which do not physically alter the boiler or pressure vessel, including, without limitation, an increase in the maximum allowable internal or external working pressure in the boiler or pressure vessel or a change in the temperature at which a boiler or pressure vessel is designed to be operated; and~~

~~(b) A reduction in the minimum temperature of a boiler or pressure vessel which requires additional mechanical tests.]~~ *has the meaning ascribed to it in NAC 455C.022.*

(Added to NAC by Div. of Industrial Relations by R141-98, eff. 1-28-2000; A by R101-02, 12-15-2004; R026-23, 09-16-2024)

NAC 512.587 Safety appliances: Generally. ~~[Repealed per R026-23]~~

NAC 512.589 Safety appliances: Capacity. ~~[Repealed per R026-23]~~

Miscellaneous Provisions

NAC 512.590 Qualifications of attendant. ~~[Repealed per R026-23]~~

NAC 512.592 Boilers: Supervision. ~~[Repealed per R026-23]~~

NAC 512.594 Contractor’s license required for certain activities. ~~[Repealed per R026-23]~~