### PROPOSED REGULATION OF THE

### STATE FIRE MARSHAL

## LCB File No. R062-04

July 26, 2004

EXPLANATION - Matter in *italics* is new: matter in brackets [omitted material] is material to be omitted.

AUTHORITY: §§1, 2, 4-16, 18-21, 24, 27-59, 61, 62, 64, 65, 67, 68 and 70-79, NRS 477.030; §§3, 17, 23, 60, 63, 66 and 69, NRS 477.030 and 477.033; §22, NRS 477.030, 477.031 and 477.033; §25, NRS 477.030, 477.031, 477.032 and 477.033; §26, NRS 477.030 and 477.032.

A REGULATION relating to fire; establishing requirements for obtaining a certificate of registration as a fire performer; requiring mattresses in correctional facilities in this State to comply with certain standards; adopting certain publications by reference; making certain changes to publications adopted by reference; revising the period for the renewal of a blaster's certificate; revising requirements related to commercial displays of fireworks and pyrotechnic operators; revising requirements related to storage of fireworks; repealing certain provisions relating to the approval of fire systems, requirements for combination paging alarm systems, required equipment, tools and materials for the servicing and repair of fire extinguishers, requirements for exits from portable buildings, requirements for containers for flammable or combustible liquids and standards of construction for Type 1 exhaust systems; and providing other matters properly relating thereto.

**Section 1.** Chapter 477 of NAC is hereby amended by adding thereto the provisions set forth as sections 2 to 5, inclusive, of this regulation.

- Sec. 2. "Authority having jurisdiction" means:
- 1. Except as otherwise provided in subsection 2 or 3, the State Fire Marshal.
- 2. A local government in a county whose population is 100,000 or more or which has been converted into a consolidated municipality.
- 3. A local government in a county whose population is less than 100,000 or which has not been converted into a consolidated municipality if the local government has entered into an

--1--LCB Draft of Proposed Regulation R062-04 interlocal agreement with the State Fire Marshal to delegate to the local government the authority or duties of the State Fire Marshal in that area.

- Sec. 3. 1. Before a person may act as a fire performer, the person must obtain a certificate of registration as a fire performer from the State Fire Marshal.
  - 2. An applicant for a certificate of registration as a fire performer must:
  - (a) Be a natural person who is at least 21 years of age;
- (b) Make a written application for a certificate of registration to the State Fire Marshal on a form provided by the State Fire Marshal;
- (c) Submit to the State Fire Marshal a resume of the experience of the applicant and a description of all safety precautions used by the applicant; and
  - (d) Pay an application fee of \$27.50.
- 3. As used in this section, "fire performer" means an entertainer or other performer who performs work for an audience using an open flame.
- Sec. 4. 1. Unless otherwise required by state statute or regulation or local ordinance, a mattress in a correctional facility in this State must comply with ASTM E1354-04a and ASTM F1870-99.
- 2. A copy of ASTM E1354-04a and ASTM F1870-99 is available from Global Engineering Documents, 15 Inverness Way East, Englewood, Colorado 80112, or from the American National Standards Institute at the Internet address <a href="http://webstore.ansi.org">http://webstore.ansi.org</a>, for the price of \$38 for each standard.
- Sec. 5. 1. If individual or cumulative additions to a building or structure in any 12-month period exceed 25 percent of the square feet of floor space of the building or structure

that existed at the commencement of the 12-month period, the building or structure must conform to the requirements for a new building or structure.

- 2. As used in this section, "addition" means any extension or increase in the floor space or height of a building or structure.
  - **Sec. 6.** NAC 477.010 is hereby amended to read as follows:
- 477.010 As used in this chapter, unless the context otherwise requires, the words and terms defined in NAC [477.015] 477.020 to 477.270, inclusive, and section 2 of this regulation have the meanings ascribed to them in those sections.
  - **Sec. 7.** NAC 477.085 is hereby amended to read as follows:
- 477.085 1. "Custodial care facility" means a building or a part of a building which is used for lodging or boarding [four] six or more persons who are incapable of caring for themselves because of age or physical or mental limitations.
- 2. The term includes facilities such as homes for the aged, nurseries providing custodial care for children [under] less than 6 years of age, adult group care facilities and facilities for the care of the mentally retarded.
- 3. The term does not include day care facilities which do not provide lodging or boarding for institutional occupants.
  - **Sec. 8.** NAC 477.103 is hereby amended to read as follows:
  - 477.103 "Fire extinguisher" means a device:
- 1. Containing powder, liquid or gases [which] that can be expelled under pressure to suppress or extinguish a fire;

- Which is tested, listed or approved by the Underwriters Laboratories Inc., Underwriters
  Laboratories of Canada, [Factory Mutual Laboratory,] FM Global Technologies LLC, the U.S.
  Coast Guard or a nationally recognized laboratory approved by the State Fire Marshal; and
- 3. Which is capable of achieving a minimum of one unit of classification of rating during testing and listing by a nationally recognized testing laboratory.
  - **Sec. 9.** NAC 477.130 is hereby amended to read as follows:
- 477.130 "I.C.C. container" means any container approved by the United States [Interstate Commerce Commission] *Surface Transportation Board* for shipping any liquid, gas or solid material of a flammable, toxic or other hazardous nature.
  - **Sec. 10.** NAC 477.250 is hereby amended to read as follows:
- 477.250 ["Uniform] "International Building Code" means the code published by the International [Conference of Building Officials.] Code Council.
  - **Sec. 11.** NAC 477.255 is hereby amended to read as follows:
- 477.255 ["Uniform] "International Fire Code" means the code published [jointly] by the [Western Fire Chiefs and the International Conference of Building Officials.] International Code Council.
  - **Sec. 12.** NAC 477.260 is hereby amended to read as follows:
- 477.260 "Uniform Mechanical Code" means the code published [jointly] by the International Association of Plumbing and Mechanical Officials. [and the International Conference of Building Officials.]
  - **Sec. 13.** NAC 477.275 is hereby amended to read as follows:
- 477.275 Where no specific standards or requirements are specified in this chapter or contained within other applicable statutes, ordinances or bylaws, or within other codes or

regulations adopted by the State Fire Marshal, compliance with the applicable standards of the [National Fire Protection Association] *N.F.P.A.* or other nationally recognized fire safety standards approved by the State Fire Marshal is prima facie evidence of compliance with the intent of this chapter.

**Sec. 14.** NAC 477.280 is hereby amended to read as follows:

477.280 1. [Where] Except for property owned by the State, where there is a conflict between this chapter and any code, ordinance or regulation adopted by a local authority, the more stringent requirement providing the greatest safety from fire and for life to the public applies.

- 2. The model codes adopted with modifications by the State Fire Marshal pursuant to this chapter are enforceable jointly with the other provisions of this chapter.
- 3. Nothing in this section prohibits a local government from adopting any code or ordinance that is more stringent than the provisions of this chapter.

**Sec. 15.** NAC 477.281 is hereby amended to read as follows:

477.281 1. The State Fire Marshal hereby adopts by reference the following nationally recognized codes with additions and deletions as noted in NAC 477.283:

- (a) [Uniform] International Fire Code, [1997] 2003 edition, Volume 1. A copy is available from [:
- (1) The Western Fire Chiefs Association, 300 N. Main Street #25, Fallbrook, California 92028; or
- (2) The International Conference of Building Officials, 5360 Workman Mill Road, Whittier, California 90601.

- → the International Code Council, 4051 West Flossmoor Road, Country Club Hills, Illinois 60478-5795, or from the International Code Council at the Internet address < <a href="http://www.iccsafe.org/e/category.html">http://www.iccsafe.org/e/category.html</a> at the price of [\$136.15.] \$53 for members and \$70 for nonmembers, plus \$5.99 for shipping and handling.
- (b) [Uniform] International Building Code, [1997] 2003 edition, Volumes 1 and 2. A copy is available from the International [Conference of Building Officials,] Code Council, 4051 West Flossmoor Road, Country Club Hills, Illinois 60478-5795, or from the International Code Council at the Internet address < http://www.iccsafe.org/e/category.html > at the price of [\$180.70.
- (c) Uniform Building Code Standards, 1997 edition, Volume 3. A copy is available from the International Conference of Building Officials, at the price of \$57.20.
- —(d)] \$65 for members, plus \$5.99 for shipping and handling, and \$86 for nonmembers, plus \$6.99 for shipping and handling.
- (c) Uniform Mechanical Code, [1997] 2003 edition. A copy is available from the International [Conference of Building] Association of Plumbing and Mechanical Officials, 5001 East Philadelphia Street, Ontario, California 91761-2816, or from the International Association of Plumbing and Mechanical Officials at the Internet address <a href="http://publications.iapmo.org">http://publications.iapmo.org</a> at the price of [\$42.
- (e) *Uniform Fire Code Standards*, 1997 edition, Volume 2. A copy is available from the International Conference of Building Officials, at the price of \$88.20.
- 2. In addition to the codes described in subsection 1, the State Fire Marshal hereby adopts by reference the 1997 edition of the National Fire Codes and Standards, published by the N.F.P.A., to supplement the other adopted codes in this chapter. A copy of the National Fire

Codes and Standards may be obtained from the National Fire Protection Association,

Batterymarch Park, Ouiney, MA 02269, at the price of \$920.

- 3. In the event of a conflict between the uniform codes adopted by reference by the State Fire Marshal pursuant to this section and the National Fire Codes and Standards, the uniform codes take precedence, unless a specific section of the National Fire Codes and Standards is specified elsewhere in this chapter as applying to that circumstance.
- 4. The prices of the codes set forth in this section are subject to change.] \$64 for members and \$89 for nonmembers, plus \$8 for shipping and handling.
- 2. In addition to the codes adopted pursuant to subsection 1, the State Fire Marshal hereby adopts by reference codes and standards 10, 11, 13, 13D, 13R, 14, 15, 17, 17A, 20, 22, 24, 25, 30B, 50, 50B, 52, 58, 72, 86, 90A, 90B, 96, 99, 110, 111, 140, 160, 385, 407, 409, 410, 704, 1123, 1126, 1403 and 2001 of the National Fire Codes to supplement other codes adopted in this chapter. A copy of the National Fire Codes is available from the N.F.P.A., 1 Batterymarch Park, Qunicy, Massachusetts 02169-7471, at the price of \$1,120.
- 3. Where no specific codes or standards are specified in the <u>International Fire Code</u>, the applicable standards of the N.F.P.A. may be used.
  - **Sec. 16.** NAC 477.283 is hereby amended to read as follows:
- 477.283 1. The following changes are made to the [1997] 2003 edition of the [Uniform]

  International Fire Code as adopted by reference by the State Fire Marshal:
- (a) Section [103.1.4] 105.6.35 is revised to read as follows: "An operational permit is required to operate a place of assembly with an occupant load of 100 or more, or as otherwise required by the authority having jurisdiction."
  - (b) Section 108 is deleted.

- [(b) Section 107.5.1 is revised to read as follows: "Whenever any work for which a plan review is required pursuant to this chapter has been commenced without first obtaining a review of the plan as required, a special investigation will be conducted before the work pursuant to that plan may continue."
- (c) Section 107.5.2 is revised to read as follows: "An investigation fee, in addition to the fee for the plan review, will be collected whether or not a plan review is then or subsequently completed. The amount of the investigation fee is equal to the amount of the fee for the plan review as determined pursuant to NAC 477.750. Payment of the investigation fee does not exempt any person or business from compliance with the provisions of this code, or from any penalty that may be prescribed by law."

<del>(d)]</del>

(c) To section [308] 202 under the Group I-1 heading is added: "All portions of a care facility which houses patients or residents which is classified by the State Board of Health as 'Category 2,' and which has an occupant load of more than 10 residents, is classified as an 'I-1' occupancy classification. ['Group I, Division 1.1.'"

## <del>(e) Section 903.2]</del>

(d) Section 508.3 is revised by adding a second paragraph to read as follows: "Subject to the approval of the fire authority, if the fire flow is not available for adequate fire protection, an approved automatic fire sprinkler system must be installed throughout the building or buildings. The sprinkler system must meet the requirements of the appropriate N.F.P.A. standard. The provisions of this paragraph do not apply if a fire sprinkler system is otherwise required by this chapter or the adopted codes." [, including sections 103.1.2, 903 and 1003.1.2 of the Uniform Fire Code.]

- (e) Section 508.5.7 is deleted and replaced with: "A clear space of at least 3 feet must be maintained around the front and sides of a fire department connection. A fire department connection must be visible from the approved fire apparatus access road and must be accessible in a direct and unobstructed approved route.
- (f) Section 903.2.1.6 is deleted and replaced with: "Casinos are classified as drinking establishments and must be designed and built with a sprinkler system classified as an ordinary Hazard Group 2."
- (g) Section 903.2.7 is revised by adding a second paragraph to read as follows: "An R-1 or R-2 occupancy that has more than two stories must have an N.F.P.A. 13 system installed. An R-1 or R-2 occupancy that has two stories or less must have an N.F.P.A. 13 system or an N.F.P.A. 13-R system installed."
- [(f) To section 1001.9 is added a new paragraph (i) to read as follows: "Except as otherwise provided in this paragraph, shell buildings, retail buildings and warehouses which are built for unknown tenants and occupancies of various hazards designed for commercial use within the general occupancy classifications, and multipurpose, shop or storage buildings constructed on prison property, must be designed and built with a sprinkler system classified as an extra hazard Group 1. The provisions of this paragraph do not apply to shell buildings, retail buildings and warehouses in Clark County, Washoe County or Carson City."
- (g) In section 1003.2.2, paragraph 5 is deleted and replaced with: "All buildings which are erected in the State after January 19, 1984, and which are more than 55 feet above or below street level or more than two stories, including any additional height incurred by usable floor space within a building, above the grade at any point, must be equipped throughout with

approved automatic sprinkler systems. The system must be installed in accordance with nationally recognized standards."

- (h) To section 1003.2.3.1 is added: "Casinos are classified as drinking establishments and must be designed and built with a sprinkler system classified as an ordinary Group 2."
  (i) To section 1007.2.4.1 is added: "Alarms must conform to section 1007.3.3.3.2 and Standard
- (j) Article 78, regarding fireworks,]

10 2 of the Uniform Fire Code."

- (h) Section 903.2.10 is revised by adding a new paragraph to read as follows: "A building that is more than 2 stories in height, including any height added by usable floor space, must have automatic sprinkler systems installed throughout."
- (i) Section 903.3.1.2 is revised to read as follows: "Where allowed, an R-1 or R-2 building that has two stories or less must have automatic sprinkler systems installed throughout in accordance with N.F.P.A. 13 or N.F.P.A. 13R. An R-1 or R-2 building that has more than two stories must have automatic sprinkler systems installed throughout in accordance with N.F.P.A. 13."
- (j) Section 906.1 is revised to read as follows: "When required, portable fire extinguishers must be installed in all group A, B, E, F, H, I, M, R-1, R-2, R-4 and S occupancies. No exceptions will apply."
- (k) In sections 907.2.12, 907.9.2 and 1019.1.8, "75 feet" is deleted and replaced with "55 feet."
  - (1) Section 907.10.1 is revised by adding the following exceptions:
- "(3) Electrical rooms and mechanical rooms that are not normally occupied and are less than 400 square feet.

- (4) Janitor closets.
- (5) Storage rooms that are less than 400 square feet.
- (6) Elevator cabs.
- (7) Individual work areas or offices and private toilets serving individual work areas or offices.
- (8) Individual inmate sleeping accommodations and patient sleeping rooms except as required by section 907.10.1.3."
- (m) In section 907.10.2, "70 dBA" is deleted and replaced with "80 dBA" and "60 dBA" is deleted and replaced with "80 dBA."
- (n) Section 3301.1.3 is amended [so that section 7802.3 reads] to read as follows: "The possession, manufacture, storage, sale, use and handling of fireworks [is prohibited if a] are prohibited except where permitted by local ordinance." [has been adopted which prohibits the use of the fireworks."
- (k) To Article 821
- (o) To section 3801.1 is added: "In the event of a conflict between any provision in this [Article] chapter and the regulations of the Board for the Regulation of Liquefied Petroleum Gas, the regulations of the Board take precedence."
- [(l) To the body of the Code is added the following supplemental material of the *Uniform Fire*Code:
- (1) Except as otherwise amended in this subparagraph, the following appendices of the *Uniform Fire Code* are adopted by reference by the State Fire Marshal:
- (I) Appendix I-C, "Stairway Identification";

(II) Appendix II B, "Protection of Flammable and Combustible Liquid Tanks in
Locations Subject to Flooding";
(III) Appendix II C, "Marinas";
(IV) Appendix II D, "Rifle Ranges";
(V) Appendix II-E, "Hazardous Material Management Plans and Hazardous Materials
Inventory Statements";
(VI) Appendix II F, "Protected Aboveground Tanks for Motor Vehicle Fuel-
Dispensing Stations Outside Buildings";
(VII) Appendix II G, "Secondary Containment for Underground Tank Systems
Containing Flammable or Combustible Liquids";
(VIII) Appendix II-H, "Site Assessments for Determining Potential Fire and Explosion
Risks from Underground Flammable and Combustible Liquid Tank Leaks";
(IX) Appendix II I, "Ozone Gas Generating Equipment";
(X) Appendix II J, "Storage of Flammable and Combustible Liquids in Tanks Located
Within Below Grade Vaults";
(XI) Appendix III-B, "Fire Hydrant Locations and Distribution";
(XII) Appendix VI A, "Hazardous Materials Classifications";
(XIII) Appendix VI B, "Hazard Rankings";
(XIV) Appendix VI-C, "Emergency Relief Venting for Fire Exposure for Aboveground
Tanks"; and
(XV) Appendix VI. F. "Percommended Separation Distances for Explosive Materials."

- → References and requirements set forth in these appendices to existing buildings apply only if the reference or requirement is more stringent than the requirements set forth in NRS 477.110 to 477.170, inclusive.
- (2) Appendix III A, "Fire Flow Requirements for Buildings," which is amended by adding the following:

All fire flows obtained at the hydrant or hydrants as specified in Table A III A 1 must be produced with 20 psi residual pressure at the test hydrant or hydrants. The hydrant or hydrants must be able to produce a minimum supply flow. The standard for rural storage is the required fire flow with a minimum of 2 hours dedicated to storage. In areas of storage for combustible or hazardous materials that are outside of buildings and have more than 500 square feet of floor space, fire flow must be not less than 1,000 gallons per minute. Any such area with more than 2,500 square feet of floor space must have an additional 500 gallons per minute available for each side of exposure. The spacing and placement of any hydrant must be specified by the authority having jurisdiction and may vary from that required by Table III B. As used in this paragraph, "exposure" means that stored material is within 25 feet of:

- a. The center line of a public road or way; or
- b. The nearest structure, building or property line.]
- 2. The following changes are made to the [1997] 2003 edition of the [Uniform]

  International Building Code as adopted by the State Fire Marshal:
- (a) [To section 6 1.2 is added: "Gypsum Association, 201 N. Wells Street, Chicago, Illinois 60606."

- (b)] To section [105] 112 is added the following provision: "This section does not apply to the State Fire Marshal of Nevada."
  - (b) Section 303.1 is revised by adding a new category "Casinos" to subsection A-2.
- (c) From section 403.1 is deleted the phrase "\* \* more than 75 feet," and to that section is added "\* \* \* more than 55 feet above the lowest level of access for a vehicle of the fire department."
- (d) To section [403.5.1] 403.6 is added: "Loudspeakers or horns for a fire alarm must achieve at least 80 decibels of sound in all areas within the protected property."
  - (e) To section [403.6.1,] 403.8, the following provisions are added:
- (1) "All equipment contained within the [central station for control] fire command center must be tested [quarterly] annually by a person approved by the authority having jurisdiction.

  Systems terminating within the [central station for control] fire command center must be tested as required by the local authority having jurisdiction according to a schedule which is commensurate with the size and complexity of the facility being protected and the systems involved. All equipment for the safety of life must be reset and certified by a person approved by the authority having jurisdiction after being tested. A log of the tests required by this section must be available for inspection by the authority having jurisdiction. Graphic display annunciator panels may be required if the complexity of the systems warrant. Testing must follow procedures which are developed by the designer, manufacturer and nationally recognized standards of good practice as approved by the authority having jurisdiction."
- (2) "The [central station for control] fire command center must be housed in a room separated from the building in which it is located by noncombustible construction rated at a

minimum of 2 hours. The room used for that station must be provided an exterior door if possible."

- (f) [To section 403.7 is added: "Elevators must be installed in compliance with the standards of the American National Standards Institute, 1985 edition, to detect smoke and for access by a fire department and for recall."
- (g) To section 403.9] To section 403.12, at the end of the last sentence, is added: "\* \* \* or an activation of any fire alarm system or a power failure."
- [(h) In section 904.2.2, paragraph 5 is deleted and replaced with: "In all buildings which are more than 55 feet above or below street level or more than two stories, including any additional height incurred by usable floor space within a building, above grade at any point. Any open parking garage which meets the definition in section 311.9.2.1 and which does not contain unseparated mixed occupancies is exempt from this requirement. The application of this requirement does not preclude the application of the provisions of section 505.3, 506 or 508."

  (i) Section 1003.2.3.1 includes casinos, showrooms and all other rooms for assembly except
- (i) Section 1003.2.3.1 includes casinos, showrooms and all other rooms for assembly except for churches and theaters which only have seating which is fixed.
- (j) To section 1005.3.3.7 is added:]
- (g) Section 403.15 is deleted and replaced with: "A smoke control system must be provided and must meet the requirements of Chapter 9.
- (h) Section 903.2.2.1 is revised by adding a new paragraph to read as follows: "In high schools where automatic fire sprinkler systems are provided, the automatic fire sprinkler systems for the automotive and woodworking shops must be ordinary hazard group 1 automatic fire sprinkler systems.
  - (i) In section 907.2.12 "75 feet" is deleted and replaced with "55 feet."

- (j) Section 907.9.1 is revised by adding the following exceptions:
- "(3) Electrical rooms and mechanical rooms that are not normally occupied and are less than 400 square feet.
  - (4) Janitor closets.
  - (5) Storage rooms that are less than 400 square feet.
  - (6) Elevator cabs.
- (7) Individual work areas or offices and private toilets serving individual work areas or offices.
- (8) Individual inmate sleeping accommodations and patient sleeping rooms except as required by section 907.2.10.1.3."
  - (k) In section 907.9.2:
    - (1) "70 dBA" is deleted and replaced with "80 dBA";
    - (2) "60 dBA" is deleted and replaced with "80 dBA"; and
    - (3) "75 feet" is deleted and replaced with "55 feet."
- (1) In section 1008.1.8.7, exception 3 is revised to read as follows: "In stairways serving buildings other than high-rise buildings, doors are permitted to be locked on the side opposite the egress side, provided that the doors can be opened from the egress side. Except for exit discharge doors, the doors must automatically unlock upon the activation of a fire alarm system or a fire sprinkler alarm and for a power failure.
- (m) Section 1019.1.8 is deleted and replaced with: "In a building having a floor level used for human occupancy which is more than 55 feet above or below the level of access for a vehicle of the fire department, all required exit enclosures must be pressurized in accordance with this

section . [and section 905.] Pressurization must occur automatically upon activation of an
approved fire alarm system. The exception and the relief venting provisions remain as written."
[(k) Section 1007, which provides requirements for means of egress based on occupancy, is
amended to read as follows:
(1) To section 1007.1 is added: "In addition to the general requirements for means of
egress specified elsewhere in the <i>Uniform Building Code</i> or chapter 477 of NAC, the detailed
requirements set forth in this section apply to those occupancies described herein. See sections
1007.2.8, 1007.2.20 and 1007.3.2.2 for hallway requirements in any occupancy containing room
used for educational purposes."
(2) To section 1007.2.8, relating to the construction of hallways, is added: "Hallways in
Group A occupancies which are being used for educational purposes must comply with the
requirements of section 1004.3.4 for corridors and section 1004.3.4.3.2 for openings."
(3) To section 1007.2.20 is added: "Hallways in Group B occupancies which are being
used for educational purposes must comply with the requirements of section 1004.3.4 for
corridors and section 1004.3.4.3.2 for openings."
— (4) To section 1007.3.2.1, relating to required separate means of egress, is added: "Every
room with an occupant load of 300 persons or more must have one of its exit access doorways
lead directly into a separate means of egress system. Not more than two required exits or exit-
access doorways may enter into the same means of egress system."
— (5) To section 1007.3.2.2, relating to the construction of hallways, is added: "Hallways in
Group E occupancies which are being used for educational purposes must comply with the
requirements of section 1004.3.4 for corridors and section 1004.3.4.3.2 for openings."

Building Code. 3. The following changes are made to the 1997 edition of the *Uniform Building Code* Standards as adopted by the State Fire Marshal: (a) Standards 9-1, 9-2 and 9-3 are deleted. (b) The following provision is added: "In high schools where automatic fire sprinkler systems are provided, the automatic fire sprinkler systems for the automotive and woodworking shops must be ordinary Group 1." — 4. The following changes are made to the 1997 edition of the *Uniform Mechanical Code* as adopted by the State Fire Marshal: — (a) The following provision is added: "Flexible duct connectors must not be more than 5 feet in length. Duct connectors must meet the requirements of N.F.P.A. Standard 90A, section 2-1,2. Ducts must meet the applicable standards of the Uniform Mechanical Code." (b) Table 11 A is amended as follows: (1) Add a footnote designated as "14" to read as follows: "For occupancy Group I, Division 1.1, the quantity of refrigerant in each system is limited to 50 percent of the respective amount listed in this table. Exceptions: Kitchens, laboratories and mortuaries." (2) Add a reference to footnote 14 to the title of the table. — (c) Table 11-B is amended as follows: (1) For row "I.1.1" under the column "Occupancy Group and Division," delete the information in the cell in the column designated as "High Probability System" and replace the information with: "Group A1 only<sup>3</sup>."

(1) To the body of the Code are added all appendices as supplemental material of the Uniform

- (2) Add a footnote designated as "3" to read as follows: "For occupancy Group I, Division 1.1, the quantity of refrigerant in each system is limited to 50 percent of the respective amount listed in Table 11 A. Exceptions: Kitchens, laboratories and mortuaries."
- 5. The following changes are made to the 1997 edition of the *National Fire Codes and Standards* as adopted by the State Fire Marshal. Standards 1, 10, 11, 11A, 11C, 12, 12A, 12B, 13, 13D, 13R, 14, 15, 16, 17, 17A, 18, 20, 22, 24, 25, 30, 30A, 30B, 31, 32, 33, 34, 35, 36, 37, 40, 40E, 43A, 43B, 43D, 45, 50, 50A, 50B, 51, 51A, 51B, 52, 54, 55, 58, 59, 59A, 61A, 61B, 61C, 61D, 65, 69, 70, 70E, 72, 75, 79, 80, 81, 82, 85C, 86, 86C, 86D, 88A, 88B, 90A, 90B, 92A, 92B, 91, 96, 99, 99B, 101, 102, 110, 111, 120, 121, 122, 123, 124, 130, 150, 160, 170, 211, 214, 220, 231, 231C, 231D, 231F, 232, 241, 251, 252, 253, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 264A, 295, 298, 299, 302, 303, 306, 307, 312, 318, 321, 326, 327, 385, 386, 395, 407, 408, 409, 410, 412, 414, 415, 416, 417, 418, 423, 430, 480, 481, 482, 490, 495, 496, 498, 501A, 501C, 501D, 505, 512, 513, 600, 601, 650, 651, 654, 655, 664, 701, 703, 704, 750, 780, 803, 1003, 1122, 1123, 1124, 1125, 1126, 1141, 1221, 1231, 1403, 1404, 1911, 1921, 1962, 1963, 1964, 1971, 1972, 1981, 1982, 1991, 1992, 2001, 8501, 8503 and 8504 are adopted.]
  - **Sec. 17.** NAC 477.300 is hereby amended to read as follows:
- 477.300 1. All applications for licenses or certificates must be made to the State Fire Marshal in the manner required by this chapter. A person who performs any of the following work in this State, other than as the employee of another, must obtain a license in accordance with this chapter and chapter 477 of NRS and shall require each person employed by him to perform that work to obtain the appropriate certificate of registration:

- (a) Selling, servicing, maintaining or installing any fire extinguisher, engineered or preengineered fixed fire extinguishing system, fire alarm system, fire detection system, automatic fire suppression system or fire standpipe system.
  - (b) Cleaning of a Type 1 hood and duct and the removal of fuel.
  - (c) Blasting and using commercial explosives.
  - (d) Using and handling of pyrotechnics.
  - (e) Installing medical gas systems.
- (f) Selling and installing heat detectors which will be used as devices for the early warning of fires.
- 2. The State Fire Marshal or his authorized representative may inspect vehicles, equipment, buildings, devices, premises or any area to be used in performing the activities permitted by the license or certificate.
- 3. A license or certificate issued by the State Fire Marshal remains the property of the State Fire Marshal Division and must be renewed as required by NAC 477.310. The license or certificate is not transferable, is revocable for cause and, except as otherwise provided in this chapter, will not be issued to any person who has not reached 18 years of age.
- 4. A licensee shall comply with any regulation adopted by a local authority which is more stringent.
- 5. All applications for a license for the installation and maintenance of systems for protection from fire must be accompanied by a letter of certification from a manufacturer or supplier of the system or material or parts for the system stating that the licensee has received parts and materials for the installation, maintenance, servicing, testing and inspection of those materials, items or systems.

- 6. Any firm having more than one office doing business in Nevada which must be licensed by the State Fire Marshal must designate one office as the principal office and pay the standard fee for each class of license for work to be performed. Except for licenses for the sale at retail of fire extinguishers, each additional office must be licensed as a branch office. Each branch office must pay the prescribed fee of \$110 for each class of license for the work to be performed by that branch. If a branch office performs work which is not done by the principal office, the branch office shall be deemed to be the principal office for that class of license and must pay the full fee.
- 7. A holder of a certificate of registration must be present at all job sites on which work requiring a license pursuant to this section will be performed.
- 8. [On and after January 1, 2003, a] A designer of fire sprinkler and alarm systems must hold a Level II certification from the National Institute for Certification in Engineering Technologies (NICET), be licensed as a professional engineer pursuant to chapter 625 of NRS or hold an equivalent certification. To obtain further information and copies of materials to receive a Level II certification from the National Institute for Certification in Engineering Technologies, a designer of fire sprinkler and alarm systems may contact the National Institute for Certification in Engineering Technologies, 1420 King Street, Alexandria, Virginia 22314-2794, telephone [(800) 787 0034.] 888.476.4238.
  - **Sec. 18.** NAC 477.311 is hereby amended to read as follows:
  - 477.311 Except as otherwise provided for a certificate for blasting:
- An applicant for a certificate of registration must pass a written examination. The
  applicant must receive a passing score on each part taken. [The examination may be
  supplemented by practical tests or demonstrations to determine the applicant's knowledge and
  abilities.]

- 2. Licensure by another state, or other training and certification recognized by the State Fire Marshal, may be considered in evaluating an applicant's qualifications.
  - **Sec. 19.** NAC 477.312 is hereby amended to read as follows:
- 477.312 The examinations administered by the State Fire Marshal are based on the <del>[respective sources and standards identified below:</del>
- 1. The examination for a certificate of registration for fire extinguishers, fixed fire extinguishing systems, automatic sprinkler systems and fire alarm systems is based upon the following sources and standards, as appropriate:
- (a) The "Standard for Installation, Maintenance and Use of Portable Fire Extinguishers" published by the N.F.P.A., 1997 edition;
- (b) The Fire Protection Handbook, Eighteenth Edition;
- (c) Standard 72 "National Fire Alarm Code" published by the N.F.P.A., 1996 edition;
- (d) The "Standards of the Installations of Sprinkler Systems, Pumps and Tanks" published by the N.F.P.A., 1996 edition;
- (e) "Installation of Carbon Dioxide, Halon and Dry Chemical Extinguishing Systems" published by the N.F.P.A., 1997 edition;
- (f) The Compressed Gas Association Pamphlet; and
- (g) The Uniform Fire Code and Uniform Building Code Standards.
- 2. The examination for a certificate of registration for pyrotechnic operators is based on reference material which is available from the State Fire Marshal. Every person who ignites pyrotechnical material as a commercial display must first obtain a certificate of registration.
- 3. The examination for a certificate of registration for the use of explosives is based upon:
- (a) The *Uniform Fire Code*;

- (b) The annual publication titled *Blaster's Handbook*;
- (c) The National Fire Codes and Standards of the N.F.P.A.;
- (d) The manufacturer's recommended standards for use; and
- (e) The applicable provisions of this chapter.] National Fire Codes, 2004 edition, published by the N.F.P.A.
  - **Sec. 20.** NAC 477.313 is hereby amended to read as follows:
- 477.313 1. The State Fire Marshal will schedule the various examinations so that an applicant may take his examination within 90 days after the date of his application. Examinations will be conducted at the State Fire Marshal's office in Carson City during business hours with an appointment. Examinations for certificates of registration will also be conducted *by appointment* in Elko and Las Vegas. *No appointment for an examination will be made until the applicant submits all required documentation to the State Fire Marshal's office in Carson City*.
- 2. An applicant who fails the examination or a part of the examination must wait 15 days after the date of the examination and pay the [application] fee for retaking an examination set forth in NAC 477.325 before taking the test or failed part of the test again. A person may not take the test for the same class of license more than three times in 1 calendar year.
- 3. An applicant who already has a certificate in one classification may apply for licensing or registration in a higher classification and, upon payment of the prescribed fee, will be tested only on that part of the examination pertaining to the higher classification.
  - **Sec. 21.** NAC 477.320 is hereby amended to read as follows:
- 477.320 1. When the State Fire Marshal receives written notice [or a complaint] alleging fraud, misrepresentation, malpractice or incompetence on the part of any person licensed or certified under this chapter, he will conduct an investigation of the allegations. The investigation

will concentrate on violations of this chapter, deceptive trade practices as set forth in chapter 598 of NRS and other pertinent criminal and civil violations set forth in NRS. The use of any unauthorized, faulty or otherwise unacceptable equipment discovered during an investigation may be prohibited pending a final determination. [The person being investigated shall replace or repair any such equipment with approved, comparable equipment.] A license or certificate will be suspended during an investigation if the investigation reveals conditions which the State Fire Marshal considers an imminent threat to public safety.

- 2. A person who has been denied an original or renewal license or certificate by the State Fire Marshal may request an administrative hearing within 10 days after notice of denial. A written request must be sent to the State Fire Marshal. The State Fire Marshal, upon receipt of a request for an administrative hearing, will take necessary action to schedule an administrative hearing.
- 3. The failure on the part of an applicant to pass tests required in this chapter does not constitute grounds to request an administrative hearing.
- 4. If an administrative hearing officer finds that the State Fire Marshal has acted correctly, he may require restitution to the State Fire Marshal for the costs of the administrative hearing. If the administrative hearing officer finds that the applicant, licensee or holder of the certificate is guilty of a lesser offense, the State Fire Marshal may require the applicant, licensee or holder, as appropriate, to receive further training or be retested, or both.
- 5. An administrative hearing does not preclude the State Fire Marshal from proceeding with a criminal investigation. Any conviction resulting from a criminal investigation may be used as prima facie evidence in an administrative hearing.
  - **Sec. 22.** NAC 477.323 is hereby amended to read as follows:

- 477.323 1. A person shall not store a hazardous material in excess of the amount set forth in the [Uniform] International Fire Code, as adopted pursuant to NAC 477.281, unless he has been issued a permit by the State Fire Marshal to store that material. A permit must be renewed annually.
- 2. Permits may be revoked or suspended when, after investigation, the State Fire Marshal determines that:
  - (a) The permit is being used by a person other than the person to whom it was issued.
  - (b) The permit is being used for a location other than that for which it was issued.
  - (c) Any of the conditions or limitations set forth in the permit have been violated.
- (d) The holder of the permit has failed, refused or neglected to comply with any order or notice served upon him under the provisions of this chapter within the time provided therein.
- (e) A false statement or misrepresentation as to a material fact was made in the application for the permit or the plans on which the permit was based.
- 3. The State Fire Marshal may suspend or revoke any permit if an inspection or investigation reveals a hazardous condition that endangers the safety of any person, or if the holder of the permit is not in compliance with this section. The State Fire Marshal may reinstate a suspended permit after the holder of the permit has paid the annual fee and corrected all deficiencies identified. A permit that has been revoked will not be reissued. A suspension will not exceed 24 months, after which the permit will be reissued or revoked.
- 4. Except as otherwise provided in subsection 5, a permit may be issued to store, transport on site, dispense, use or handle hazardous materials in excess of the amount listed in the [Uniform] International Fire Code, [1997] 2003 edition, section [105.1,] 105, for a fee of \$90.

- 5. The fee established by subsection 4, or any portion of it, may be waived by the State Fire Marshal. The State Fire Marshal may issue a permit for other facilities or appliances listed in section 105 of the [Uniform] International Fire Code, [1997] 2003 edition, for a fee of \$55, and in addition thereto may charge a fee of \$38.50 per hour, or any fraction thereof, for inspection services and an amount equal to the actual expenses incurred for travel, salaries and administrative expenses. The State Fire Marshal may issue an annual permit for the manufacture of explosives, blasting agents or fireworks for a fee of \$1,100, and in addition thereto may charge a fee of \$110 for each building or structure at the facility and an amount equal to the actual expenses incurred for travel, salaries and administrative expenses.
- 6. The \$60 surcharge required by NRS 477.045 will be collected on all permits to store hazardous materials, in addition to any other fees.
- 7. A permit expires 1 year after the last day of the calendar month in which the permit was issued, unless a different expiration date is noted on the permit.
- 8. Revocation or suspension of a permit does not preclude the State Fire Marshal from proceeding with a criminal investigation. Evidence from a criminal investigation may be used as evidence in an administrative hearing for the revocation or suspension of a permit.
- 9. If a holder of a permit or an applicant for a permit intends to terminate the storage, dispensing, handling or use of hazardous materials at a facility, the holder or applicant must submit a plan to the State Fire Marshal outlining the proposed termination of the storage, dispensing, handling or use of the hazardous materials at least 30 days before the date on which the facility is to be closed. The plan must demonstrate that the reported quantities of materials have been or will be transported, disposed of or removed in a manner that presents no hazardous conditions to any person or property.

# **Sec. 23.** NAC 477.325 is hereby amended to read as follows:

- 477.325 1. Except as otherwise provided in this chapter, the schedule of fees for:
- (a) A license to install or maintain portable fire extinguishers and fixed systems is as follows:

(1) Type A for full service of portable fire extinguishers\$440.00
(2) Type B for portable fire extinguishers without hydrostatic service357.50
(3) Type B, C or B, D for Type B with hydrostatic service (C is low pressure, D
is high pressure hydro)
(4) Type E for fixed fire extinguishing systems:
(I) E-1 for hood/duct systems
(II) E-2 for all other systems
(III) Both E-1 and E-2
(5) Type F for fire alarm440.00
(6) Type G for automatic sprinkler system (includes G-U)
(7) Type G-U for underground fire sprinkler service <i>and private hydrant</i>
maintenance and repair
(8) Type H for hood and duct cleaning440.00
(9) Type H-E for E-1 licensed companies wanting an H license
(10) Type I for standpipe systems
(11) Type I-G for G licensed companies wanting an I license
(12) Type J for N.F.P.A., Standard 13-D systems
(13) Type G-J for G licensed companies wanting to do Standard 13-D work137.50
(14) Blaster's certificate of registration

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	(15) [Five year] Two-year renewal of a blaster's certificate	55.00	
	(16) Type MG license to install medical gas systems	247.50	
	(17) Type EWD license to sell or install heat detectors	110.00	
	(b) A certificate of registration (each class)	71.50	
	(c) Renewal of a certificate of registration	33.00	
	(d) Issuance of a duplicate license or certificate	11.00	
	(e) Change of information on a certificate or license	11.00	
	(f) A license for each branch office, per license class	110.00	
	(g) An annual license for the sale at retail of all types of fire extinguishers	27.50	
	(h) An annual license for the sale at retail of only disposable fire extinguishers which	are not	
J	required by a code	11.00	
	(i) Retaking an examination or any part of an examination	22.00	
	(j) A certificate of registration and license for codes and regulations in interior	<b>*</b> -	Formatted: Tabs: 0.2", Left + 0.4", Left + 6.5", Right, Leader:
	design	100.00	
Ī	(k) Renewal of a certificate of registration and license for codes and regulations in	<b>+</b> -	Formatted: Tabs: 0.2", Left + 0.4", Left + 0.6", Left + 6.5", Right, Leader:
	interior design	50.00	
Ī	(l) Annual certificate of registration for installers of medical gas systems	71.50	
	(m) A copy of the regulations of the State Fire Marshal	11.00	
	2. The fees for a license do not apply to this state or its political subdivisions. The fe	es for	

2. The fees for a license do not apply to this state or its political subdivisions. The fees for certificates of registration apply in all cases. A certificate of registration operates as a license for a person to perform a specific job for a company licensed pursuant to this chapter and chapter 477 of NRS.

- 3. The State Fire Marshal will refund the fee for a license, less an administrative fee of \$38.50, if a written request for a refund, stating that the licensee has not, after being licensed, engaged in any of the activities for which the license is issued, is received by the State Fire Marshal within 30 days after the date of the issuance of the license.
- 4. The following fees are established for the administrative and regulatory services of the State Fire Marshal Division:
- (a) All copy service will be at the rate of \$2.75 for the first copy and 55 cents for each page thereafter for each file opened.
  - (b) Fees for investigative services are as follows:
- (1) For expert testimony rendered by the Division in a civil proceeding, the fee of \$110 for each hour of testimony or research will be charged.
- (2) The actual costs for an investigation must be paid by the person investigated if he is found guilty.
- (3) Investigative and hearing costs must be paid by the person investigated, if the hearing officer finds in favor of the State Fire Marshal.
- (c) The fee for the issuance of a license or certificate of occupancy is \$22. The State Fire Marshal will issue a certificate of occupancy:
  - (1) Annually for a licensed facility; or
- (2) For a facility which is not licensed, annually after an inspection and the removal of deficiencies, if any.
- (d) The State Fire Marshal may charge a fee for any other inspection services. The rate for this fee is \$38.50 per hour or any fraction thereof. The first inspection may be conducted at no

charge. A fee for subsequent reinspections will be charged for the actual cost of travel, salaries and administrative expenses in addition to the inspection fee.

- (e) The fee for witnessing any test for acceptance is \$22 for each test requiring a separate fee for certification.
- (f) A fee may be charged for the costs associated with providing training programs. The State Fire Marshal may waive this fee if a reasonable justification for doing so is provided.
- (g) Instructional supplies and materials will be supplied at the approximate cost of providing them.
- (h) Fees for instructors are \$22 per hour, or as set by contract for specific classes, plus per diem and travel expenses.
- (i) Any additional costs for service will be added, as well as an administrative fee of 5.5 percent of the total cost of each program.
- (j) Costs of certification are based upon hours of training, but will not exceed \$22. Fees will be charged for any certification other than:
  - (1) Initial firefighter certification I and II for a member of a volunteer fire department; or
- (2) Certification for hazardous materials awareness and operations for all first responders for a governmental agency.
- (k) Additional fees equal to those charged for initial testing will be charged for retesting those who fail.
- (l) The State Fire Marshal will not collect fees pursuant to this section from a person if a third party, such as the employer of the person, pays that fee.
- (m) Any service provided by the State Fire Marshal Division may be billed at the rate of \$38.50 per hour or the actual cost of providing the service, whichever is greater.

- (n) Any service performed by a special deputy on behalf of the State Fire Marshal may be billed, pursuant to an interagency agreement, at the rate of \$38.50 per hour, the actual cost of providing the service, or any other rate specified by this chapter. The State Fire Marshal may allow such fees or any part thereof to be collected and used by the agency supporting the special deputy.
- (o) Approval for equipment or materials which are not on a list published by a nationally recognized testing laboratory, inspection agency or other organization concerned with product evaluation [,] will be issued annually for a fee of \$550 per product, \$38.50 per hour of research and actual expenses incurred in evaluating the product. If a product or material is not approved, there will be charged a fee of \$38.50 per hour of research and actual expenses incurred in evaluating the product, except that the minimum fee is \$165. Approval of a product lapses if the:
  - (1) Product is modified;
  - (2) Name of the product or person manufacturing the product is changed;
  - (3) Ownership of the company is changed;
  - (4) Use of the product is changed; or
  - (5) Annual fee is not paid.
- (p) Requests for statistical information received before the publication of the annual report will be supplied as available. The administrative cost to receive such statistical information will be calculated and assessed in accordance with this section.
- 5. The State Fire Marshal may establish a fee for supplying copies of the annual report to persons and agencies other than fire, legislative and state agencies. The fee will be limited to the actual cost of the publication and distribution of the report, plus an administrative fee of \$38.50.

- 6. The State Fire Marshal may refund all or part of any fee if he deems it appropriate. To be eligible for a training refund, a registrant must give not less than 72 hours' notice before removing his name from the registration list. The State Fire Marshal may require the registrant to provide written documentation of the notice.
- 7. For a plan review, the State Fire Marshal will collect an investigation fee in accordance with section [107.5.2] 108 of the [1997 edition of the *Uniform Fire Code*, as amended by paragraph (c) of subsection 1 of NAC 477.283.] International Building Code.
  - **Sec. 24.** NAC 477.330 is hereby amended to read as follows:
- 477.330 1. A licensee shall maintain accurate records of all service performed by him and all installations and service agreements made by him. These records must be made available for inspection by the State Fire Marshal or his representatives during the normal hours of business of the licensee.
- 2. The State Fire Marshal will keep a list of the names, addresses and numbers of the licenses of all licensees. The record of all numbers will be available for inspection.
- 3. Any change of location of a licensee must be reported to the office of the State Fire Marshal, in writing, within 7 days after the change. A new license will be issued upon notification and payment of the prescribed fee.
- 4. A licensee shall provide to the State Fire Marshal with the initial application for a license and with each application for renewal of a license a copy of at least one agreement between the licensee and a company that has [hydrotesting] hydrostatic testing facilities approved by the United States Department of Transportation and soft shell [hydrotesting] hydrostatic testing facilities not required to be approved by the United States Department of Transportation, pursuant to which the company with the [hydrotesting] hydrostatic testing

facilities will provide services relating to [hydrotesting] hydrostatic testing to the licensee. If the agreement is cancelled or otherwise terminated, the licensee shall forthwith notify the State Fire Marshal of the cancellation or termination of the agreement.

**Sec. 25.** NAC 477.333 is hereby amended to read as follows:

477.333 [1.] The State Fire Marshal will, in accordance with NRS 477.032, issue a certificate of registration and license for codes and regulations in interior design to a person who successfully completes a specialized training course that has been approved by the State Fire Marshal.

[2.—A person must apply for a certificate of registration and license for codes and regulations in interior design in accordance with this chapter. Upon receipt of such a certificate of registration and license, the person to whom the certificate of registration and license were issued shall use the most current applicable codes adopted by the State Fire Marshal in any project of interior design which he does. An application for a certificate of registration and license for codes and regulations in interior design must be made on the appropriate forms and include the appropriate fee as set forth in NAC 477.325. An applicant must pass the written final examination with a score of not less than 75 percent to receive a certificate of registration and license for codes and regulations in interior design.

- 3. An instructor for a course in codes and regulations must be approved by the State Fire Marshal.
- 4. The State Fire Marshal may charge for issuing a certificate of registration and license for codes and regulations in interior design a reasonable fee pursuant to this chapter, plus the actual cost expended by the State Fire Marshal to evaluate the course.]
  - **Sec. 26.** NAC 477.3338 is hereby amended to read as follows:

477.3338 For each project in interior design by a holder of a certificate of registration and license for codes and regulations in interior design, the holder shall submit to the authority having jurisdiction a plan that lists the types and uses of interior materials and furnishings which the holder will be using in the project of interior design, so that the authority *having jurisdiction* can determine whether the materials, furnishings and plan comply with the codes. The authority having jurisdiction may charge a reasonable fee for making such a determination.

**Sec. 27.** NAC 477.335 is hereby amended to read as follows:

477.335 1. All pre-engineered or engineered fixed fire extinguishing systems, fire alarm systems, standpipe systems or sprinkler systems must be inspected in accordance with schedules recommended in the appropriate adopted standards, [and in the "Fire Protection Systems, Inspection, Test and Maintenance Manual,"] as published by the N.F.P.A. Those inspections, other than [the annual] a required inspection and certification, may be conducted by any person, including an employee of a firm, who, in the opinion of the authority having jurisdiction, has sufficient knowledge of the system to conduct such an inspection and who will maintain an accurate record of such inspections of the system in the designated place for each system.

- 2. [The State Fire Marshal hereby adopts by reference the 1998 edition of the "Fire Protection Systems, Inspection, Test and Maintenance Manual." A copy is available from the N.F.P.A. at the price of \$62.
- 3.] The authority having jurisdiction may inspect a fire protection system at any time. [the contractor is present.] All work must comply with the standards adopted for the system being installed. The methods or equipment used in the installation must not vary from those required by the plans pursuant to which the fire protection system is being installed and the applicable standard for that fire protection system.

- **Sec. 28.** NAC 477.340 is hereby amended to read as follows:
- 477.340 1. The provisions of NAC 477.340 to 477.370, inclusive, prescribe the requirements for the licensing of persons engaged in the sale, leasing, installation or servicing of fire systems and components of fire systems.
  - 2. The provisions of NAC 477.340 to 477.370, inclusive, apply to all:
  - (a) Persons within or conducting business within the State unless specifically excepted; and
  - (b) Fire systems and components installed within the State after November 27, 1978.
- 3. The provisions of NAC 477.340 to 477.370, inclusive, do not apply to municipal fire alarm systems in any municipality whose population is [50,000] 100,000 or more.
  - **Sec. 29.** NAC 477.3465 is hereby amended to read as follows:
- 477.3465 A person who wishes to engage in the sale, installation, repair, restoration or testing for maintenance of heat detectors which will be used as devices for the early warning of fires must possess a [certificate of registration] license issued by the State Fire Marshal. Each applicant for such a [certificate of registration] license must provide a certification from a manufacturer of the type of heat detector to be used by the applicant or firm engaged in the sale of the heat detector that the applicant has received instruction and training in the installation, repair, testing and inspection of the heat detector to be used by the applicant. [The applicant must then take and pass a written examination and pay the appropriate fee. The examination for a certificate of registration for the sale, installation, repair, restoration or testing for maintenance of the heat detector which will be used as a device for the early warning of fires will be based on reference material which is available from the State Fire Marshal.]
  - **Sec. 30.** NAC 477.350 is hereby amended to read as follows:

- 477.350 1. No fire system, device or component of any fire system may be sold, leased or installed in this State unless it is approved, labeled or listed by Underwriters Laboratories Inc., Underwriters' Laboratories of Canada, [Factory Mutual Research Global Corporation] FM Global Technologies LLC or any other testing laboratory approved by the State Fire Marshal as being qualified to test such systems or devices or if an approved listing from a testing laboratory is not available for a system, device or a component, by the State Fire Marshal on the basis of a practical test or examination and payment of the required fee by the person who is requesting approval of the system, device or component by the State Fire Marshal.
- 2. In addition to other provisions of NAC 477.340 to 477.370, inclusive, fire systems must comply with standards published by the N.F.P.A. and the International [Conference of Building Officials.] Code Council.
- 3. Where smoke detectors are required by any statute, regulation or ordinance, evidence of approval must be furnished to the purchaser at the time of purchase or delivery. The evidence must be a listing or label from one of the approved laboratories.
- 4. All new structures built for residential purposes which are not otherwise required by any statute, regulation or ordinance to be equipped with smoke detectors or other fire systems must be equipped with smoke detectors that have been approved by the authority having jurisdiction.
  - **Sec. 31.** NAC 477.365 is hereby amended to read as follows:
- 477.365 1. The distributor or installer of a fire alarm system must submit evidence of his capability to provide for any needed repair and restoration of the system within 24 hours after being notified of a fire or fault in the system. The evidence of that capability is subject to approval by the State Fire Marshal and must include a showing that the distributor or installer has:

- (a) The necessary equipment and qualified personnel to perform the service;
- (b) The necessary stock of parts and devices; and
- (c) A valid license issued by the State Contractors' Board.
- 2. Where fire alarm systems are installed, a satisfactory agreement for the maintenance of the system must be provided. A licensed company shall give a 30-day notice to the owner, the occupant [,] and the authority having jurisdiction [and the State Fire Marshal] before the company may discontinue service to the owner and the occupant. All systems must be under the supervision of qualified persons. These persons shall have proper tests and inspections made at prescribed intervals and have general charge of all alterations and additions to the systems under their supervision. A copy of the maintenance agreement, along with proof that the firm or company which will provide the maintenance is adequately covered by liability insurance, must be submitted by the firm or company to the local fire department having jurisdiction.
- 3. Detailed plans of alarm systems must be submitted to the [State Fire Marshal for review and to the] authority having jurisdiction. The specifications must state that the installation will conform to applicable standards and meet the approval of [that authority.] the authority having jurisdiction. The specifications must include the specific tests which may be required to meet the approval of [that authority.] the authority having jurisdiction. Plans must be drawn to an indicated scale or be suitably dimensioned and must be made so that they can be easily reproduced. Plans must contain sufficient detail to enable the authority having jurisdiction to evaluate the effectiveness of the system. Plans must be submitted to and approved by the [State Fire Marshal and the] authority having jurisdiction before the system may be installed. Where field conditions necessitate any substantial change from the approved plan, the corrected plan showing the system as actually installed must be submitted to the [State Fire Marshal and the]

authority having jurisdiction. Plans [that have been approved by the State Fire Marshal] must be on the job site at all times when work is being performed pursuant to that plan at that site.

- 4. All areas in a high-rise building protected by a fire alarm system and all areas protected by a fire alarm system must be provided with sufficient notification devices to achieve 80 decibels of sound at any occupied space within the area protected. All other occupancies must have an alarm system or systems which produce a sound that exceeds the prevailing equivalent sound level in the room or space by 15 decibels, or exceeds any maximum sound level with a duration of at least 30 seconds by at least 5 decibels, whichever is louder. The level of sound for the alarm signal must not exceed 120 decibels.
  - **Sec. 32.** NAC 477.385 is hereby amended to read as follows:
- 477.385 1. A person who is licensed to install or maintain a portable fire extinguisher or fixed fire extinguishing system or sell at retail or provide as a part of other sales at retail a portable fire extinguisher or fixed fire extinguishing system for use within this State:
- (a) Must be properly equipped and qualified to perform the service authorized by the type of license issued;
- (b) Must provide a shop or a vehicle as a place of business, properly equipped and subject to inspection by the [State Fire Marshal and the authorities] authority having jurisdiction; and
- (c) If he is engaged in the installation or maintenance of *portable fire extinguishers or* fixed fire extinguishing systems, must possess a state contractor's license appropriate to the work performed as issued by the State Contractors' Board.
- 2. Any advertisement that the services of selling, installing, charging or testing or other maintenance of portable fire extinguishers or fixed fire extinguishing systems are available

constitutes prima facie evidence that the premises, business, building, room or establishment in or upon which the advertisement appears or to which it refers is a separate location for business.

- 3. Licenses are classified and defined as follows:
- (a) License for a public agency Any type of license which is issued to the State or any of its agencies or political subdivisions for work to be performed by the State or that agency or political subdivision upon its own properties and for its own use. All requirements set forth in NAC 477.300 to 477.435, inclusive, except the requirement for a [state contractor's license,] license issued by the State Contractors' Board, must be met.
- (b) Restricted license A license which authorizes the holder to perform work covered by the license only upon his own properties and for his own use. All fees must be paid. Unless otherwise exempted, a valid license issued by the State Contractors' Board is required.
- (c) License A license which is required by NRS 477.033 but is issued to a business and is not restricted.
- 4. Licenses for the sale at retail of portable fire extinguishers are issued in two classes, fire extinguishers required by a code and fire extinguishers not required by any code. Fire extinguishers required by a code must conform to the standards of the [National Fire Protection Association] *N.F.P.A.* and meet the requirements for testing and listing of a nationally recognized testing laboratory. Fire extinguishers not required by a code must meet the requirements of the N.F.P.A., be nonrefillable, achieve a minimum of one unit of classification of rating through testing and listing by a nationally recognized testing laboratory and be designed and intended for use in homes, automobiles and recreational vehicles.
  - **Sec. 33.** NAC 477.390 is hereby amended to read as follows:

- 477.390 1. In addition to the requirements set forth in NAC 477.385, any person who desires to engage in the installation, maintenance or inspection of an engineered or preengineered fixed extinguishing system must be declared qualified to perform such act or acts by the State Fire Marshal.
- 2. The State Fire Marshal will declare a person to be qualified if he provides a certification from a manufacturer of fixed extinguishing systems that he has received instruction and training in the installation, maintenance and inspection of fixed extinguishing systems and he passes a written examination for a certificate of registration. [In lieu of a written examination, the State Fire Marshal may accept a practical demonstration and proof, in the form of a letter or contract, that manuals and other materials are available for the systems being serviced or worked on by the person.]
  - **Sec. 34.** NAC 477.395 is hereby amended to read as follows:
- 477.395 1. Application for a license or a certificate of registration must be made on forms prescribed by the State Fire Marshal.
- 2. Each application must be accompanied by the required fee and contain the following information:
  - (a) The name and address of the applicant.
  - (b) The physical address of the business of the applicant.
  - (c) Fictitious names used, if any.
  - (d) The type of work performed.
  - (e) Other pertinent information required by the State Fire Marshal.

- Upon passage of the written examination and any required practical tests or demonstrations, a certificate of registration endorsed with the type of qualification will be issued to each qualified person.
  - 4. Information needed to pass the examination on portable fire extinguishers is found in:
- (a) N.F.P.A. 10, "Standard for [the Installation, Maintenance and Use of] Portable Fire Extinguishers"; and
  - (b) NAC 477.380 to 477.435, inclusive . [; and
- (c) The Fire Protection Handbook, Eighteenth Edition.]
- 5. Information needed to pass the examination on fixed fire extinguishing systems is found in:
  - (a) N.F.P.A. [10, "Standard for Dry Chemical Systems";
- (b) NAC 477.380 to 477.435, inclusive;
- (c) The Fire Protection Handbook, Eighteenth Edition;
- (d) N.F.P.A. 13, "Standard for Sprinkler Systems";
- (e) N.F.P.A. 11A, "Standards for Gas Systems"; and
- (f) N.F.P.A. 96, "Standard for Vapor Removal from Cooking Equipment."
- 6. Applicants traveling for the purpose of testing must do so at their own expense.
- 7. An applicant who fails that portion of the written examination related to hydrostatic services may be issued a Type B certificate of registration if he so desires. If, at a later date, the applicant wishes to reapply for a Type A certificate of registration, he must request a new date for the retest in writing, complete an application and pay the required fees as if the application were being made for the first time.] 12, "Standard on Carbon Dioxide Extinguishing Systems";
  - (b) N.F.P.A. 12A, "Standard on Halon 1301 Fire Extinguishing Systems";

- (c) N.F.P.A. 17, "Standard for Dry Chemical Extinguishing Systems";
- (d) N.F.P.A. 17A, "Standard for Wet Chemical Extinguishing Systems"; and
- (e) N.F.P.A. 2001, "Standard on Clean Agent Fire Extinguishing Systems."
- **Sec. 35.** NAC 477.400 is hereby amended to read as follows:
- 477.400 1. The provisions of NAC 477.385 do not prohibit new employees of a licensee from performing service on portable fire extinguishers for a maximum of 90 days after the beginning of employment, if the servicing is performed in the presence and under the direct supervision of a registrant.
- 2. A new employee shall not perform service on portable fire extinguishers if, after the completion of the 90-day period, he fails to pass a written examination and a background investigation. A conviction of a felony or crime which would demonstrate his lack of good character is a basis for denial of a certificate of registration.
- 3. Within 7 days after employing a registrant or new employee who performs service on portable fire extinguishers or fixed fire extinguishing systems, a licensee must report to the State Fire Marshal the name, address and certificate number of the registrant or the name and address of the new employee.
- 4. A licensee shall report any termination of employment by a registrant within 7 days. A registrant shall report any change in his address by written notice to the State Fire Marshal within 7 days after the change. [The registrant must record the new address on the reverse side of the certificate.] The State Fire Marshal will issue a new certificate of registration to the registrant upon receipt of the written notice and the payment of the required fees.
  - **Sec. 36.** NAC 477.405 is hereby amended to read as follows:

- 477.405 1. No portable fire extinguisher or component of a fixed fire extinguishing system may be sold or leased in this State unless it has been approved, labeled or listed by Underwriters Laboratories Inc., Underwriters' Laboratories of Canada, [Factory Mutual Global Research Corporation,] FM Global Technologies LLC, Applied Research Laboratories, the United States Coast Guard or any other testing laboratory approved by the State Fire Marshal.
- 2. No portable fire extinguisher or fixed fire extinguishing system may be sold, leased, installed or serviced in this State if it uses as an extinguishing agent carbon tetrachloride, chlorobromomethane, methyl bromide, trichlortrifluoroethane or any other agent which has not been accepted by a laboratory approved under subsection 1. Any accepted fire extinguishing agents must be approved by the State Fire Marshal or his authorized representative. Plans for proposed Halon installations must be submitted to the State Fire Marshal or his authorized representative with an application for approval. No portable fire extinguisher containing Halon as an extinguishing agent may be sold or used except as approved by the authority having jurisdiction for use in commercial occupancies or other special applications.
- 3. Inverting type extinguishers may not be hydrostatically tested. Each such extinguisher which becomes due for hydrostatic testing must be permanently removed from service.
- 4. Each portable fire extinguisher must bear a label which includes the following information:
  - (a) The unit is a fire extinguisher.
  - (b) The manufacturer's name.
  - (c) The date of manufacture.
  - (d) The designation of the model.
  - (e) The numerical rating and classification.

- (f) The weight full and empty.
- (g) The extinguishing agent.
- (h) The test pressure determined by the manufacturer.
- (i) The testing laboratory's listing label.
- (j) The freezing limits, if applicable.
- → A label bearing this information must not be removed from the extinguisher except when it has failed to pass the tests or other requirements of this chapter.
  - **Sec. 37.** NAC 477.410 is hereby amended to read as follows:
- 477.410 1. All installation, inspection, maintenance and repair of portable fire extinguishers and fixed extinguishing systems must be performed in accordance with [the standards of the] N.F.P.A. 10, "Standard for Portable Fire Extinguishers," 2002 edition, and the State Fire Marshal.

registration. If possible, a collar tag ring as required by N.F.P.A. 10 or an alternate collar tag ring that is approved by the State Fire Marshal must be installed after recharging or servicing the extinguisher.

- [(b) Except as otherwise provided in this paragraph, all fixed cylinders for fire extinguishing systems except carbon dioxide and Halon systems must be recharged as required by the standards of the N.F.P.A. and the State Fire Marshal.]
- 3. Nitrogen or approved dry air must be used as expellant when recharging dry chemical type extinguishers unless the manufacturer recommends otherwise.
- 4. [An extinguisher which bears the date of manufacture on the cylinder and has been charged at the factory need not be tested or recharged for 1 year after the date of manufacture unless the cylinder has been discharged during that year. The extinguisher must have an approved tag from a licensed company affixed before it may be placed into service or installed in accordance with the *Uniform Fire Code* or N.F.P.A., whichever is more stringent. A factory charged extinguisher that does not bear a date of manufacture on the cylinder must be hydrostatically tested, recharged and tagged by a licensed company before being placed into service or installed.
- 5. For the recharging of any cylinder using dry chemicals to be valid, the person performing the service must date and initial an approved internal tag. The tag must show the same date and initials as the exterior tag. The internal tag must be placed securely on the topmost exposed portion of the pick up tube before reassembly and recharging. Failure to initial, date and place the internal tag is a ground for the immediate suspension or revocation of a serviceman's certificate of registration.

- 6.] Before a fire extinguishing system using Halon is accepted, a test as referenced in N.F.P.A. Standard 11A must be performed and recorded.
- [7.] 5. Within 30 days before the date on which an extinguisher must be serviced, the owner of a portable fire extinguisher may enter into a verbal service agreement for the service of that extinguisher. Failure to comply with the provisions of this section by a person who holds a certificate of registration is a ground for the immediate suspension or revocation of the certificate of registration, and the person who holds the certificate of registration may be criminally or civilly liable for fraud.
  - **Sec. 38.** NAC 477.415 is hereby amended to read as follows:
- 477.415 1. Each person who performs hydrostatic testing of fire extinguishers manufactured in accordance with the specifications of the United States Department of Transportation must do so in accordance with the procedure specified by that Department for compressed gas cylinders and must have been qualified by a test administered by the State Fire Marshal and have received the proper license or certificate of registration, or both.
- 2. The procedure concerning the hydrostatic testing of cylinders listed by the United States Department of Transportation is set forth in the Compressed Gas Association's Pamphlet, *Methods for Hydrostatic Testing of Compressed Gas Cylinders*. The 1996 edition of the pamphlet is hereby adopted by reference. A copy of the pamphlet may be obtained from the [State Fire Marshal,] Compressed Gas Association, 4221 Walney Road, 5th Floor, Chantilly, Virginia 20151-2923, at a price of [\$5.50.] \$43 for members and \$79 for nonmembers.
  - **Sec. 39.** NAC 477.420 is hereby amended to read as follows:
- 477.420 A licensee shall replace extinguishers removed from premises for servicing with spare extinguishers of equal or higher [UL] ratings during the period the extinguishers being

serviced are removed. Failure to comply with the provisions of this section is a ground for the immediate suspension or revocation of the certificate of registration of the licensee.

**Sec. 40.** NAC 477.430 is hereby amended to read as follows:

- 477.430 1. The installer shall submit evidence of his capability to repair, recharge and restore fixed fire extinguishing systems within 24 hours after notification of a fire or a fault in the system. The installer's evidence must include a showing that the installer has:
- (a) The necessary equipment [, as listed in NAC 477.432,] and certified personnel for the service;
  - (b) The necessary stock of parts, products and devices;
  - (c) A valid license issued by the State Contractors' Board; and
- (d) A certification and approval of a major manufacturer of fixed fire extinguishing systems which is acceptable to the State Fire Marshal.
- 2. Where a fixed fire extinguishing system is required by a statute, regulation or ordinance, a satisfactory written agreement for maintenance of the system must be provided. All such systems must be maintained under the supervision of qualified persons approved by the State Fire Marshal. A copy of the maintenance agreement along with proof that the firm or company providing the maintenance is adequately covered by liability insurance must be provided by the firm or company to the [local fire department] authority having jurisdiction. A tag conforming to the requirements of NAC 477.425 must be attached to all such systems. A person certified by the State Fire Marshal must be present whenever work is performed.
- 3. Detailed plans of such systems must be submitted to [and approved by] the authority having jurisdiction and must conform to applicable standards and meet the approval of the authority having jurisdiction. The specifications must require that a puff test of the system be

performed by sending a charge of gas through the system to determine the presence of any obstructions. The test must be certified by the licensee as meeting the requirements of the *National Fire Codes*. [and Standards.] That certification must be sent to the authority having jurisdiction. Plans must be drawn to an indicated scale and must be made so that they can be easily reproduced. Plans must contain sufficient detail to enable [that] the authority having jurisdiction to evaluate the effectiveness of the system. Plans must be submitted to and approved by [that] the authority having jurisdiction before the work starts. Where field conditions necessitate any substantial change from the approved plan, a corrected plan showing the system as actually built must be submitted, with the appropriate fee, to [that] the authority having jurisdiction for approval. All changes must comply with the codes and standards, and any substantial change must be submitted to the authority having jurisdiction for review and be approved by [that] the authority having jurisdiction before such a change may be made.

- 4. After a fire extinguishing system has been approved and installed, a copy of the system's plans must be placed on the premises as required by the authority [.] having jurisdiction. A fire extinguishing system installed in conformance to the requirements of the National Fire Codes [and Standards] is not required to be updated to later revisions in the [Code] National Fire Codes until the State Fire Marshal adopts those revisions by reference and the hazard which is to be protected is remodeled, removed or substantially altered.
  - **Sec. 41.** NAC 477.440 is hereby amended to read as follows:
- 477.440 1. Each portable building in this state must comply with all statutes and regulations relating to educational facilities or other occupancy classifications, depending on the intended use of the building.

- 2. All plans for the construction and placement of portable buildings must be reviewed and approved by the **[local fire authority, the local building authority or the State Fire Marshal.]** authority having jurisdiction. The fire authority having jurisdiction shall inspect and approve the placement or relocation of a portable building, including, without limitation, available access for a fire department and water supply, before the building may be occupied.
  - **Sec. 42.** NAC 477.441 is hereby amended to read as follows:
  - 477.441 1. A *new or relocated* portable building must:
  - (a) Be placed on a surface which is:
    - (1) Paved or composed of dirt or any other material which is noncombustible; and
    - (2) Free of combustible material.
- (b) Have a skirt that is noncombustible or fire-resistant and which extends from the bottom of the portable building to ground level.
- (c) Have a zone of at least 5 feet that extends outward from the bottom of the skirt and which is free of trash, debris, plants or any other combustible material in accordance with section [1103] 304 of the [Uniform] International Fire Code.
- (d) Not be located within 60 feet of a permanent structure, except that a portable building may be located within 60 feet of a permanent structure if the location of the portable building is in compliance with section [505] 503.1.3 of the [Uniform] International Building Code.
- (e) Have at least two means of egress, as that term is defined by the [Uniform] International Building Code.
  - (f) Provide illumination for each egress.
  - (g) Be equipped with a fire extinguisher which has a minimum rating of 2A-10BC.

- (h) Be provided with a fire alarm system, as required by the [Uniform] International Fire Code. If the portable building is designated for occupancy as a "Group B occupancy used for educational purposes" or as a "Group E occupancy," the portable building must have an automatic and a manual fire alarm system, which is integrated with the fire alarm system in the primary building.
- 2. Except as otherwise provided in this subsection, if two or more portable buildings are placed next to each other, there must be no empty spaces between the buildings. If it is physically impossible to place portable buildings next to each other so that there are no spaces between the portable buildings, the space between the portable buildings must have a barrier to prevent combustible materials or debris from entering that space.
  - 3. Flammable or combustible material may not be stored beneath a portable building.
- 4. Portable buildings may not be joined if there are windows or other openings on the joined wall other than doors that are designed and used as access between the buildings.
- 5. Portable buildings which abut or are grouped together must not exceed the total area allowed by the [Uniform] International Building Code for occupancies which are designated as ["Type 5, nonrated."] "Type V-B."
  - **Sec. 43.** NAC 477.442 is hereby amended to read as follows:
- 477.442 1. [A] An existing portable building which has [no windows or] only one door to the exterior must be equipped with:
- (a) A system for emergency lighting. [as required by N.F.P.A. Standard 101, section 30-7.1.3.]
- (b) An automatic fire sprinkler system as required by N.F.P.A. Standard [101, section 7.7] 13 if:

- (1) The maximum legal occupancy of the building exceeds 50 persons; or
- (2) More than two portable buildings are joined together to be used for classrooms or assembly.
  - 2. All other portable buildings must:
- (a) Be in compliance with the codes for building, fire and life safety as adopted by this chapter or by the local authority [ ] having jurisdiction, whichever are more restrictive.
  - (b) Be equipped with a fire extinguisher which has a minimum rating of 2A-10BC.
  - (c) Have an automatic and a manual fire alarm system if:
    - (1) The maximum legal occupancy of the joined portable buildings exceeds 50 persons; or
    - (2) Three or more portable buildings are joined together.
- (d) Have all alarm signals installed and connected to a main alarm system as required by N.F.P.A. Standard 72.
- (e) If smoke detectors are required, have those detectors interconnected with the fire alarm system.
- (f) If the portable building is used as a classroom or for any other purpose relating to education, have and maintain plans for fire drills and evacuation, which must be posted as prescribed by NRS 392.450.
- 3. No change in the use of a portable building described in subsection 2 may be made until the proposed change is reviewed and approved by the **[local fire]** authority having jurisdiction for the State Fire Marshall for compliance with the adopted codes or this section.
  - 4. A system for heating, ventilating or air-conditioning which:
  - (a) Is in a portable building described in subsection 2;
  - (b) Can circulate more than 2,000 cubic feet of air per minute; and

- (c) Shuts down automatically,
- → must be serviced quarterly. Records of the service must be maintained for 2 years for review by the [local fire] authority having jurisdiction.
  - **Sec. 44.** NAC 477.444 is hereby amended to read as follows:
- 477.444 1. The [local] authority having jurisdiction [may] will designate the requirements for fire flow and [assist in] approve the location of a site for a portable building based on the proximity and usability of available fire hydrants. [The requirements must comply with section 903 and appendices III-A and III-B of the Uniform Fire Code, or the local ordinance, whichever is more stringent.] If it is not possible to locate a portable building which is to be used as a classroom or for any other purpose relating to education in compliance with such requirements, the school district in which the building is to be placed may apply to the [local fire department for a waiver of the requirements. A waiver may be granted if the requested alternative meets the intent of this chapter.] authority having jurisdiction to request an alternative means of compliance with the requirements.
- 2. There must be no obstruction between a hydrant and the areas to be protected. Access to a hydrant by fire trucks must not be obstructed. If necessary, a hydrant must be turned, moved or otherwise relocated to allow access to the hydrant by fire trucks.
  - **Sec. 45.** NAC 477.445 is hereby amended to read as follows:
- 477.445 The exterior areas around a portable building, including the areas under stairs or ramps, must be kept free and clear of accumulations of trash, weeds, dead grass, litter or any other flammable or combustible material, in accordance with the [Uniform] International Fire Code. Clearances from other buildings, services or hazards must be maintained as required by the building and fire codes adopted by the State Fire Marshal for all structures and buildings.

- **Sec. 46.** NAC 477.446 is hereby amended to read as follows:
- 477.446 Access for vehicles must be provided into any area where a portable building is located. Not less than two means of access which meet the requirements of the [local fire] authority *having jurisdiction* or the [Uniform] International Fire Code, whichever is more stringent, must be provided, except that, if physical difficulties exist, the authority having jurisdiction may approve a single means of access.
  - **Sec. 47.** NAC 477.455 is hereby amended to read as follows:
- 477.455 1. No component or device of an automatic sprinkler system may be sold, leased or installed in this State unless it has been approved, labeled or listed by Underwriters Laboratories [,] Inc., Underwriters' Laboratories of Canada, [Factory Mutual Global Research Corporation] FM Global Technologies LLC or other testing laboratory approved by the State Fire Marshal as qualified to test such a component or device.
- 2. Automatic sprinkler systems must comply with the [Uniform] International Fire Code and the following standards of the [National Fire Protection Association:] N.F.P.A.:
  - (a) ["Installation] "Standard for the Installation of Sprinkler Systems," Standard 13.
  - (b) ["Care and Maintenance of Sprinkler Systems," Standard 13A.
- (c) "Standpipe] "Standard for the Installation of Sprinkler Systems in One- and Two-Family Dwellings and Manufactured Homes," Standard 13D.
- (c) "Standard for the Installation of Sprinkler Systems in Residential Occupancies up to and Including Four Stories in Height," Standard 13R.
- (d) "Standard for the Installation of Standpipe, Private Hydrants, and Hose Systems," Standard 14.

(d) "Water

- (e) "Standard for Water Spray Fixed Systems for Fire Protection," Standard 15.

  [(e) "Foam-water]
- (f) "Standard for the Installation of Foam-Water Sprinkler and Foam-Water Spray Systems," Standard 16.
  - [(f) "Centrifugal Fire Pumps,"]
  - (g) "Standard for the Installation of Stationary Pumps for Fire Protection," Standard 20.

    [(g) "Water]
  - (h) Standard for Water Tanks for Private Fire Protection," Standard 22.
- [(h) "Installation of Sprinkler Systems in One and Two Family Dwellings and Mobile Homes," Standard 13 D.
- (i) "Private]
- (i) "Standard for the Installation of Private Fire Service Mains and Their Appurtenances," [N.F.P.A.] Standard 24.
- (j) "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," Standard 25.
  - **Sec. 48.** NAC 477.460 is hereby amended to read as follows:
- 477.460 1. Each automatic fire sprinkler system must be inspected quarterly. One of the quarterly inspections must be termed an annual inspection and be conducted in accordance with the provisions of subsection 2. The other quarterly inspections may be conducted by any responsible person, including an employee of a firm, who, in the opinion of the authority having jurisdiction, has sufficient knowledge of the system to conduct such inspections. The quarterly inspections must conform to the requirements of N.F.P.A. Standards 13 and 25. [and with the "Fire Protection Systems Inspection, Test and Maintenance Manual," published by the N.F.P.A.]

Records of inspection must be kept on-site for review by the authority having jurisdiction. Any deficiencies must be reported to the authority having jurisdiction [within 5 working days.] if the owner or occupant has received notice of the deficiency and fails to correct the deficiency within 30 days. Systems which terminate within a station for central control for a high-rise building must be scheduled for testing in accordance with paragraph (e) of subsection 2 of NAC 477.283.

- 2. The annual inspection must be made by a qualified licensee for automatic fire sprinkler systems. The annual inspection must comply with the standards and publications described in subsection 1. [and include the following:
- (a) Post indicator valves, underground gate valves and outside screw and yoke valves must be operated to make sure that they are in good operating condition and do not leak. Each control valve must be secured in its open position by means of a padlock and chain, except electrically supervised valves when approved by the authority having jurisdiction. At the annual inspection, devices for the prevention of backflow, including, without limitation, a double detector check valve assembly, or "DDCA," and a reduced pressure principle assembly, or "RPPA," must be serviced and inspected by a qualified service person who holds a certificate of registration from the State Fire Marshal for that work, or by a qualified representative of a water purveyor who holds a certificate of registration from the State Fire Marshal specific for that property. Any deficiencies must be reported to the authority having jurisdiction within 5 working days.
- (b) Fire pumps must be started and operated until water is discharged freely from the relief valve and checked for ample pressure, proper supply of lubricating oil, operating condition of relief valve and level of water in priming tank. The pump must meet full flow test requirements.

— (c)—Fire department connections must be inspected, caps must be in piace, threads in good
condition, ball drip or drain in order and cheek valve not leaking.
— (d) Underground pipes connecting the water supply to the sprinkler system must be flushed
with a sufficient flow of water to remove any obstruction from the pipelines, when physical
construction allows.
— (e) For wet systems with alarm valves:
— (1) Test alarms by opening the inspector's test connection, the bypass test connection, or
both, in conjunction with making a water flow test when facilities and conditions permit.
— (2) Check cold weather valves and exposed piping to ensure their proper conditions for
winter and summer operations.
— (3) Test the solution in the antifreeze system for satisfactory condition, as required in the
N.F.P.A.'s Standard 13.
(4) Place a tag, which complies with the requirements of NAC 477.470 and indicates the
temperature to which the system is protected, on the antifreeze loop.
— (f) For dry systems with dry valves, accelerators and other items:
(1) Test the alarms, both water flow and air, if provided, and perform a water flow test
through the drain connection when facilities and conditions permit.
(2) Check air pressure, priming water level, latching arrangements, automatic drip
connections when provided, and the general condition of the dry pipe valves, accelerators or
exhausters and their environment, including dry pipe valve room or enclosures.
(3) Trip test dry pipe valves, together with accelerators and exhausters, if provided, in
accordance with standard testing and reporting procedures required by the authority having
<del>jurisdiction.</del>

- (4) After testing, restore the system and the dry pipe valve to operation according to the manufacturer's instructions.
- (5) Open condensation drains on drum drop connections and drain low points during fall and winter inspection.
- 3. A copy of any required inspection report must be sent to the owner within 30 days after the inspection and, if there are deficiencies, within 24 hours or immediately when so required by subsection 9, as appropriate, to the authority having jurisdiction by the licensee who conducted the inspection.
- 4. All hydrostatic tests of systems and the flushing of underground systems may be witnessed by a representative of the authority having jurisdiction.
- 5. The licensee must notify the authority having jurisdiction before any acceptance test is conducted. The State Fire Marshal must be notified if the local authority is unable to witness a test.
- 6. The last person who works on a fire sprinkler system must attach a service tag to the riser.

  The tag must be punched to indicate the type of service performed on the system and the date.

  The tag must be signed by the person doing the work who is certified by the State Fire Marshal.
- 7. The installer of a fire sprinkler system shall place a metal tag on the system riser which displays the name of the installing company and the date the installation was completed.
- 8. The authority having jurisdiction must be notified if any system is going to be shut down except while being tested by a licensed firm.

<del>9.]</del>

**3.** If a maintenance inspection indicates that additional work is required on a fire sprinkler system in order to have the system conform to code requirements, the licensee shall notify the

owner and the authority having jurisdiction in writing immediately after the inspection. A tag must be properly signed, punched and attached. The word "deficient" must be written across the bottom of the tag.

[10.] 4. A licensed company must give 30 days' written notice to the owner, the occupant and the authority having jurisdiction before it may discontinue service to the owner or the occupant, or both.

**Sec. 49.** NAC 477.465 is hereby amended to read as follows:

477.465 1. The distributor, installer or agency to provide service to customers must submit evidence of its capability to repair and restore an automatic sprinkler system within 24 hours after notification of a fire or fault in the system and must repair a system within 24 hours after being notified by the owner that a system requires service. The evidence of that capability is subject to approval by the State Fire Marshal. The evidence must demonstrate that the licensee has:

- (a) The necessary equipment and personnel appropriately certified by the State Fire Marshal;
- (b) The necessary stock of parts and devices;
- (c) A valid license issued by the State Contractors' Board; and
- (d) A certification and approval by the manufacturer from whom the equipment is purchased.
- 2. Where automatic sprinkler systems are installed for any reason, a satisfactory written agreement for the maintenance of the system must be provided. All systems must be under the supervision of qualified persons. No work may be performed on an automatic sprinkler system unless a holder of a certificate of registration is present to supervise the work. Proper tests and inspections must be made at prescribed intervals, and qualified persons must have general charge of all alterations and additions to the systems under their supervision. A copy of the agreement

for maintenance, along with proof that the firm or company which will provide the maintenance is adequately covered by liability insurance, must be submitted by the firm or company to the [local fire department] authority having jurisdiction.

- 3. Detailed plans, with the appropriate fees, must be submitted to the **State Fire Marshal for** approval and to the local authority having jurisdiction [.] for approval. The specifications must state that the installation will conform to the applicable standards and be approved by the authority having jurisdiction before the sprinkler system is installed. The specifications must include the specific tests required by the N.F.P.A.'s standards and the standards required for the approval of [that authority.] the authority having jurisdiction. Plans must be drawn to an indicated scale or be suitably dimensioned and must be made so that they can be easily reproduced. Plans must contain sufficient detail to enable [that] the authority having jurisdiction to evaluate the effectiveness of the system. Plans must be submitted to the [State Fire Marshal and the local authority having jurisdiction before work starts. Where field conditions necessitate any substantial change from the approved plan, the corrected plan showing the system as installed, with the appropriate fees, must be submitted to the [State Fire Marshal and the local] authority having jurisdiction for approval. The [State Fire Marshal and the local] authority having jurisdiction must inspect and approve any substantial changes before the job is completed. Plans [which have been approved by the State Fire Marshall must be on the job site when work is being done pursuant to the plan at that site.
- 4. Calculations must be established from the applicable design curve for sprinkler systems as shown in N.F.P.A. Standards 13, 13R, 231 and 231C. [Calculations must be computed from the water flow test that has been approved by the authority having jurisdiction.] There must be not less than 10 psi additional water pressure above the system demand.

- 5. All hydrostatic tests of systems and flushing of underground systems must be witnessed by [the State Fire Marshal or] a representative of the authority having jurisdiction. All portions of the automatic fire sprinkler system, including the underground service from the gate valve, road box or check valve to the riser, must be installed, tested and flushed by a company licensed by the State Fire Marshal to perform this work. A company which holds a current Type G-U license may provide only the underground services from the gate valve, road box or check valve to the base of the riser. The company shall provide certification of the contractors' materials and testing to the authority having jurisdiction upon the completion of the work. The underground services provided and the certification to be provided to the authority having jurisdiction must meet the requirements of NAC 477.340 to [477.350,] 477.349, inclusive, and the standards of the N.F.P.A. for automatic fire sprinkler systems.
- 6. Upon completing the installation of an automatic sprinkler system, the licensee shall issue a letter of certification to the authority having jurisdiction. The letter must certify that the system has been installed in accordance with the approved plans and all applicable national, state and local codes. The installer shall properly identify all hydraulically designed automatic sprinkler systems with a permanently attached placard. The placard must show the location and number of sprinkler heads and the density of discharge over the designed area.

**Sec. 50.** NAC 477.490 is hereby amended to read as follows:

477.490 1. Plans must be submitted [, with the appropriate fee, to the State Fire Marshal and] to the authority having jurisdiction for approval before any system is installed or modified. Plans must contain:

- (a) The name of the company installing the system.
- (b) The general location and exact address of the job location.

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- (c) A rough plot plan showing water supply and property lines in relation to the installation site.
  - (d) Water pressure at the installation site.
  - (e) A rough floor plan with system coverage indication.
- (f) Any additional information required by the [State Fire Marshal.] authority having jurisdiction.
- 2. The authority having jurisdiction may require additional plans, documentation of testing data, engineering specifications and equipment as deemed necessary.
  - **Sec. 51.** NAC 477.540 is hereby amended to read as follows:
- 477.540 1. The authority having jurisdiction may inspect a fire sprinkler system at any time during its installation. The authority *having jurisdiction* may witness any tests of the system. The licensee shall contact the authority having jurisdiction and schedule witnessing of any required testing, including, without limitation, final acceptance tests.
- 2. The owner of any fire sprinkler system installed in accordance with this chapter and N.F.P.A. Standard [13 D] 13D shall conduct or cause to be conducted an annual test of the system. The firm that installed the system shall provide the owner with written instructions on the method of testing it. These instructions must include the location of the inspector's test valve, which must drain to the exterior of the building, the location of the water flow alarm mechanism and the location of the riser assembly. The [installation and testing of a fire sprinkler system pursuant to this subsection does not require the approval of the authority having jurisdiction and] annual test of the system is the responsibility of the owner of the system.
  - **Sec. 52.** NAC 477.560 is hereby amended to read as follows:

477.560 In all medical facilities, custodial care facilities and restrained care facilities, a device for detection of the products of combustion, other than by detecting heat, must be installed pursuant to section 12.3.4.5 of pamphlet 101 in the 1997 edition of the *National Fire Codes*, [and Standards,] published by the [National Fire Protection Association.] N.F.P.A.

**Sec. 53.** NAC 477.562 is hereby amended to read as follows:

477.562 The following requirements apply to child care facilities that require inspection and a certificate of occupancy to be issued by the [State Fire Marshal or local] authority having jurisdiction:

- 1. Plans for the construction of new facilities or the remodeling of existing facilities must be submitted to the [State Fire Marshal or to the local authority, or both when so required, if the facility is in Clark County, Washoe County or Carson City,] authority having jurisdiction for approval before the construction or remodeling begins.
- 2. Each facility must be inspected for compliance with applicable fire and safety regulations by the authority having jurisdiction before a license to operate the facility is issued. The facility must be inspected annually thereafter and have a current certificate of occupancy issued by the [State Fire Marshal or local authority, as appropriate.] authority having jurisdiction.
- 3. Smoke detectors approved by the State Fire Marshal must be installed pursuant to the table provided in NAC 477.563 according to the manufacturer's instructions. In newly constructed buildings, smoke detectors must receive their primary power from the building's wiring, with provision made for the detection of smoke during a power failure. If a smoke detector powered by a battery is currently installed and it fails, the smoke detector must be replaced by a smoke detector which receives its primary power from the wiring of the building and has a battery as a backup source of power.

- 4. The number of occupants permitted in a facility must be calculated pursuant to N.F.P.A. Standard 101, or chapters 449 and 477 of NRS, as appropriate.
- 5. Smoking is prohibited in any area designated as an "E" occupancy area unless the area has specifically been designated as a smoking area by the authority having jurisdiction. Where smoking is allowed, ashtrays must be provided.
- 6. All stairs must be free of obstacles and stored combustible materials. Handrails with turnins must be provided if there are two or more steps in any stairway.
- 7. Bathroom and closet doors must open from the inside without the need for a key or any special knowledge or effort and must be able to be immediately opened from the outside with the use of an appropriate device hung or placed above or near the door.
- 8. Basements in R-3 occupancies used for child care must have at least two unobstructed exits which lead directly to the outside, one of which must open directly at ground level.
- 9. Portable fire extinguishers must have a minimum rating of 2A-10BC and must be mounted pursuant to the requirements of N.F.P.A. Standard 10 or the authority having jurisdiction.
- 10. Heaters, fireplaces or other similar devices in rooms used for child care must be protected from contact with children by a sturdy, noncombustible partition, wire screen or protective metal guard. No portable heating devices are allowed.
- 11. All heating equipment and hot water heaters must be enclosed in a manner which prevents children from coming into contact with them.
  - 12. Child-resistant covers must be installed on all electrical outlets accessible to children.
- 13. Wastebaskets, garbage cans and other containers used to store garbage, waste, rubbish and other combustible materials must be constructed of noncombustible materials and have a

tight-fitting lid of the same material. Wastebaskets or other trash containers placed in the designated smoking areas must be constructed of noncombustible materials with a tight-fitting lid of the same material.

- 14. No more than 10 gallons of flammable liquid may be stored in any area designated as an "E" area. This flammable liquid must be stored in an approved metal container and out of the reach of children.
- 15. Rooms in which equipment is used or where flammable liquids, combustible dust or similar hazardous materials are handled must be separated from other portions of the building by a material which has a rating of at least 1-hour fire [resistant occupancy separation] barrier and must conform to the requirements of the [Uniform Fire] International Building Code.
  - **Sec. 54.** NAC 477.563 is hereby amended to read as follows:
- 477.563 The buildings used for child care facilities must be classified pursuant to the model codes approved by the State Fire Marshal. [and the following chart:

## MINIMUM REQUIREMENTS FOR CHILD CARE FACILITIES

	Family Care Group Care		Institutional Child Care	
	R-3	E-3	1-3	<del>1-2]</del>
Number of Clients Number of Clients	0-6 (See Note #3)	7 or More	6 or More	<del>6 or more</del>
Under 2 Years Recommended Staff	See Child Care Regs.	Same	Same	Same
to Client Ratio	See Child Care Regs.	Same	Same	Same
Building Construction	Meet UBC Requirements	Meet UBC Requirements	Min. One-Hour Fire Resistive Construction	Min. One-Hour Fire Resistive Construction
Occupant Load				
Factor	One person/35 ft 2	One person/35 ft 2 (See Note #3)	One person/80 ft 2	One person/80 ft 2
Area of Refuge	Not Required	Not Required	Required	Required
Number of Exits	<del>One</del>	<del>Two</del>	<del>Two</del>	<del>Two</del>
Travel Distance to				
Exit (feet)	150 (from any point	75 (from any point	200 (from any point	200 (from any point
	<del>in a room)</del>	<del>in a room)</del>	in a room)	<del>in a room)</del>
Exit Discharge	To Outside	One Directly	One Directly	One Directly
<u> </u>		to Outside	to Outside	to Outside
Illumination of Means				
of Egress (Exit Sign)	Not Required	50 or More	50 or More	50 or More
Emergency Lighting	Not Required	Required	Required	Required
Door Latches (Closet)	Child Öpen	Child Open	Child Open	Child Open
	From Inside	From Inside	From Inside	From Inside
Door Locks (Bathroom)	Child Open	Child Open	Child Open	Child Open
	From Inside	From Inside	From Inside	From Inside
Protection from				
Vertical Openings	Per UBC	Per UBC	Per UBC	Per UBC
Hazard Protection -				

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Flammable/ Combustible Liquids	One-Hour Occupancy Sep. (See Note #3)	One-Hour Occupancy Sep. (See Note #3)	One-Hour Occupancy Sep. (See Note #3)	One-Hour Occupancy Sep. (See Note #3)
Class of Interior			1. (	
Finish	Class III	<del>Class I -</del> <del>Vert. Exitway</del> <del>Class II -</del>	<del>Class I -</del> <del>Vert. Exitway</del> <del>Class II -</del>	<del>Class I -</del> <del>Vert. Exitway</del> <del>Class II -</del>
		Other Exitway Class III - Rooms	Other Exitway and Rooms	Other Exitway
Alarm System	Not Required	Required - 50 or More	Required	Required
Smoke Detectors	Single Station Sleeping/Napping Area (See Note #3)	Single Station - Over Panel Sleeping/ Napping Area (See Note #3)	Panel Sleeping/ Napping Area	Panel Sleeping/ Napping Area
Extinguishers	One per 3000 ft 2 Min. 2A 10:B-C	One per 3000 ft 2 Min. 2A 10:B-C	One per 1500 ft 2 Min. 2A 20-B:C	One per 1500 ft 2 Min. 2A 20-B:C
Corridor Protection	Not Required	30 or More-One-Hour	10 or More-One-Hour	10 or More-One-Hour
Electric Equipment	Refer to NFPA 70	Refer to NFPA 70	Refer to NFPA 70	Refer to NFPA 70
HVAC	Not Required	2000 or More CFM - Auto Shut Down	2000 or More CFM - Auto Shut Down	200 or More CFM - Auto Shut Down
Sprinklers	(See Notes #1 and #3)	Required (See Notes #1, #2 and #3)	Required	Required
Commercial Cooking		1100051, 112 tiliti 113)		
Equipment	H/D & FE System *	H/D & FE System *	H/D & FE System *	H/D & FE System *

- #1 Care for more than six children between midnight and 6:00 a.m. must be equipped with an automatic sprinkler system.
- #2 Second story to have two exits directly to the exterior in facilities that have sprinkler systems
- #3 More restrictive than or differing from UBC.
- \* Hood/Duct and Fire Extinguishing System.]

**Sec. 55.** NAC 477.566 is hereby amended to read as follows:

477.566 Devices for the detection of the products of combustion, other than heat, must be installed in every building which is used for the care of children. The devices must be installed in accordance with [sections 310.9 to 310.9.1.5, inclusive,] section 907.2.10 of the [Uniform]

International Building Code, and N.F.P.A. Standard [10] 72 if so required by the [local] authority having jurisdiction.

**Sec. 56.** NAC 477.568 is hereby amended to read as follows:

477.568 Child care facilities which are used for child care between the hours of 12:00 a.m. and 6:00 a.m. and care for seven or more children must have a sprinkler system installed which conforms to N.F.P.A. Standard 13, *13D* or 13R, as applicable, and the requirements of the [Uniform] International Building Code. The sprinkler system must be tied into the fire alarm system so that activation of any portion of the sprinkler system will activate the alarm system.

**Sec. 57.** NAC 477.576 is hereby amended to read as follows:

477.576 "Commercial display" of fireworks means an [entertainment] event or function where the public or a private group is admitted or permitted [,] to view the display or discharge of [dangerous] fireworks.

**Sec. 58.** NAC 477.606 is hereby amended to read as follows:

477.606 No person may engage in the business of producing commercial displays of fireworks without possessing a license issued by the State Fire Marshal. Conducting commercial displays of fireworks includes the display or discharge of [dangerous] fireworks at an entertainment before the public or a private group which has been admitted or permitted to view the display.

**Sec. 59.** NAC 477.616 is hereby amended to read as follows:

477.616 1. Licenses will be issued to companies in one of the following categories:

- (a) A general license permits the licensee to produce commercial displays of fireworks in one of the following categories:
  - (1) Indoor stage;
  - (2) Outdoor aerial;
  - (3) Special effects; or
  - (4) Show specific.
- → A general license is valid until June 30 following its date of issue.
- (b) A limited event license permits a nonprofit organization to produce a specific display of fireworks or series of displays at the time or times and location specified by the license subject to local requirements for a permit. A limited license is valid for the single event or series of events which it specifies.

- (c) A nonprofit organization must obtain a limited event license (exempt) for a Fourth of July event. The license will be issued without payment of a fee. The nonprofit organization must:
  - (1) Show evidence of valid insurance which covers the event or series of events;
- (2) Require that all persons who participate in producing the display or series of displays complete the prescribed training program provided by the State Fire Marshal; and
- (3) Obtain a certificate of registration for the person who will be responsible for the show and the safety of the participants and spectators.
- 2. A license issued in one of these categories does not permit the licensee to engage in activities permitted by another, more general, category.
  - 3. In producing a commercial display of fireworks a licensee must:
  - (a) Obtain any permit or permits required by local authority; and
- (b) Employ only pyrotechnic operators who are registered with the State Fire Marshal to conduct the display or discharge of the [dangerous] fireworks.
  - **Sec. 60.** NAC 477.624 is hereby amended to read as follows:
- 477.624 Before a person may act as a pyrotechnic operator, the person must obtain a certificate of registration as a pyrotechnic operator from the State Fire Marshal. To receive a certificate of registration as a pyrotechnic operator, an applicant must:
  - 1. Be a natural person who is at least 21 years of age;
- 2. Make a written application for such a certificate of registration to the State Fire Marshal on a form provided by the State Fire Marshal and pay a fee of \$55;
- 3. Hold a certificate of registration as an assistant pyrotechnic operator issued by the State Fire Marshal, or be licensed or certified in good standing as a pyrotechnic operator by another state, as approved by the State Fire Marshal;

- 4. If the applicant holds a certificate of registration as an assistant pyrotechnic operator, pass, with a score of at least 80 percent, a final examination that covers the design, construction, storage and use of [dangerous] fireworks; and
  - 5. Submit to the State Fire Marshal:
- (a) A log which demonstrates that the applicant has worked on at least 15 different shows during the 3 years immediately preceding the date on which he applies for the certificate of registration as a pyrotechnic operator; and
- (b) Letters of endorsement from three persons who hold certificates of registration as a pyrotechnic operator issued by the State Fire Marshal, or are licensed or certified as a pyrotechnic operator in good standing by another state.
  - **Sec. 61.** NAC 477.626 is hereby amended to read as follows:
- 477.626 No person may purchase pyrotechnics for the purposes of commercial display or prepare, handle, detonate, display or discharge [dangerous] fireworks or special effects without having first obtained a valid certificate of registration as a pyrotechnic operator for indoor stage, outdoor aerial, special effects or show specific. An assistant to a certified pyrotechnic operator must be under the supervision of the certified pyrotechnic operator.
  - **Sec. 62.** NAC 477.636 is hereby amended to read as follows:
- 477.636 1. Certificates of registration for pyrotechnic operators will be issued to successful applicants. Such a certificate of registration permits the registrant to handle, supervise and discharge [dangerous] fireworks and special effects at events held for entertainment whether or not before a live audience. The certificate of registration will be issued for outdoor aerial display, indoor stage, special effects or show specific. Any person igniting [dangerous] fireworks must be at least 21 years of age.

- 2. A certificate of registration for indoor stage or special effects permits the registrant to handle, supervise and discharge special effects for the purpose of recording the result on film or videotape or for producing a sound effect where no audience is present other than incidental spectators. A registrant in this category may handle, supervise or discharge any class of fireworks if the production of a film or videotape requires their use.
- 3. A certificate of registration issued pursuant to this section is valid until June 30 following its date of issue.
  - **Sec. 63.** NAC 477.641 is hereby amended to read as follows:
- 477.641 1. A licensee or registrant who wishes to renew his license or certificate must do so between April 1 and June 1, inclusive.
  - 2. Fees for the renewal of a certificate of registration are as follows:

Assistant pyrotechnic operator	\$27.50
Indoor stage	55.00
Outdoor aerial	55.00
Special effects	55.00
Show specific	55.00
Magician	27.50
Fire Performer	27.50
Duplicate certificate of registration or change of address	11.00

3. To renew a certificate of registration, the holder of the certificate of registration must, for each classification sought to be renewed, have logged the following number of events or performances during the previous 12 months:

Indoor stage	At least five performances
Special effects	At least three performances
Show specific	At least 10 performances Formatted: Indent: Left: 0.5", First line: 0", Tabs: 6.5", Right, Leader:

**Sec. 64.** NAC 477.646 is hereby amended to read as follows:

- 477.646 1. The State Fire Marshal may suspend, revoke or refuse to renew a license for commercial displays of fireworks or a certificate of a pyrotechnic operator if the licensee or registrant has caused injuries or permitted a fire hazard at a location at which he:
  - (a) Stores, handles or prepares fireworks, special effects or pyrotechnic devices; or
  - (b) Produces or conducts a commercial display of fireworks or special effects.
- 2. If an incident results from a fire hazard caused or permitted by a licensee or registrant, he shall immediately submit to the State Fire Marshal a report explaining the incident. The failure to make this report is grounds for immediate revocation of the license or certificate.
- 3. A person whose license or certificate has been revoked must dispose of the fireworks, special effects or pyrotechnic devices in his possession within 10 days after receiving written notice to do so by the State Fire Marshal. In complying with this subsection, the licensee or registrant shall transfer the fireworks, special effects or pyrotechnic devices only to a person who is licensed to produce commercial displays of fireworks or who is otherwise permitted to lawfully purchase and possess [dangerous] fireworks or pyrotechnic devices. Upon the transfer of the fireworks, special effects or pyrotechnic devices, the licensee or registrant shall submit a written report to the State Fire Marshal which includes the name, license number, address and telephone number of the person to whom the fireworks, special effects or pyrotechnic devices were transferred.
  - **Sec. 65.** NAC 477.661 is hereby amended to read as follows:

477.661 1. No person may:

(a) Use or discharge:

(1) A special effect or [dangerous] firework unless he is a pyrotechnic operator certified

by the State Fire Marshal.

(2) A firework of any class or type within 100 feet of stored gasoline or other flammable

liquid which is listed as Class I in N.F.P.A. Standard 30 or any other combustible material.

(b) Display or discharge a [dangerous] firework at a commercial display of fireworks in such

a manner as to endanger any person.

(c) Discharge fireworks of any class in a county where the discharge of the fireworks is

prohibited.

2. If the [State Fire Marshal or] authority having jurisdiction believes that fireworks which

create an imminent danger to life or property will be discharged in violation of this subsection,

the [State Fire Marshal or] authority having jurisdiction may seize the fireworks without notice.

3. The [State Fire Marshal or local] authority *having jurisdiction* will take and retain

possession of fireworks seized in accordance with this section during any judicial or

administrative proceedings involving the fireworks and will, upon conclusion of the proceedings,

destroy them or return them to the person from whom they were seized as directed in such

proceedings.

4. Any person whose fireworks are adjudged in any judicial or administrative proceeding to

be hazardous will be charged with the expenses incurred in the seizure, transportation, storage

and disposal of those fireworks. This charge constitutes a debt and is collectible by any agency

of the State or any of its political subdivisions incurring any such expense in the same manner as

if it is an obligation under an express or implied contract.

- **Sec. 66.** NAC 477.663 is hereby amended to read as follows:
- 477.663 1. No person may maintain or permit the existence of a fire hazard at any location under his control where fireworks or pyrotechnic compositions are displayed, discharged or stored.
- 2. A permit issued by the State Fire Marshal is required for the storage of fireworks classified as [Class B, Division 1.3, or Class C, Division 1.4,] Division 1.3G, Division 1.4G or Division 1.14S by 18 U.S.C. §§ 841 et seq. and N.F.P.A. [...] Standard 1124, except for:
- (a) Fireworks classified as consumer [fireworks, which are not dangerous fireworks and which] fireworks that are stored at [an] a retail outlet for [sales at retail] sale as approved by the State Fire Marshal or pursuant to a permit issued by the State Fire Marshal after an inspection of the site is made;
- (b) Fireworks for public display or special effects stored at the site of firing for immediate use; and
  - (c) Storage of material for special effects which weighs less than 10 pounds.
  - 3. Fees for permits for storage are as follows:

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4. Fireworks must be stored in compliance with the requirements of the [Uniform]

<u>International</u> Building Code and Standard 1124 of the National Fire Codes [and Standards] of the N.F.P.A. Material for special effects which weighs less than 750 pounds may be stored in a single-story structure which is fully equipped with fire sprinklers and which otherwise conforms to the requirements for a Type [V, 1-hour] V-A rated building as described in the [Uniform]

<u>International</u> Building Code. Material for special effects which weighs 750 pounds or more must be stored in a magazine approved for that purpose.

- 5. The State Fire Marshal will, as he determines necessary, inspect each site used for storage of fireworks to determine if the fireworks are stored properly according to their class or type.
  - **Sec. 67.** NAC 477.666 is hereby amended to read as follows:
- 477.666 1. Fireworks stored in violation of NAC 477.601 to 477.666, inclusive, which have become chemically unstable or which are in the possession of a person who is not a licensee or registrant or whose license or certificate has been suspended are hereby declared to be fire hazards and may be seized and disposed of by the [State Fire Marshal or a local authority.] authority having jurisdiction. Except as otherwise provided in this subsection, the seizure may take place only after reasonable advance written notice is given to the holder of the permit who stores the fireworks unless there exists an imminent threat of danger to life or property. If such a threat exists, those fireworks which create an imminent threat of danger to life or property may be seized without notice by the [State Fire Marshal or] authority having jurisdiction.
- 2. The officer seizing the fireworks must promptly report to the State Fire Marshal concerning:
  - (a) The quantity and type of the fireworks seized;
  - (b) The location where the seizure occurred;
  - (c) The circumstances prompting the seizure; and
- (d) The condition of the containers and fireworks seized. Fireworks that are found to be unstable or incompatible must be destroyed.

- 3. The [State Fire Marshal or local] authority *having jurisdiction* will take and retain possession of the seized fireworks during any judicial or administrative proceedings involving the fireworks and will, upon conclusion of the proceedings, destroy them or return them to the person from whom they were seized as directed in such proceedings.
- 4. Any person whose fireworks are adjudged in any judicial or administrative proceeding to be hazardous will be charged with the expenses incurred in the seizure, transportation, storage and disposal of those fireworks. This charge constitutes a debt and is collectible by any agency of the State or any of its political subdivisions incurring any such expense in the same manner as if it is an obligation under an express or implied contract.
- 5. Fireworks transported in violation of any applicable federal or state law or regulation will be seized and impounded. The explosive load of any impounded firework must not be separated unless necessary to remove unstable or incompatible materials. Materials that are found to be unstable or incompatible will be destroyed at the expense of the owner or possessor, or both.
  - **Sec. 68.** NAC 477.680 is hereby amended to read as follows:
- 477.680 No person may sell or offer for sale any plastic or other nonmetallic portable container for use in storage or transportation of Class I or Class II flammable or combustible liquids. [unless the container has been approved by the State Fire Marshal.]
  - **Sec. 69.** NAC 477.710 is hereby amended to read as follows:
- 477.710 1. Except as provided in subsection 3, no person may use explosives in blasting operations for commercial construction unless he has a certificate of registration for blasting issued by the State Fire Marshal or is under the direct supervision of a person holding such a certificate. An applicant for a certificate of registration for blasting must:
  - (a) [Be at least 21 years of age;

- (b) Be in adequate physical and mental condition to perform blasting operations;
- (c) Be able to understand and give oral orders in English;
- (d) Not be addicted to alcohol, controlled substances or dangerous drugs;
- (e) Not have been convicted of a violation of chapter 453, 454, 585 or 639 of NRS, relating to the possession or sale of narcotics or controlled substances, or certified for treatment of abuse of alcohol or drugs as provided in NRS 458.290 to 458.350, inclusive;
- (f) Be qualified by training, knowledge and experience in transporting, storing, handling and using explosives;
- (g) Have a knowledge of federal, state and local laws and regulations pertaining to the handling of explosive materials;
- (h) Meet the criteria outlined in section 3301.4 of the <u>International Fire Code</u>;
  - (b) Pass a background check;
- (c) Pass a written, oral or other type of examination, as determined by the State Fire Marshal; and
  - (d) Pay a fee of \$55 at the time he submits his application.
- 2. The certificate of registration for blasting must be in the possession of the registrant while he is performing blasting operations. A registrant must pay a fee of \$11 for a duplicate of a certificate that has been lost or destroyed.
- 3. This section does not apply to the use of pyrotechnics governed by other provisions of this chapter or the use of explosives:
  - (a) By a person engaged in agriculture or ranching for occasional use on his property;
- (b) By an employee of the State, a local government or the Federal Government who uses explosives for construction in the proper performance of his duties; or

- (c) In gasoline, in fertilizer and in tools or other devices which are actuated by a propellant.
- 4. A certificate of registration for blasting must be renewed every [5] 2 years. An applicant for renewal must pass a test prescribed by the State Fire Marshal and pay a fee of \$55 before his certificate of registration for blasting may be renewed.
  - **Sec. 70.** NAC 477.770 is hereby amended to read as follows:
- 477.770 1. A license must be obtained from the State Fire Marshal to service and clean Type 1 exhaust system grease ducts. A Type 1 exhaust system grease duct has the meaning ascribed to it in the *National Fire Codes*. [and Standards.]
- 2. To obtain a license to service and clean a Type 1 exhaust system grease duct an applicant must:
  - (a) Pass an examination administered by the State Fire Marshal; and
- (b) Establish that he has read and understands N.F.P.A. Standard 96, section [8-3] 11.4 and is properly equipped to service and clean Type 1 exhaust system grease ducts.
- 3. A licensee who has obtained a license from the State Fire Marshal to service and clean Type 1 exhaust system grease ducts must also be licensed to do business in the city or county in which it is providing this service.
- 4. Employees of the licensee who are not licensed may be allowed to assist in the servicing and cleaning of Type 1 exhaust systems if a person certified by the State Fire Marshal is on the premises at all times and the certificate of inspection and maintenance is filled out by that certified person who will accept responsibility for the work.
  - **Sec. 71.** NAC 477.780 is hereby amended to read as follows:

- 477.780 1. A copy of the cleaning contract and cleaning reports for a Type 1 exhaust system must be maintained at the site where the exhaust system is located and made available to the authority having jurisdiction upon request.
- 2. Within 30 days after inspecting or cleaning a Type 1 exhaust system, a copy of a report describing any deficiencies found in the system or a notice that service was refused or was extended beyond the limitations of the contract must be sent to the authority having jurisdiction. A report describing any deficiencies must specify all deficiencies that were not corrected during the servicing of the system, including, but not limited to:
  - (a) Excessive grease;
  - (b) Inaccessible areas;
  - (c) Access panels which do not comply [to] with code specifications;
  - (d) Fans that are not commercial or cleanable; and
  - (e) Missing filters.
- → The report must be signed by a person representing the owner of the system.
- 3. When grease or other residues are present within the hood, ducts or devices for the removal of grease, the system must be cleaned in accordance with N.F.P.A. [section 96-8-3.] Standard 96, section 11.4.
  - **Sec. 72.** NAC 477.810 is hereby amended to read as follows:
- 477.810 1. Fire standpipe systems must be inspected annually by a person certified by the State Fire Marshal for fire standpipe systems who works for a firm licensed by the State Fire Marshal to service fire standpipe systems. The annual inspection must conform to the requirements of the "Fire Protection Systems Inspection, Test and Maintenance Manual," as

published by the [National Fire Protection Association, and the standards of the *Uniform Fire Code*.] N.F.P.A.

- 2. A copy of the annual inspection report must be maintained on-site and sent to the owner. A report describing any deficiencies found during the annual inspection must be sent to the authority having jurisdiction *if the owner fails to correct the deficiency* within 10 days after the inspection.
- 3. Before hydrostatic tests may be conducted on a fire standpipe system, the installer of the fire standpipe system must notify the authority having jurisdiction in such a manner as to provide the authority *having jurisdiction* with sufficient time to schedule an appointment so that the authority *having jurisdiction* can be present when the hydrostatic tests are conducted on the fire standpipe system. Tests must be certified by the licensee as meeting code requirements and a copy of that certification must be maintained [on side.] *on-site*. A copy of a report describing any deficiencies in the systems found during the testing must be sent to the authority having jurisdiction.
- 4. The installer of a fire standpipe system shall place a metal tag on the control valve for the system which states the name of the installing company and the date of the installation.
- 5. Any work done on the system must be done under the supervision of a person who has a certificate of registration for that work. At the conclusion of the service, test, inspection or installation, the person holding a certificate of registration shall sign and place an approved tag on the system control riser. The tag must be punched in an approved manner to indicate the type of service performed on the system and the date it was performed.
  - **Sec. 73.** NAC 477.830 is hereby amended to read as follows:

- 477.830 1. Before installing or remodeling a fire standpipe system, the owner of the system shall submit to the authority having jurisdiction:
  - (a) Design specifications for the system;
  - (b) A list of materials to be used in the system;
  - (c) Scale drawings of the remodeling or installation which:
    - (1) Can be easily reproduced; and
- (2) Are of sufficient detail to enable the authority *having jurisdiction* to evaluate the effectiveness of the system;
  - (d) A schedule of tests required by the appropriate code; and
  - (e) Calculations for the flow of water for the proposed system.
- 2. When substantial change has been made in the plans approved by the [State Fire Marshal or the] authority having jurisdiction for the construction or remodeling of the system, a corrected plan depicting the system as it was built must be submitted, with the appropriate fees, to the [State Fire Marshal or authority, as appropriate,] authority having jurisdiction for approval within 10 days after the completion of the system.
- 3. The results of hydrostatic tests of the system must be certified to the authority *having jurisdiction* and the owner in writing.
  - **Sec. 74.** NAC 477.840 is hereby amended to read as follows:
- 477.840 1. Following the installation of a fire standpipe system, the licensee shall submit a letter to the authority having jurisdiction certifying that the system has been installed in accordance with the plans approved by the authority *having jurisdiction* and all applicable state and local codes.

- 2. Within 30 days after completing the installation or remodeling of a fire standpipe system, the licensee shall attach a metal placard which must:
  - (a) Identify all requirements for the hydraulic design.
- (b) The number, size and location of system outlets and the calculated discharge of the highest outlet.
  - **Sec. 75.** NAC 477.850 is hereby amended to read as follows:
- 477.850 1. A tag for recording the installation, maintenance and inspection of fire standpipe systems must be at least 4 inches long, 2 inches wide and conform to the requirements of NAC 477.470.
- 2. The tag must serve as a seal for the riser control valve and must be attached in such a manner that the valve cannot be closed without removing the tag.
- 3. The holder of a certificate of registration who is supervising the work on a system must be present at all times that work is being done on the system and must sign, date and punch the tag and attach it to the system immediately at the conclusion of testing or completion of the installation. If the system remains deficient and the licensee does not have the authority to correct the deficiency, the word "deficient" must be written across the bottom of the tag. The licensee shall notify the owner and the authority *having jurisdiction* of the deficiency in writing within 5 days after completing the work.
  - **Sec. 76.** NAC 477.910 is hereby amended to read as follows:
- 477.910 1. Every new building constructed by or for the State of Nevada must meet or exceed the minimum requirements of this chapter and the codes adopted by the State Fire Marshal.

- 2. Every new building owned [or occupied] by the State that is intended for occupancy [which does not meet the requirements of paragraph (a), (b) or (c) of subsection 1 of NAC 477.915] must be equipped with an automatic fire suppression system. Rooms in such a new building which are to be used for sleeping purposes must be equipped with smoke detectors. The smoke detectors must receive their primary power from the building's wiring, with provision made for the detection of smoke during a power failure.
- 3. A person who removes or disables any smoke detector required by this section is subject to prosecution for a misdemeanor in accordance with NRS 477.250.
  - **Sec. 77.** NAC 477.915 is hereby amended to read as follows:
  - 477.915 1. Every existing building owned [or occupied] by the State of Nevada must:
  - (a) Comply with the provisions of NRS 477.100 to 477.170, inclusive;
  - (b) Meet the requirements of the building code in effect when the building was constructed;
  - (c) If the building:
    - (1) Is designated as a B occupancy;
- (2) [Has] Regardless of occupancy designation, has a floor area which exceeds 12,000 square feet on any floor or 24,000 square feet on all floors, including any mezzanines; or
  - (3) Is an R-1 *or R-2* occupancy,
- → be scheduled for installation of an automatic fire suppression system during the next remodeling of or addition to the building; [after July 1, 1995;]
- (d) Meet the requirements for fire flows contained in this chapter and the [Uniform]

  International Fire Code, [1997] 2003 edition; and
- (e) Be equipped with noncombustible containers for the disposal of smoking materials in designated smoking areas.

- 2. Every fire in a building or area of a building owned [or occupied] by the State must be reported to the local fire department immediately and to the State Fire Marshal within 24 hours. The report must be filed by the state agency affected with the Nevada State Fire Marshal, 107 Jacobsen Way, Carson City, Nevada 89711.
- 3. Upon the failure of a smoke detector which is powered by a battery and installed in a building owned or occupied by the State, [before February 17, 1994,] the smoke detector must be replaced by a smoke detector which is connected to the wiring of the building and has a battery as a backup source of power.
- 4. A person who knowingly violates the provisions of this section is subject to prosecution for a misdemeanor in accordance with NRS 477.250.
  - **Sec. 78.** NAC 477.920 is hereby amended to read as follows:
- 477.920 1. Unless otherwise required by state [code, local code] statute or regulation or local ordinance, a new commercial building that has more than 5,000 square feet of floor space must be equipped with an automatic fire suppression system if:
- (a) The community or area where the building is located is not served by a water system or utility and cannot produce the required fire flow;
- (b) The community or area is not served by an organized fire department that is capable of responding to the report of an alarm at the building within 10 minutes; or
  - (c) The building is not served by an all-weather access road.
- An increase in floor space area that is allowed by section [902.2.2.2] 503 of the [1997]
   2003 edition of the [Uniform] International Building Code must be approved by the authority having jurisdiction when a system is installed in compliance with this section.
  - 3. As used in this section:

- (a) "Organized fire department" means a fire department that is capable of producing a fire flow of not less than 500 gallons per minute for 30 minutes using pumper tanker operations.
- (b) "All-weather access road" has the meaning ascribed to it in section [902] 503.2.3 of the [Uniform] International Fire Code.

**Sec. 79.** NAC 477.015, 477.350, 477.355, 477.360, 477.432, 477.443, 477.581, 477.586, 477.685, 477.760 and 477.800 are hereby repealed.

#### TEXT OF REPEALED SECTIONS

**477.015** "Administrator" defined. "Administrator" means the executive officer of a political subdivision.

477.350 Approval of equipment; compliance with standards; smoke detectors. (NRS 477.030)

1. No fire system, device or component of any fire system may be sold, leased or installed in this state unless it is approved, labeled or listed by Underwriters Laboratories Inc., Underwriters' Laboratories of Canada, Factory Mutual Research Global Corporation or any other testing laboratory approved by the State Fire Marshal as being qualified to test such systems or devices or if an approved listing from a testing laboratory is not available for a system, device or a

component, by the State Fire Marshal on the basis of a practical test or examination and payment of the required fee by the person who is requesting approval of the system, device or component by the State Fire Marshal.

2. In addition to other provisions of NAC 477.340 to 477.370, inclusive, fire systems must comply with standards published by the N.F.P.A. and the International Conference of Building Officials.

3. Where smoke detectors are required by any statute, regulation or ordinance, evidence of approval must be furnished to the purchaser at the time of purchase or delivery. The evidence must be a listing or label from one of the approved laboratories.

4. All new structures built for residential purposes which are not otherwise required by any statute, regulation or ordinance to be equipped with smoke detectors or other fire systems must be equipped with smoke detectors that have been approved by the authority having jurisdiction.

### 477.355 Combination paging alarm systems: Equipment. (NRS 477.030)

1. Cone-type and horn-type loudspeakers and line matching transformers employed in combination paging alarm systems must meet or exceed the following requirements:

(a) The horn or loudspeaker must be rated at a minimum wattage to provide the coverage specified in subsection 1 of NAC 477.360.

(b) The matching transformer must be rated at a minimum of twice the wattage required for the load for the speaker as specified in subsection 1 of NAC 477.360.

(c) The rating for a loudspeaker must be calculated for the speaker as actually installed and used, with the backbox, grille and matching transformer attached.

(d) A speaker must be housed in a metal backbox specifically designed for loudspeakers or other approved electrical box.

- (e) Where applicable, the speaker must be located near the initiating device.
- (f) Where enclosures for speakers are permitted to be mounted on the surface for two-way or one-way projection, they must provide protection to the speaker. Tamperproof mounting is required.
- (g) Any area where environmental conditions are detrimental to cone-type speakers must be provided with horn-type loudspeakers mounted flush on the surface which meet the minimum requirements for a cone-type speaker.
  - (h) Each sleeping room on protected premises must be equipped with a loudspeaker.
- (i) Any device to sound an alarm must be listed by Underwriters Laboratories Inc. for use as a fire alarm.
- (j) The engineer who designs the system shall ensure that the equipment for the alarm meets the minimum standards set forth in this section and NAC 477.350 and 477.360.
- (k) The architect or designer shall ensure that the number and placement of loudspeakers meets the requirements of subsection 1 of NAC 477.360.
- 2. The devices to generate and amplify signals and the equipment to supervise their operation in a combination paging alarm system must meet current standards of the National Fire Protection Association and the following requirements:
- (a) Amplifiers, tone generators and associated equipment must be installed to provide a completely independent operating system. Each system must include a "fail-safe" panel which will monitor the sound system against open and short circuits, grounds, mechanical damage and loss of power in all components while equipment is in use or on standby. Power amplifiers and signal generators must be designed with solid-state circuitry and be tested and approved for use

as fire alarms by a recognized testing laboratory, an agency approved by the State Fire Marshal, or both.

- (b) The tone generator must emit a unique tone distinctive in sound and oscillation which will awaken a sleeping person.
- (c) When the supervisory panel has detected a fault, it must emit an audible and visual signal. These signals must be indicated at all annunciator panels and at central control. Trouble signals must include a switch for silencing the audio trouble signal. Visual trouble signals must not be cancelled until the fault is corrected.
- 3. Each combination paging alarm system must include a central station for control with the following features:
- (a) The station must have access to all systems of vocal communications, panels for manual and automatic fire alarms, status indicators for elevators and systems for handling air, controls for unlocking stairwell doors, a public telephone with a direct outside line, indicators for valves for sprinklers and the flow of water and standby controls.
- (b) All metalware of any cabinets or panels must have been manufactured by a company regularly engaged in the manufacture of enclosures for electrical or electronic apparatus.
- (c) Switching and annunciator panels must be segmented in groups of switches with each separate group clearly marked to identify the systems it controls.

#### 477.360 Combination paging alarm systems: Design.

1. Areas to be protected by a combination paging alarm system must be covered with sufficient loudspeakers to achieve at least 80 decibels of sound at any place within the protected property.

- 2. The central control panel for the combination paging alarm system and the annunciator panel must consist of switches, with one switch for the speakers in each zone. Zoning of the protected property must be approved by the State Fire Marshal or the local fire department. The system must be capable of selective vocal transmission to any zone by the use of one or more switches. One switch must be provided for calling all zones.
- 3. The central control panel must include a power supply and associated equipment and circuitry for a system of communication by telephone, and a handset must be located at the panel. This requirement may be satisfied by installing an internal telephone system, complete with handsets at indicated locations, or installing jacks at the indicated locations, and having portable handsets stored at the central station for control.
- 4. A paging microphone must be provided at each annunciator panel and the central control panel. Keying the button on the paging microphone must mute all fire alarm signals, and the fire alarm function must be automatically restored when the microphone is not in use. The microphone at the central control panel must be capable of overriding all audible fire signals.
- 5. The capability for giving a general alarm must be available by manual switches at the annunciator panels and the central control panel. The use of a signal from other manual stations to the management before a general alarm is sounded is permitted if the management has an emergency procedure which is approved by the State Fire Marshal or the local fire department. The system for those signals must be interconnected to an approved central station for receiving signals where such services are available.
- 6. An annunciator panel must be provided at the central station for control. Additional annunciator panels must be provided if required by the local authority.

- 7. Any other annunciator panel must be of the same design as the central control panel.

  Access to the fire department's control panel must be by a common lock and key which is acceptable to that department.
- 8. Keying a microphone at the central control panel or any other annunciator panel must automatically silence the monitor speakers at that location.
- 9. All components of the system must be continuously supervised and annunciated on all panels.
  - 10. When requested to do so by the fire department, the owner shall:
- (a) Perform tests on the premises to demonstrate the operation of the system and its compliance with the audio coverage specified in this section; or
  - (b) Provide an engineer's certification as to such performance and compliance.
- 11. An actual test of the system is required once each month. All equipment must be maintained in proper operating condition.
- 12. Where cross-ventilation is not possible because of the design of the building or the system for handling air, controls for the ejection of smoke must be provided at the central control panel and any other panel, including:
  - (a) An on-off control for the supply of air;
  - (b) An on-off control for the exhaust; and
  - (c) A control to shut down the override portion of the system for automatic detection.

# 477.432 Servicing and repairs: Required equipment, tools and materials. (NRS 477.030)

1. The following equipment must be located in a shop used to service fire extinguishers and fixed fire extinguishing systems:

	(a) Either:
	(1) A dry air compressor with a moisture monitor and pressurizing station;
	(2) A dry nitrogen supply and pressurizing station;
	(3) A carbon dioxide supply and fill station; or
	(4) A Halon supply and fill station,
<b>→</b>	depending upon the type of license issued to the licensee.
	(b) Transfer pumps, as appropriate.
	(c) Work benches.
	(d) Cylinder racks, as appropriate.
	(e) A chain hoist and trolley, as appropriate.
	(f) A dry chemical fill station with an approved exhaust and collection system.
	(g) A shop vacuum.
	(h) One hundred and 500-pound beam scales which must be calibrated annually.
	(i) Balance scales.
	(j) Low pressure hydrostatic test equipment, as appropriate.
	(k) A cylinder dryer.
	(l) Internal cylinder cleaning equipment.

(o) A chain or pipe vise.

(q) A device for purging cylinders.

(m) Test cages, as appropriate.

(n) A cylinder vise and bench.

(r) Gauges which must be calibrated annually.

(s) A system for keeping records which must be available for inspection.	
(t) Power drills and bench grinders.	
(u) Approved service tags and internal tags.	
2. The repair shop and the vehicle used to travel to locations where repairs are to be made	
must include the following inspection equipment:	
(a) A measuring tape.	
(b) A penlight.	
(c) Extension mirrors.	
(d) An internal inspection light.	
(e) Torque wrenches.	
(f) A thread-size gauge.	
(g) A scale which is able to measure weights up to 50 pounds and which is calibrated	
annually.	
(h) A 4-pound by 1-ounce cartridge scale.	
(i) A gauge which can measure air pressure to a minimum pressure of 150 pounds per square	
inch.	
3. The repair shop and the vehicle used to travel to locations where repairs are to be made	
must include the following tools:	
(a) Assorted recharge adapters.	
(b) Taps and dies.	
(c) Pipe and screw extractors.	

(d) Wire and nylon bristle brushes.

(e) Hammers and mallets.

(f) Drift pins, punches and reamers.
(g) Pliers, wrenches and screwdrivers.
(h) Knives, files and hacksaws.

(i) An approved collection system.

- 4. The repair shop and the vehicle used to travel to locations where repairs are to be made must include the following materials:
  - (a) Lubricants.
  - (b) Anti-seize compounds.
  - (c) Sealing compounds.
- (d) A quantity of extinguishing agent necessary for servicing or a minimum of 25 pounds of each agent, as appropriate.
- (e) Twenty-five pounds of a specialized agent, including, without limitation, D, K or other specialized agent.
  - (f) Fifteen dry chemical discharge nozzles of assorted sizes.
  - (g) Pressure gauges in the following sizes:
    - (1) Twelve 100 psi gauges.
    - (2) Two 100 psi general vertical gauges.
    - (3) Two 115 psi gauges.
    - (4) Six 150 psi gauges.
    - (5) Four 175 psi gauges.
    - (6) Eight 195 psi gauges.
    - (7) Six 240 psi gauges.
  - (h) Two hundred and fifty assorted "O" rings.

- (i) Twelve assorted valve springs.
- (j) Thirty assorted valve stems.
- (k) Six siphon tubes.
- (l) Thirty safety pull pins.
- (m) Four water pressure siphon tubes.
- (n) Six water pressure hoses.
- (o) Three CO2 rubber handles.
- (p) Four CO2 horns in 10-pound and 15-pound sizes each.
- (q) Six 5-pound horns.
- (r) Approved service tags and internal tags.
- (s) Approved seals.
- (t) Eight cartridges of ansul and general types each.
- (u) Brackets and wall hangers.
- 5. Compliance with the standards of the National Association of Fire Equipment Distributors is an acceptable alternative to the requirements of this section.

## 477.443 Exits: Compliance with codes; maximum legal occupancy; windows; ramp or stairs. (NRS 477.030)

- 1. Exits from a portable building must meet the requirements of the *Uniform Building Code* and *Uniform Fire Code*.
- 2. In determining the maximum legal occupancy of a classroom for the purpose of exiting, there must be allowed not less than 20 square feet of net floor space for each person. The maximum legal occupancy of all other occupancies must be in compliance with table 33-A of the *Uniform Building Code*.

- 3. A portable building which has no windows must have at least two exits on opposite walls.
- 4. A portable building which is being used as a classroom and has a maximum legal occupancy of 50 or more persons or more than 1,000 square feet in area must have at least two exits which must be as far from one another as practical.
- 5. A window which meets the requirements set forth in N.F.P.A. Standard 101, section 11-2.11.1, may be used in lieu of an exit door if the window is on a wall which is opposite an approved exit door.
- 6. A portable building used as a classroom or for any purpose relating to education must have ramps or stairs, or both ramps and stairs:
- (a) Which are in compliance with the requirements of the Americans with Disabilities Act of 1990, 42 U.S.C. §§ 12101 et seq., or the building code adopted by the State Fire Marshal, whichever is more stringent, regarding access to and egress from the building; and
  - (b) Which are of substantial construction.

**477.581** "Dangerous fireworks" defined. "Dangerous fireworks" means a device which:

- 1. Contains:
- (a) Arsenic sulfide, arsenates or arsenites.
- (b) Boron.
- (c) Chlorates, except in:
- (1) A colored mixture of smoke which includes an equal or greater amount of sodium bicarbonate.
  - (2) Caps.
- (3) A device which contains 4 grams or less of which 15 percent or less of that amount is a chlorate of potassium, sodium or barium.

- (d) Gallates or gallic acid.
- (e) Magnesium, except magnesium-aluminum alloys.
- (f) Mercury salts.
- (g) Phosphorus, except caps containing red phosphorus.
- (h) Picrates or picric acid.
- (i) Thiocynates.
- (j) Titanium, except in particles which are greater than 100 mesh in size.
- (k) Zirconium.
- 2. Explodes and contains more than 50 milligrams (0.772 grains) of explosive.
- 3. Fires in aerial display.
- 4. Employs a combustible or explosive material and which rises in the air or darts about the ground during discharge.
  - 5. Discharges balls of fire.
  - 6. Explodes through the means of friction.
  - 7. Explodes on impact.
- 8. Constitutes an assembly of materials or explosive substances designed by the manufacturer to be assembled by the person receiving the material or explosive substances and when assembled comes within the definition of a firework.
- 9. Is examined by the State Fire Marshal and determined to possess chemically hazardous properties similar to those prohibited chemicals listed in subsection 1 or to have decomposed or become chemically unstable.
- **477.586** "**Firework**" **defined.** "Firework" means a device containing chemical elements or chemical compounds capable of burning independently of the oxygen of the atmosphere and

producing audible, visual, mechanical or thermal effects which are useful as pyrotechnic devices or for entertainment.

477.685 Containers to be tested and listed. (NRS 477.030) Before being offered for sale in this state, each type of container must be tested and listed by a nationally recognized testing laboratory as meeting the standard for plastic containers of petroleum ANSI/ASTM D 3435-78 or sections 5202.11.4.5 and 7902.1.8.1.3 of the *Uniform Fire Code*, or both. A copy of the listing card must be filed with the State Fire Marshal.

**477.760 Standards of construction.** (**NRS 477.030**) Type 1 exhaust systems must be constructed to meet the following requirements:

- 1. Access doors to the duct must be located:
- (a) To allow service personnel unrestricted entrance to the access door and duct. The access doors must not be obstructed by electrical components, mechanical systems or other impediments to access.
- (b) On the sides of horizontal ducts, if possible, or on the top when not possible because of obstructions. Access doors may not be located on the bottom of horizontal ducts.
  - (c) At every change in direction of the duct.
- 2. For ducts less than 24 x 24 inches in size, access openings must be located at intervals not to exceed 12 feet as measured from the center of one opening to the center of the next opening.
- 3. For ducts 24 x 24 inches in size or larger, access openings must be located at intervals not to exceed 16 feet as measured from the center of one opening to the center of the next opening.
- 4. Openings for the access door must be as large as the duct allows but are not required to be larger than  $24 \times 24$  inches. The access openings must leave a 1 1/2-inch bottom lip and a 1-inch top and side lip.

- 5. Access doors must be equipped with:
- (a) Tight-fitting doors constructed of steel.
- (b) A method of latching sufficient to hold the door tightly closed.
- 6. Access doors must be:
- (a) Designed so that they can be opened without the use of a tool; and
- (b) Located to allow inspection by personnel without the use of any specialized equipment.
- 7. Access doors must be constructed so that there are no sharp edges which could cause cuts to service personnel.
- 8. In buildings consisting of Type I and II-FR construction, the duct and access doors must be enclosed by 2-hour fire-rated construction.
- 9. In buildings consisting of Type II-N, II-1-hour, III, IV and V construction, the duct and access doors must be enclosed by 1-hour fire-rated construction. Access doors in the fire-rated enclosure must be at least as large as the size of the duct it serves.

477.800 Approval of equipment; compliance with codes, standards and regulations. (NRS 477.030)

- 1. No fire standpipe system or component of such a system may be sold, leased or installed unless it has been approved, labeled or listed by a testing laboratory approved by the State Fire Marshal.
- 2. Fire standpipe systems must comply with the *Uniform Fire Code* and the *National Fire Codes and Standards*. Any portion of a fire standpipe system which is underground must meet the requirements of subsection 5 of NAC 477.465.