

# ORDINANCE 99-01

## **AN ORDINANCE ADOPTING FIRE CODES AND STANDARDS FOR TUALATIN VALLEY FIRE AND RESCUE A RURAL FIRE PROTECTION DISTRICT, PRESCRIBING REGULATIONS GOVERNING CONDITIONS HAZARDOUS TO LIFE AND PROPERTY FROM FIRE OR EXPLOSION, PROVIDING FOR THE ISSUANCE OF PERMITS FOR HAZARDOUS USES OR OPERATIONS, AND REPEALING ORDINANCE 96-01.**

WHEREAS, Tualatin Valley Fire & Rescue A Rural Fire Protection District, has developed uniform fire regulations for the jurisdictions served; and,

WHEREAS, Tualatin Valley Fire and Rescue A Rural Fire Protection District, hereinafter referred to as the District, desires to and finds it necessary to adopt the following regulations to provide minimum fire safety and that a plan for inspections and maintenance will upgrade existing structures, thereby reducing hazards of fire, thus does hereby adopt the following regulations; and now, therefore,

### **IT IS ORDAINED AS FOLLOWS:**

#### **TITLE AND FILING:**

This ordinance, including the codes hereby adopted, shall be filed in the record of the District and in the office of Washington, Multnomah, and Clackamas County Clerks and State Fire Marshal's office as prescribed by ORS 478.940. A copy shall be posted at each fire station within the District. From the date on which this ordinance shall take effect, provisions thereof shall be controlling within the territorial limits of the District and within each city or county within the District approving pursuant to ORS 478.924. The whole of this ordinance shall be known as the Fire Prevention Code and may be referred to as the Fire Code and shall be enforced by the Fire Marshal's Office created by Ordinance 91-02.

#### **SCOPE:**

This Fire Code provides minimum life and fire safety regulations to reduce the hazards of fire, explosion and other perils. The code also protects life and property to a reasonable degree by supplementing laws relating to fire safety and shall apply to existing buildings.

#### **SECTION I – ADOPTION OF UNIFORM CODES:**

The following codes are hereby adopted by the District for the purpose of prescribing regulations governing conditions hazardous to life and property from fire or explosion. Those certain codes and standards known as the:

- A. Uniform Fire Code, 1997 Edition, Volume 1, as published and copyrighted by International Fire Code Institute and International Conference of Building Officials, except as hereinafter amended by this Ordinance.

- B. Uniform Fire Code, 1997 Edition, Volume 2, as published and copyrighted by the International Fire Code Institute and International Conference of Building Officials, except as hereinafter amended by this Ordinance.

## SECTION II – DEFINITIONS:

Definitions set forth in the Uniform Fire Code and Uniform Fire Code Standards are hereby adopted save and except for the following:

- A. Whenever the terms “Administrator”, “Director”, or “Chief” are used, they shall be held to mean the Fire Chief or authorized representative.
- B. Whenever the term “Authorized Representative” is used, it shall be held to mean the person charged with enforcement of the Fire Prevention Code.
- C. Whenever the term “Board of Appeals” is used, it shall be held to mean the Board of Appeals that is provided by the Fire Prevention Code of the District.
- D. Whenever the term “Board of Directors” is used, it shall be held to mean the elected officials of Tualatin Valley Fire and Rescue A Rural Fire Protection District.
- E. Whenever the term “Uniform Building Code” or “Building Code” is used it shall be held to mean the current edition of the State of Oregon *Structural Specialty Code* as adopted by the State Building Codes Division.
- F. Whenever the term “Building Department” is used it shall be held to mean the building department of the city or county of which it is a part thereof.
- G. Whenever the term “Building Official” is used in the Uniform Building Code, Uniform Mechanical Code and ORS Chapter 455, it shall mean the Building Official of the city or county which is a part of this district.
- H. Whenever the term “Chief” or “Chief of the Fire Department” is used, it shall be held to mean the Fire Chief of the District.
- I. Whenever the term “Chief of Police” is used, it shall be held to mean whichever chief of Police or Sheriff has jurisdiction within the geographical area so affected.
- J. Whenever the term “Corporate Counsel” or “City Attorney” or “Attorney” is used, it shall be held to mean the Attorney for the District.
- K. Whenever the term “District” is used, it shall be held to mean Tualatin Valley Fire and Rescue A Rural Fire Protection District.
- L. Whenever the term “Fire Prevention Bureau” is used, it shall be held to mean the Fire Marshal’s Office.
- M. Whenever the term “jurisdiction”, “city”, “county”, “state”, or “municipality” is used, it shall be held to mean the district or the city or county of which this District is a part.

- N. Whenever the term “hazardous vehicle” is used, it shall be held to mean vehicles blocking or obstructing a public or private right-of-way or fire hydrants, or vehicles with leaking fuel tanks or other hazardous materials, or vehicles located in violation of the Fire Prevention Code.
- O. Whenever the term “Primary Tank” is used it shall be held to mean a listed atmospheric tank used to store liquid. See definition for PRIMARY CONTAINMENT.
- P. Whenever the term “Protected Aboveground Tank” is used, it shall be held to mean a listed tank system consisting of a primary tank provided with protection from physical damage, and fire-resistive protection from a high-intensity liquid pool fire exposure. The tank system may provide these protection elements as a unit or may be an assembly of components, or a combination thereof.
- Q. Whenever the term “Uniform Mechanical Code” or “Mechanical Code” is used it shall be held to mean the current edition of the State of Oregon *Mechanical Specialty Code*, as adopted by the State Building Codes Division.
- R. Whenever the term “room” is used, it shall be held to mean a space or area bounded by any obstructions to exit passage which at any time encloses more than 80 percent of the perimeter of the area. In computing the unobstructed perimeter, openings less than 3 feet in clear width and less than 6 feet 8 inches high shall not be considered.

**SECTION III – ESTABLISHMENT OF LIMITS FOR STORAGE OF FLAMMABLE OR COMBUSTIBLE LIQUIDS IN OUTSIDE ABOVE GROUND TANK:**

The limits referred to in Section 7902.2.2.1 and 7904.2.5.4.2 of the Uniform Fire Code relating to the storage of Class I and II flammable liquids or combustible liquids in outside aboveground tanks, are hereby established as the limits of the District.

EXCEPTION: The Chief, after consideration of built-in fire protection or fire extinguishing facilities or topographical conditions and the District’s firefighting capabilities may permit the installation of above ground storage tanks in approved locations.

**SECTION IV – ESTABLISHMENT OF LIMITS FOR STORAGE OF EXPLOSIVES AND BLASTING AGENTS:**

The limits referred to in Section 7701.7.2 of the Uniform Fire Code, relating to the storage of explosive materials, are hereby established as the limits of the District.

EXCEPTION: The Chief, after consideration of built-in fire protection or fire extinguishing facilities or topographical conditions, and the District’s firefighting capabilities, may permit the storage of explosives and blasting agents on farms, gravel pits, rock quarries, and other isolated areas.

**SECTION V – ESTABLISHMENT OF LIMITS FOR STORAGE OF LIQUEFIED PETROLEUM GAS:**

The limits referred to in Section 8204.2 of the Uniform Fire Code, in which storage of liquefied petroleum gas is restricted, are hereby established as the limits of the District.

EXCEPTION: The Chief, after consideration of built-in fire protection or firefighting facilities or topographical conditions, and the District’s firefighting capabilities, may permit the installation of liquefied petroleum gas containers in approved locations, and then only when approval has been obtained pursuant to Section 8202 of the Uniform Fire Code.

**SECTION VI – ESTABLISHMENT OF LIMITS FOR STORAGE OF COMPRESSED NATURAL GAS:**

The limits referred to in Section 5204.5.2 of the Uniform Fire Code in which the storage of compressed natural gas storage is prohibited, are hereby established as the limits of the District.

EXCEPTION: The Chief, after consideration of built-in fire protection or fire extinguishing facilities or topographical conditions, and the District's firefighting capabilities, may permit the storage of compressed natural gas in approved locations pursuant to Section 5204.

## **SECTION VII – ESTABLISHMENT OF LIMITS FOR STORAGE OF STATIONARY TANKS OF FLAMMABLE CRYOGENIC FLUIDS:**

The limits referred to in Section 3-1.6 of the Uniform Fire Code Standard 80-3, in which the storage of flammable cryogenic fluids in stationary containers is prohibited, are hereby established as the limits of the District.

EXCEPTION: The Chief, after consideration of built-in fire protection or fire extinguishing facilities or topographical conditions, and the District's firefighting capabilities, may permit the storage of flammable cryogenic fluids in stationary containers in approved locations.

## **SECTION VIII – ESTABLISHMENT OF LIMITS FOR STORAGE OF HAZARDOUS MATERIALS:**

The limits referred to in Section 8001.1.1 of the Uniform Fire Code, in which the storage of hazardous materials is prohibited, are hereby established as the limits of the District.

EXCEPTION: The Chief, after consideration of built-in fire protection or fire extinguishing facilities or topographical conditions, and the District's firefighting capabilities, may permit the storage of hazardous materials pursuant to the provisions of Article 80.

## **SECTION IX – ENFORCEMENT OF CODE**

Notwithstanding provisions in the Uniform Fire Code authorizing or requiring inspections of buildings and premises or testing of fire protection systems and equipment, e.g. Sections 103.3.1.1 and 1001.5.2, or provisions providing for enforcement of the Code, such inspections, testing and enforcement of the Code shall be discretionary by the Chief and other individuals charged by the Chief with such activities. The District recognizes that it has limited financial resources with which to provide fire, rescue and other services and functions and is forced to make public policy decisions as to allocation of District resources. Although the District places a high priority on prevention, inspection and maintenance of fire systems, due to financial limitations, it is the Board's policy to require inspections only so often as necessary to provide a reasonable level of fire and life safety. Accordingly, although the Fire Chief and other individuals charged by the Chief with these activities are encouraged to pursue them, performing such activities, as well as the scope and frequency of such activities, shall be within the discretion of the Fire Chief. It is the intention of the District to make clear that the District's duty to perform the inspections and testing, or to take enforcement actions, as set forth in the Code is limited to providing a reasonable level of fire and life safety. Such actions are discretionary.

## **SECTION X – AMENDMENTS MADE IN THE UNIFORM FIRE CODE:**

The 1997 Edition of the Uniform Fire Code is amended and changed in the following respects:

- 1. Section 101.8.1** is added and specifically adopts the appendices listed below:

The provisions of the following appendices are adopted as part of this code. I-C, I-D, I-E, I-F, I-G, II-A, II-B, II-C, II-D, II-I, II-J, II-K, III-A, III-C, III-F, IV-A, V-A, V-B, VI-A, and VI-F.

2. **Section 103.2.1.1** is amended by deleting the word “and” at the end of number 7, adding a comma to the end of number 8, and adding the following:

9. The adequacy of means of approach to buildings and structures by mobile fire apparatus and firefighting personnel,
10. Providing firefighting water supplies and fire detection and suppression apparatus adequate for the protection of buildings and structures,
11. Issuance of permits before burning trash or waste material, and
12. Inspection of premises by officers designated by the Chief and requiring removal of fire and life safety hazards found on premises at such inspections.

3. **Section 103.3.1.1** is amended by replacing the word “shall” with “may” in the first sentence.

4. **Section 103.4.4** is amended by replacing the word “misdemeanor” with “violation of the Fire Code (see ORS 478.930 and 478.990).”

5. **Section 103.4.5** is amended by deleting the last sentence of the section, as follows:

“See the procedure specified in Chapters 4 through 9 of the *Uniform Code for the Abatement of Dangerous Buildings*.”

6. **Section 105.8** is amended by deleting all permits, except the following:

c.2. Carnivals and fairs

e.1. Explosives or blasting agents

f.3 is amended as follows: Delete entire section except the following:

6. To install, alter, remove, abandon, place temporarily out of service or otherwise dispose of a flammable or combustible liquid tank.

h.4 Haunted Houses

i.1 Liquefied petroleum gases

p.3 Pyrotechnical special effects material

t.1 Tents, canopies and temporary membrane structures

7. **Section 901.4.5.1** is added as follows:

**901.4.5.1 No Parking Signs.**

1. Signs shall read “NO PARKING - FIRE LANE - TOW AWAY ZONE, ORS 98.810 to 98.812”.
2. Vertical no parking signs shall be mounted with a clear space above ground level of 7 feet high.
3. Vertical no parking signs shall be 12 inches wide by 18 inches high. Signs shall have red or black letters and border on a white background.

**8. Section 901.4.5.2** is added as follows:

**901.4.5.2 Curb and Surface Marking.** Fire access roads and curbs shall be painted red or yellow and be posted “No Parking Fire Lane” at each 25 feet. Lettering shall be white on the red background or black on yellow background and shall have a stroke of 1-inch wide by 6-inches high. Roadway driving surfaces, at the discretion of the chief, shall be painted with 6-inch diagonal striping. The color of striping shall be red or yellow against a high contrast background.

**9. Section 902.2.1** is amended by adding the following:

Twenty-five or more dwelling units shall have not less than two or more approved fire apparatus access roadways.

**Exception:** 1. When Group R, Division 1 Occupancies are provided with automatic sprinkler protection in accordance with UBC Standard 9-1 or 9-3 a single access may be provided when approved by the chief. All other provisions for fire apparatus access roadways shall be complied with as specified herein.

2. When Group R, Division 3 Occupancies are provided with automatic sprinkler protection in accordance with National Fire Protection Association Standard 13D, 1996 Edition, a single access may be provided when approved by the chief.

**10. Section 902.2.2.5** is amended to read as follows:

**902.2.2.5 Bridges.** Private bridges on required fire apparatus access roadways shall be designed and constructed in accordance with the State of Oregon Department of Transportation and American Association of State Highway and Transportation Officials Standards. Design load shall conform with HS-25 or greater. The design and specifications for bridges shall be prepared by a State of Oregon registered professional engineer. A building permit shall be obtained for the construction of the bridge when required by the building official. The design engineer shall prepare a special inspection and structural observation program for approval by the building official when a permit is required or approval by the fire chief when a permit is not required. The design engineer shall give, in writing, final approval of the bridge to the fire department after construction is completed. Maintenance of the bridge shall be the responsibility of the party(ies) that use the bridge for access to their property(ies). The fire district may at any time, for due cause, ask that a registered engineer inspect the bridge for structural stability and soundness at the expense of the property owner(s) the bridge serves.

**11. Section 902.2.4.1** is amended by adding the following to the end of the section:

The chief may order any vehicle to be removed which is in violation of the Uniform Fire Code and/or is an obstruction to suppression of fire. If the vehicle is left unattended, the chief may cause the vehicle to be towed with all expenses incurred by the owner.

**12. Section 902.4.1 through 902.4.4 are added as follows:**

**902.4.1 Required Key Boxes.** Key boxes shall be installed on buildings and structures if:

1. an elevator is installed;
2. if equipped with an automatic fire extinguishing system;
3. if equipped with a fire alarm system; or,
4. if, access is restricted due to security arrangements.

**Exception:** Buildings and structures open and supervised twenty-four hours a day, seven days a week or constantly attended.

**902.4.2 Key Box Mounting Location.** Key boxes shall be installed within twenty feet of the main entrance (address entrance). The bottom of the key box shall not be less than eight feet nor more than ten feet above the walking surface unless approved by the Chief or authorized representative.

**Exceptions: 1.** In multi-tenant buildings (each with their own outside entrance) the key box shall be located at the door that will best and most easily gain access to automatic sprinkler system controls, alarm system controls, etc.

**2.** For other configurations, the Fire Marshal's Office shall be contacted for installation instructions.

**902.4.3 Key Box Contents.** Key boxes shall contain the following:

1. building or structure keys;
2. gate key;
3. elevator recall key;
4. elevator door key;
5. alarm systems keys and operation instructions;
6. automatic fire extinguishing system control valve keys.

and may contain the following:

1. emergency personnel contact numbers;
2. hazardous materials safety data sheets

**902.4.3.1 Labeling.** All keys shall be labeled as to their use, i.e., main entrance, alarm control panel, sprinkler room door, etc.

**902.4.4 Key Box Size.** The size of the key box shall be sufficient to contain all necessary keys and/or equipment.

**13. Section 903.2 is amended by replacing the prescribed distance of 150 feet with a distance of 250 feet.**

**14. Sections 903.3 through 903.3.2 are amended and added as follows:**

**903.3 Required Fire Flow:** No building shall be constructed, altered, enlarged, moved, or repaired in a manner that by reason of size, type of construction, number of stories, occupancy, or any combination thereof creates a need for a fire flow in excess of 3,000 gallons per minute at 20 pounds per square inch residual pressure, or exceeds the available fire flow at the site of the structure. The requirements for determining fire flow for all buildings are as set forth in Uniform Fire Code, Appendix III-A, in areas with municipally developed water supplies; For rural areas where no municipally developed water supply is available, see the National Fire Protection Association (NFPA) Standard 1231, 1993 Edition, *Standard on Water Supplies*

for *Suburban and Rural Firefighting*, which is hereby adopted and by this reference becomes a part of this ordinance.

**EXCEPTION:** Fire flow requirements in excess of 3,000 gallons per minute may be allowed if, in the opinion of the chief, all reasonable methods of reducing the fire flow have been included within the development and no unusual hazard to life and property exists.

Existing buildings that require a fire flow in excess of 3,000 gallons per minute are not required to comply with the fire flow requirements of this section. However, changes in occupancies or the character of occupancies, alterations, additions or repairs shall not further increase the required fire flow for buildings.

**903.3.1 Rural Water Supply:** Outside of the boundaries of a municipal type water supply, the water supply for firefighting shall be provided in accordance with NFPA 1231.

Commercial occupancies shall be equipped with a smoke alarm system installed in accordance with UFC Standard 10-2 and supervised by an approved remote central station.

**Note:** Credit for installation of alarm systems as specified in Appendix III-A is not applicable to this section.

**EXCEPTIONS:** 1. In other than the occupancies listed in ORS 479.010(I)(i), where in the opinion of the chief the loss of a structure would not incur substantial impact on the community financially, commercial occupancies shall be equipped with a smoke detection system installed throughout complying with Uniform Fire Code Standard 10-2 and 10-3 that is monitored by a remote central station which has been approved by the chief.

2. When there are not more than one each, Group R, Division 3 and Group U occupancies or agricultural building, as defined by ORS 455.315, on a single parcel of not less than one acre, the requirements of this section may be modified provided, the Group R, Division 3 occupancy does not require a fire flow in excess of 1500 gpm (based on NFPA Standard 1231) and in the opinion of the chief, firefighting or rescue operations would not be impaired.

3. When smoke detection would produce adverse or false alarms, upon judgment of the chief, fixed temperature or rate of rise heat detection may be substituted.

**903.3.2 Municipal or Public Water Supply:** An approved water supply for areas inside water districts or municipally developed water supplies (private or public) capable of supplying required fire flow for fire protection shall be provided to all premises upon which buildings are moved or portions of buildings are hereafter constructed.

**EXCEPTION:** Exceptions #1 and #2 of Section 903.3.1 may be applied to Section 903.3.2.

**15. Section 903.4.2.1 through 903.4.2.5 are added as follows:**

**903.4.2.1 Commercial Buildings.** Fire hydrants shall be located so that no portion of the exterior of a commercial building is more than 250 feet from a fire hydrant as measured in an approved manner around the outside of the structure and along the approved route of travel accessible to fire apparatus. The minimum number of hydrants shall be determined by dividing the required fire flow by 1500 gallons per minute prior to giving credit for fire protection systems in Appendix III-A. When the above calculation results in a fraction of a hydrant equal to or greater than .5 the next larger whole number of hydrants shall be used. The minimum number of hydrants for a structure shall not be less than 2.

**EXCEPTIONS:** (1) When such buildings are protected throughout with an approved automatic fire extinguishing system, the chief may allow variations up to a maximum of 500 feet, provided adequate protection is maintained.

(2) Temporary and portable structures used at construction sites when both the following conditions are provided;

A. When the structures are not less than 40 feet from the primary structure(s) under construction or buildings on adjacent properties.

B. When the combined areas of the temporary portable structures are not greater than 2,500 square feet in size. Areas of structures may be considered as separate when there is 40 feet or more between each group of buildings. The square footage of cargo containers shall also be included in the area.

**903.4.2.1.1** The following shall be considered when evaluating the numbers of fire hydrants for a structure.

1. Existing hydrants in the area may be used to meet the required number of hydrants; however, hydrants that are over 500 feet away from the nearest point of the subject building shall not be considered to contribute to the required number of hydrants.
2. Hydrants that are separated from the subject building by railroad tracks shall not contribute to the required number of hydrants.
3. Hydrants that are separated by divided highway, freeway or heavily traveled collector streets shall not contribute to the required number of hydrants.
4. Hydrants that are accessible only by a bridge shall be acceptable to contribute to the required number of hydrants only if approved by the chief.
5. Private hydrants or public hydrants that are on adjacent private property shall not contribute to the required number of hydrants for the subject property.

**Exception:** The use of hydrants located on other private property may be considered if their locations and access are encumbered in a legal document (such as a deed restriction) by the owners of the involved parcels of property. The encumbrance may be lifted only after approval of the chief on behalf of the fire department and any other governmental agencies that may require approval.

6. When evaluating the placement of hydrants at apartment or industrial complexes the first hydrant(s) to be placed shall be at the primary access and any secondary access to the site. After these hydrants have been placed other hydrants shall be sited to meet the above requirements for spacing and minimum numbers of hydrants.

**903.4.2.2 Non-Commercial Buildings.** Unless otherwise approved by the chief, fire hydrants shall be placed at each intersection. Intermediate hydrants are required when the distance to any part of a non-commercial building exceeds 500 feet as measured in an approved manner around the outside of the structure and along a route of travel accessible to fire apparatus.

**Note:** For the purpose of Section 903, a “commercial building” means a building used for other than Group R Division 3 (when built as one or two family dwellings), Group U, or agricultural occupancies as defined in the Building Code.

**903.4.2.3 Fire Department Connection Pressurized Hydrants.** Fire hydrants on private water mains that are required to be pressurized by a fire department connection shall not be considered to contribute to the requirements of Section 903.4.2.2 unless approved by the chief.

**903.4.2.4 Fire Hydrant Distance from Driving Surface.** Fire hydrants shall be placed not more than 15 feet from an approved access roadway unless specifically approved by the chief.

**903.4.2.5 Fire Department Connections.** Fire department connection(s) shall not be attached to the protected structure unless approved by the chief. Each building shall be provided with its own fire

department connection unless approved by the Chief. Fire department connection(s) shall be located within 70 feet (21 336 mm) of a fire hydrant.

**Exception:** Fire department connections (fdc) may be placed on buildings classified as Group R, Division 1 Occupancies, not more than 4 stories in height, and used exclusively for dwellings with or without attached private garages for the storage of pleasure automobiles, provided all of the following conditions are fulfilled.

1. There shall not be more than 70 feet from the driving surface of an approved access roadway to the fdc. This measurement shall be made along an unobstructed, 3 foot wide, approved access walkway. Oregon Structural Specialty Code, Chapter 10 shall be used to determine the provisions of an approved access walkway.
2. A fire hydrant shall be located not more than 500 feet from the fdc. The measurement shall include the 70 feet in item 1.
3. The fire hydrant shall be placed on the same side of the access roadway as the fdc unless there is at least one additional approach to the building by an approved access roadway.
4. Fire department connections shall be located on buildings so that they are at an easily accessible location and no closer than 3 feet to a building opening.
5. There shall be a fire alarm signaling device in the form of a horn/strobe located not less than 8 feet above grade directly over the fdc(s).

**16. Section 1006.1** is amended by adding the following exception:

**EXCEPTION:** Oregon Mechanical Code Interpretive Ruling 92-13 provides when equipment is limited to a maximum of two domestic ranges in locations such as churches, lodge halls, employee kitchens and similar occupancies where cooking practices are limited to infrequent cooking of meals and/or reheating of limited quantities of foodstuffs which as performed does not create grease - laden vapor, a Class II ventilating hood may be installed in accordance with the Mechanical Code.

**NOTE:** The use of this exception may be revoked by the chief or building official for due cause requiring the installation of a Type I hood.

**17. Section 1006.2.7** is amended as follows:

**1006.2.7 Portable fire extinguishers.** An approved portable fire extinguisher having a minimum rating of 40-B shall be installed within 30 feet (9144 mm) of commercial food heat-processing equipment, as measured along an unobstructed path of travel, in accordance with UFC Standard 10-1.

**18. Section 1007.2.1.1.1** is added as follows:

**1007.2.1.1.1 Non-required fire alarm systems (NFAS).** Non-required fire alarm systems may be installed as follows:

1. Applicants shall be required to obtain a building permit for a NFAS, which will require a plan review and approval.
2. The NFAS shall be installed in accordance with UFC Standard 10-2 and any manufacturers specifications throughout the room or area.
3. There shall be a single fire alarm panel serving an NFAS. The fire alarm panel shall be capable of serving a complete fire alarm system installed in accordance with UFC Standard 10-2.

4. If a required fire alarm system (RFAS) is installed, a NFAS system, when installed, must be connected to the RFAS for notification purposes. The connection shall be compatible and compliant with all applicable and recognized standards.
5. Property/building owners shall assure that the NFAS is maintained and operates with the RFAS, if present, as one system to all applicable and recognized standards.
6. If at any time the NFAS is not installed to recognized standards, fails testing, or is not maintained, it will be deemed non-compliant and in violation of the Fire Code. If the NFAS is not installed to recognized standards, fails testing, or is not maintained as part of the RFAS, both will be deemed non-compliant and in violation of the Fire Code.
7. Removal of an existing NFAS requires prior approval from the Fire Marshal. Disconnecting an NFAS is prohibited.

19. **Section 1007.2.7.1.2** is amended to read as follows:

**1007.2.7.1.2 Patient room smoke detectors.** Approved smoke detectors shall be installed in patient sleeping rooms of hospital and nursing homes and shall be intertied with the building fire alarm system. Actuation of such detectors shall cause a visual display on the corridor side of the room in which the detector is located, cause an audible and visual alarm at the respective nurses' station and shall initiate a signal to an approved remote central station. When smoke detectors and related devices are combined with a nursing call system, the nursing call system shall be listed for the intended combined use.

20. **Section 1007.3.3.3.1** is amended by adding an exception as follows:

**EXCEPTION:** Single-station detectors in dwelling units, rooms used for sleeping purposes in hotel and lodging houses.

21. **Section 1007.3.3.7** is amended to read as follows:

**1007.3.3.7 Annunciation.** Fire alarm systems shall be divided into alarm zones when required by the chief. When two or more alarm zones are required, fire protection signaling systems shall be divided into zones to assist in determining the fire location. The annunciation of all zones and device identification shall be on electrically supervised initiating circuits to the main fire alarm control panel. Alarm, supervisory and trouble signals shall be annunciated in the main control panel and in any required remote annunciator panels by means of an audible signal and a visual display. Such annunciation shall indicate the building, floor, zone or other designated area from which the alarm or trouble signal originated. For the purpose of annunciation, zoning shall be in accordance with the following:

1. When the fire-protective signaling system serves more than one building, each building shall be considered as a separate zone.
2. Each floor of a building shall be considered as a separate zone.
3. Each section of floor of a building that is separated by area separation walls or by horizontal exits shall be considered as a separate zone.
4. Annunciation shall be further divided into zones where deemed necessary by the authority having jurisdiction.

5. Identification of the type of alarm, initiating devices such as manual, automatic, sprinkler water flow, sprinkler supervisory switches, etc.. shall be separately indicated on electrically supervised initiating circuits to the main fire alarm control unit.

**22. Section 1107.1** is amended by adding the following subsections:

1. The use of portable electric heaters and fuel fired space heaters in Groups I and SR Occupancies is prohibited.
2. All portable electric heating devices shall have a high-temperature limiting device and a tip-over switch. Use of unvented fuel fired space heaters shall be approved by the Chief.

**23. Article 11** is amended by adding Section 1114, Collection and Storage of Combustible, Recyclable Materials, to read the same as the State Fire Marshal's amendment to the Uniform Fire Code. (see attachment #1 to this Ordinance)

**24. Section 1303.1.1** is added as follows:

**1303.1.1 Area of rescue assistance.** When the Exceptions to Section 1107.1 of the Oregon Structural Specialty Code are utilized in order to omit an area of rescue assistance, the District's operational guideline 300I shall serve as the approved written fire and life safety plan.

**25. Article 13** is amended by adding "When required by the Chief," to the beginning of Section 1303.3.1. (The remainder of Section 1303.3.1 remains the same.)

**26. Section 2402.3** is amended by adding an exception as follows:

**EXCEPTION:** In lieu of an issued identification card, the employer shall make available to the inspector the training and/or certification file on each qualified fuel operator. This file shall contain all information pertinent to the individual's certification to operate aircraft-refueler units.

**27. Section 2402.8.2** is amended by adding an exception as follows:

**EXCEPTION:** When the fueling equipment is bonded to the aircraft by use of a cable providing a conductive path to equalize potential between the two, a separate wire to ground will not be required.

**28. Section 2402.8.3** is amended by adding an exception (2) as follows:

2. For overwing fueling, the person stationed at the fuel pumping equipment shall not be required when: the person at the dispensing device is within 75 feet (22.8 M) of the emergency shutoff device, and is not on the wing of the aircraft during fuel transfer, and the dispensing line does not exceed 50 feet (15.24M) in length.

**29. Section 2902.5.1** is amended by adding the following sentence to the end of the paragraph:

"and electrical and fuel-burning equipment shall comply with Sections 5202.6, 5202.7.2 and 7904.4."

**30. Section 4501.2.1** is amended by adding the following:

**4501.2.1 General;** For definitions of SPRAY BOOTH, SPRAYING AREA and SPRAYING ROOM, see Article 2

**4501.2.2 Limited application.** For the purpose of Article 45. certain terms are defined as follows:

**MANUFACTURING AREA** is any location used in the fabrication or assembly of materials utilizing polymerization.

**OVERCHOP** is the residue that accumulates from the normal chopper-gun operation during the manufacturing processes.

**THERMOSETTING PLASTIC** is a plastic that, after having been cured by heat or other means, is substantially infusible and insoluble.

31. **Section 4502.3.3** is amended to read as follows:

**4502.3.3 Filter disposal.** Discarded filter pads shall be immediately placed in a non-combustible container with a tightfitting lid and disposed of in accordance with hazardous materials waste regulations.

32. **Sections 4506 and 4506.1** are amended as follows:

**Section 4506 — ORGANIC PEROXIDES AND DUAL-COMPONENT COATINGS AND THERMOSETTING PLASTICS.**

**4506.1 General.** Areas containing manufacturing operations producing thermosetting plastics using hazardous materials similar to those listed in Table 4506-A shall be in accordance with this article. Such operations include, but are not limited to, hand lay, spray-up, resin, transfer moulding, bag moulding, filament winding, centrifugal casting, continuous laminating and casting.

33. **Section 4506.1.4** is amended by adding the following to the end of the paragraph:

Catalyzed resins and overchop residues shall conform to the following:

**1. Catalyzed resins.** Excess catalyzed resin shall be disposed of in open topped noncombustible containers provided with noncombustible bar screens, large mesh wire screens or other means to support individual containers through which surplus catalyzed resin can be poured and upon which other containers can be placed. The containers for disposed resin shall contain water at least 2 inches (51 mm) deep into which the excess resin shall be poured and allowed to cure.

**2. Overchop.** Paper polyethylene film or similar materials shall be used to cover exposed surfaces of the walls and floor in areas where chopper guns are used to allow build-up of overchop to be readily removed. When the accumulation depth of over-chop has reached an average thickness of 2 inches (51 mm) in the manufacturing area, it shall be disposed of after a minimum of four hours curing.

34. **Article 45** is amended by adding Table 4506-A as follows:

**TABLE 4506-A-CLASSIFICATION OF TYPICAL HAZARDOUS MATERIALS USED IN THERMOSETTING PLASTIC MANUFACTURING OPERATIONS REGULATED BY ARTICLE 45.**

MATERIAL	HAZARD CLASSIFICATION
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Acetone	FLI-B-IRR
MEK P/9% A/ODMP	OPIII, CLII-B, OHH, IRR
MEK P/9% AO/Glycols	OPIV, CLII-B, OHH, IRR
MEK P/5.5% AO/DMP	OPIV, CLII-B, OHH, IRR
Polyester resin	FLI-C,FRR, OHH, URI OR UR2
Vinyl ester resin	FLI-C, IRR, OHH, URI, OR UR2
Styrene monomer	FLI-C, IRR, OHH, UR2

The Unstable Reactive nature of resins containing styrene monomer may be Class 1 or Class 2 depending on the concentration of styrene. Concentrations of styrene including but not limited to concentrations of 45 & have been demonstrated to possess Class 2 hazards. Testing by a qualified testing laboratory may be used as a means to identify the hazard of the specific formulations in storage or use.

**KEY:**

FLI-B = Flammable liquid, Class I-B  
 CLIII-B = Combustible liquid Class III-B  
 OPIV = Organic Peroxide, Class IV  
 OHH = Other health hazard  
 UR2= Unstable reactive, Class 2  
 AO = Active Oxygen

FLI-C =Flammable liquid, Class I-C  
 OPIII = Organic Peroxide, Class III  
 IRR = Irritant  
 UR1 = Unstable reactive, Class 1  
 MEKP = Methyl ethyl ketone, peroxide  
 DMP = Dimethyl Phthalate

*\* depending on styrene content*

- 35. **Section 5001** is amended by adding “See Article 45 for Thermosetting Plastics” to the end of the sentence.
- 36. **Section 5101.10.4.3.1** is amended by revising the last sentence to read, “The requirements of Section 8003.3.1.6. shall also apply”.
- 37. **Section 5201.2** is amended by adding the terms “Primary Tank” and “Protected Aboveground Tank” to the list of definitions.
- 38. **Section 5201.3.2** is amended to read as follows:

**1. Flammable and Combustible Liquids:** Type and design of underground and aboveground liquid storage tanks; quantity and types of liquids to be stored; location and design of the fuel dispensers and dispenser nozzles; distances from tanks dispensers to tanks, property lines and buildings; vehicle access; fire appliances; vehicle impact protection; method of storage and dispensing; over-fill protection; spill containment; vents; vapor recovery; other equipment and accessories; seismic design in accordance with the Building Code; secondary containment; design and specifications for related piping, valves and fittings; location and classification of electrical equipment, including emergency fuel shutdown devices; specifications for fuel storage and venting components; and other information as required by the chief.

39. Section 5202.3.1 is amended to read as follows:

**5202.3.1 General.** Class I, II and III-A liquids shall be stored in closed containers, in tanks located underground, in special enclosures in accordance with Section 5202.3.6 or, when approved, in protected aboveground tanks in accordance with Section 5202.3.7. See also Appendix II-K.

For locations where aboveground tanks are prohibited, see Section 7902.2.2.1.

40. Section 5202.3.7 through Table 5202.3.7-A are amended to read as follows: (renumber remaining sections)

**5202.3.7 Protected aboveground tanks.** When approved, the storage and dispensing of motor fuels into the fuel tanks of motor vehicles from protected aboveground tanks located outside buildings are allowed in accordance with this section and Section 7902.1.9.

**5202.3.7.1 Size.** Primary tanks of protected aboveground tanks shall not exceed a 12,000-gallon (45 425 L) individual or 48,000-gallon (181 700 L) aggregate capacity. Tank installations having the maximum allowable aggregate capacity shall be separated from other installations of protected aboveground tanks by not less than 100 feet (30 480 mm).

**5202.3.7.2 Separation distances.** A protected aboveground tank shall be separated from property lines, important buildings, public ways and other tanks in accordance with Table 5202.3.7-A.

**5202.3.7.3 Dispensing Devices.** Dispensing devices are allowed to be installed on top of or immediately adjacent to protected aboveground tanks.

**5202.3.7.4 Signs.** Warning signs and identification signs shall be installed to clearly identify the hazards. The design of such signs shall be in accordance with Sections 5201.8 and 7901.9. Conspicuous signs prohibiting simultaneous tank filling and fuel dispensing shall be posted.

**TABLE 5202.3.7-A – MINIMUM SEPARATION REQUIREMENTS FOR PROTECTED ABOVEGROUND TANKS**

<b>INDIVIDUAL TANK CAPACITY gallons (liters)</b>	<b>MINIMUM DISTANCE FROM PROPERTY LINE THAT IS OR CAN BE BUILD UPON, INCLUDING THE OPPOSITE SIDE OF A PUBLIC WAY feet (mm)</b>	<b>MINIMUM DISTANCE FROM THE NEAREST SIDE OF ANY PUBLIC WAY OR FROM THE NEAREST IMPORTANT BUILDING ON THE SAME PROPERTY feet (mm)</b>	<b>MINIMUM DISTANCE BETWEEN TANKS feet (mm)</b>
Less than or equal to 6,000 (22 712)	15 (4572)	5 (1524)	3 (914)
Greater than 6,000 (22 712)	25 (7620)	15 (4572)	3 (914)

41. **Section 5202.4.1** is amended by adding the following sentence to the end of the paragraph, “or, when approved, such tanks are protected aboveground tanks meeting the requirements of Section 5202.3.7. See also Appendix II-K”.

42. **Sections 5202.11.6.1 through 5202.11.6.1.2** are amended to read as follows:

**5202.11.6.1 Standpipes.** Piers, wharves and floats at marine motor vehicle fuel–dispensing stations with any portion in excess of 250 feet (76 200 mm) from fire apparatus shall be equipped with an approved wet standpipe system installed in accordance with Article 10.

**EXCEPTION;** Waterlines shall normally be dry where subject to freezing temperatures.

Hose stations shall be spaced to provide protection to any portion of docks, piers, wharves or floating craft. Hose stations shall be labeled FIRE HOSE EMERGENCY USE ONLY. Tests and valving shall be approved by the chief.

**5202.11.6.1.1 Access and water supply.** Piers and wharves shall be provided with fire apparatus access roads and water supply systems. Access roads shall be maintained in accordance with Section 902.2. Water supply systems shall be in the form of on-site fire hydrants or as required by the chief.

**5202.11.6.1.2 Sprinkler system.** Piers and wharves shall be installed with an automatic sprinkler system when required by the Building Code.

43. **Section 5204.9.2** is added as follows:

**5204.9.2 Emergency breakaway devices.** Dispenser hose for compressed natural gas dispensing system for containers or vehicle resales shall be equipped with a listed emergency breakaway device designed to retain liquid and vapor on both sides of a breakaway point. Such devices shall be installed and maintained in accordance with the manufacturer’s instructions.

44. **Section 7503.3.2.1** is amended as follows:

**7503.3.2.1 Transfilling of liquid oxygen containers used for respiration.** In buildings where transfilling of containers are used for respiration, all containers involved with the transfilling are limited to a maximum of 72 pounds. Transferring shall be on bare concrete floors with no combustible seams. The room shall be separated from the exitways and have ventilation to handle the off gassing of the containers. Refer to article 90 section c.1.3.

45. **Section 7701.2.1** is amended to read as follows:

**7701.2.1 General.** For definitions of BLASTING AGENT; BULLET RESISTANT; EXPLOSIVE; GUNPOWDER; INHABITED BUILDING; SPECIAL INDUSTRIAL EXPLOSIVE DEVICE; SPECIAL INDUSTRIAL HIGH–EXPLOSIVE MATERIAL; and TEST BLASTING CAP NO. 8, see Article 2.

46. **Section 7701.3.3 through 7701.3.5** are amended as follows:

**7701.3.3 Standards.** NFPA 495, 1996 Edition, Code for Explosive Materials, excluding Chapter 2, is hereby adopted and made part of this code.

**7701.3.4 Possession of explosives.** These rules shall apply to all persons possessing and/or purchasing explosives as defined in Section (1) of ORS 480.200.

ORS 480.200 is not a part of this code but is reproduced or paraphrased here for the reader's convenience:

ORS 480.200 (1) provides the definition for the term "explosive".

**7701.3.5 Application and issuance of certificate-fees (effective October 14, 1983).** Any person desiring a certificate of possession of explosives, as prescribed by ORS 480.230, shall apply on the forms provided by the Office of State Fire Marshal. The applicant shall obtain the signature of the respective chief or designated assistant in whose jurisdiction the explosives will be purchased, stored, or used, indicating that the chief has been notified of their intent to purchase, store, or use explosives in the chief's jurisdiction. Upon receiving the signature from the chief, the applicant shall forward the completed form to the Office of State Fire Marshal, accompanied by a nonrefundable \$15.00 fee for a three - year certificate or \$7.50 fee for a 90 - day certificate. Upon receipt and verification of the completed application form, bearing the signature of the chief, and the appropriate application fee, the State Fire Marshal shall proceed with the investigation prescribed in ORS 480.235. Based on the findings of the investigation, the State Fire Marshal shall either issue or deny the certificate of possession of explosives. Upon issuance of the certificate of possession of explosives, the State Fire Marshal shall forward notification of the certificate's issuance to the chief who signed the application and the appropriate county sheriff. Upon denial of the application, based on the findings of the investigation, the State Fire Marshal shall notify the applicant in writing per ORS 480.275. The certificate shall be in effect from the date of issue for the time periods specified in ORS 480.235(3).

ORS 480.225, 480.230, 480.235 and 480.275 are not a part of this code but are reproduced or paraphrased here for the reader's convenience:

ORS 480.225 and 480.230 define eligibility and requirements for an individual applying for a certificate of possession and the fees required.

ORS 480.235 defines the waiting period for issuance of certificates; investigation of applicants; terms; assignment or transfer prohibited; and records required.

ORS 480.275 defines the rights of the applicant in the event of a denial, including: hearings; notice; representation by counsel; decision; and judicial review.

**47. Sections 7701.4 through 7704.8.3** are specifically deleted from the provisions of Ordinance 99-01.

**48. Section 7801.1** is amended by adding "and ORS 480.110 through 480.165" to the end of the paragraph and the following:

ORS 480.110 through 480.165 are not a part of this code but are reproduced or paraphrased here for the reader's convenience.

ORS 480.110 through 480.165 define the regulations for the following: 480.110-Definitions for Oregon fireworks laws; 480.120-Prohibited uses for fireworks; 480.122-Use for repelling birds; 480.124-Use for controlling predatory animals; 480.127-Sales permits for certain items; 480.130-Permits required for sale or public display of fireworks; 480.140-Requirements for fireworks displays to be under supervision of police

and fire department chiefs; 480.150-Permits for fireworks sales or displays; 480.152-Publication of advertisement for sale of unlawful fireworks; 480.154-Requirements for records; 480.156-Selling of fireworks to out-of-state residents; 480.158-Liability of parents for the costs incurred in suppressing fires caused by use of fireworks by minors; 480.160-The effect of local regulations on state law; 480.165-Civil penalty for fireworks law violations.

49. **Section 7801.3.1** is amended by deleting the title (Fireworks) and replacing with “Pyrotechnic special effects material”, and adding the following:

OAR 837-12-500 through 837-12-570 are not a part of this code but are reproduced or paraphrased for the reader’s convenience:

OAR 837-12-570 through 837-12-570 define the laws and regulations for wholesale sales and storage of pyrotechnics in Oregon.

OAR 837-12-600 through 837-12-675 are not a part of this code but are reproduced or paraphrased here for the reader’s convenience:

OAR 837-12-600 through 837-12-675 define the laws and regulations for retail sales and storage of pyrotechnics (allowed fireworks) in Oregon.

OAR 837-12-700 through 837-12-970 and OAR 837-12-021 are not a part of this code but are reproduced or paraphrased here for the reader’s convenience:

OAR 837-12-700 through 837-12-970 and OAR 837-12-021 define the laws and regulations for public displays of fireworks including special effects.

OAR 837-12-305 through 837-12-330 are not a part of this code but are reproduced or paraphrased here for the reader’s convenience:

OAR 837-12-305 through 837-12-330 define the laws and regulations for agricultural uses of fireworks in Oregon.

OAR 837-12-1000 through 837-12-1160 are not a part of this code but are reproduced or paraphrased here for the reader’s convenience.

OAR 837-12-1000 through 837-12-1160 define the laws and regulations for civil penalties for violation of Oregon’s fireworks statutes and administrative rules as referenced in Article 78.

50. Add a new section 7802.1.1 as follows:

**7802.1.1 Temporary storage.** Temporary storage of fireworks shall be in accordance with Section 307 of the Building Code.

51. **Sections 7802.4 through 7802.4.9.8.10** are specifically deleted from the provisions of Ordinance 99-01.

52. **Section 7901.3.2** is amended to read as follows:

**7901.3.2 Plans.** Plans shall be submitted with each application for a permit to store more than 250 gallons (946 L)-of flammable or combustible liquids outside of buildings in drums or tanks. The plans shall indicate the method of storage, quantities to be stored, distances from buildings and property lines, accessways, fire-protection facilities, and provisions for spill control and secondary containment. For additional plan requirements, see also Section 5201.3.2 (1).

53. Add a new Section 7901.13 as follows:

**7901.13 Maintenance of Protected Aboveground Tanks.** Protected aboveground tanks and connected piping shall be maintained in a safe operating condition. Protected aboveground tanks shall be maintained in accordance with their listings.

Damage to protected aboveground tanks shall be repaired using materials having equal or greater strength and fire resistance or the protected aboveground tank shall be replaced or taken out of service.

54. Section 7902.1.8.2.1 is amended by adding a last sentence to read as follows:

“Protected aboveground tanks shall be listed and shall meet the requirements specified in UFC Standard 79-7 and shall be labeled accordingly.”

55. Sections 7902.1.9 through 7902.1.9.12 are added as follows: (renumber remaining section)

**7902.1.9 Additional requirements for protected aboveground tanks.**

**7902.1.9.1 General.** The installation of protected aboveground tanks shall be in accordance with Section 7902.1.9.

**7902.1.9.2 Tank Construction.** The construction of a protected aboveground tank and its primary tank shall be in accordance with Section 7901.1.8.2.1.

**7902.1.9.3 Normal and emergency venting.** Normal and emergency venting for protected aboveground tanks shall be provided in accordance with Sections 7902.1.11 and 7902.2.6. The vent capacity reduction factor as provided for in Section 7902.2.6.3.4 shall not be allowed.

**7902.1.9.4 Flame arresters.** Approved flame arresters or pressure-vacuum breather valves shall be installed in normal vents.

**7902.1.9.5 Projectile protection.** When projectile protection is required by the chief, the protected aboveground tank shall comply with the requirements for bullet resistance as specified in Section 7702.3.4.3. See also UFC Standard 79-7, Section 79.702.7.3.

**7902.1.9.6 Secondary containment.** Protected aboveground tanks shall be provided with secondary containment, drainage control or diking in accordance with Section 7901.8 or 7902.2.8.

**7902.1.9.7 Vehicle impact protection.** When subject to vehicular impact, protected aboveground tanks shall be provided with impact protection in accordance with this section. Protected aboveground tanks with piping connected to remote dispensers shall be protected by guard posts or other approved barriers. Protected aboveground tanks without piping connected to remote dispensers shall comply with the impact protection requirements of Section 79.702.7.2 of UFC Standard 79-7 or shall be protected by guard posts or other approved barriers. Where guard posts or other approved barriers are provided, they shall be independent of each protected aboveground tank.

Where subject to vehicular impact, piping and electrical conduit connected to protected aboveground tanks shall be provided with impact protection.

Impact protection provided by guard posts shall be in accordance with Section 8001.11.3.

**7902.1.9.8 Overfill prevention.** Protected aboveground tanks shall not be filled in excess of 90 percent of their capacity. An overfill prevention system shall be provided for each tank. During tank filling operation, the system shall:

1. Provide an independent means of notifying the person filling the tank that the fluid level has reached 85 percent of tank capacity by providing an audible or visual alarm signal, providing a tank level gage marked at 85 percent of tank capacity, or other approved means, and
2. Automatically shut off the flow of fuel to the tank when the quantity of liquid in the tank reaches 90 percent of tank capacity. For rigid hose fuel-delivery systems, an approved means shall be provided to empty the fill hose into the tank after the automatic shutoff device is activated.

A permanent sign shall be provided at the fill point for the tank documenting the filling procedure and the tank calibration chart. The filling procedure shall require the person filling the tank to determine the gallonage required to fill it to 90 percent of capacity before commencing the fill operation.

**7902.1.9.9 Fill pipe connections.** The fill pipe shall be provided with a means for making a direct connection to the tank vehicle's fuel-delivery hose so that the delivery of fuel is not exposed to the open air during the filling operation. When any portion of the fill pipe exterior to the tank extends below the level of the top of the tank, a check valve shall be installed in the fill pipe not more than 12 inches (304.8 mm) from the fill hose connection. See Section 7901.11.4 for tank valves.

**7902.1.9.10 Spill containers.** A spill container having a capacity of not less than 5 gallons (18.9 L) shall be provided for each fill connection. For tanks with a top fill connection, spill containers shall be noncombustible and shall be fixed to the tank and equipped with a manual drain valve which drains into the primary tank. For tanks with a remote fill connection, a portable spill container shall be provided.

**7902.1.9.11 Tank openings.** Tank openings in protected aboveground tanks shall be through the top only.

**7902.1.9.12 Antisiphon device.** Approved antisiphon devices shall be installed in each external pipe connected to the protected aboveground tank when the pipe extends below the level of the top of the tank.

**56. Sections 7902.2 through 7902.2.1** are amended to read as follows:

**7902.2 Stationary Aboveground Tanks and Protected Aboveground Tanks Located Outside of Buildings.**

**7902.2.1 General** Stationary aboveground tanks located outside of buildings shall be in accordance with Sections 7902.1 and 7902.2. For the purpose of Section 7902.2, when the term tank is used, it shall include protected aboveground tanks.

**57. Section 7902.2.6.1** is amended to read as follows:

**7902.2.6.1 General.** Stationary tanks shall be provided with adequate additional venting that will relieve excessive internal pressure caused by exposure to fires. Such venting shall also be provided for each compartment of a compartmented tank, the interstitial space of a secondary containment-type tank, and the enclosed space of a close-top dike tank construction. Enclosed spaces, such as those intended for insulation, membranes, or weather shields, which can contain liquid because of a leak from the primary vessel, shall also comply with the venting requirements.

**58. Section 7902.2.6.3.4** is amended as follows:

**7902.2.6.3.4 Reductions in required venting for stable liquids** For tanks, other than protected above ground tanks, containing...(balance to remain unchanged)

59. Section 7902.2.8.1 is amended as follows:

**7902.2.8.1 General** For aboveground tanks other than protected aboveground tanks, the area surrounding a tank or... (balance to remain unchanged)

60. Section 7902.2.8.2 is added as follows:

**7902.2.8.2 Protected aboveground tanks.** Protected aboveground tanks shall be provided with secondary containment, drainage control or diking in accordance with Section 7901.8 or 7902.2.8 or with secondary containment that is a component of the listed protected aboveground tank. The method of monitoring and the capacity of the secondary containment shall be in accordance with Section 7901.8. Enclosed secondary containment shall be provided with emergency venting.

61. Table 7902.2-A is amended by adding an additional row to the end of the table as follows:

Protected aboveground tank	See Section 7902.1.9	½ times Table 7902.2-F	½ times Table 7902.2-F
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62. Section 7903.3.3 is amended to read as follows:

...are stored in protected aboveground tanks in accordance with Section 7902.1.9. ~~tanks which are tested and labeled as two-hour protected tank assemblies in accordance with nationally recognized standards. See UFC Standard 79-7.~~

63. Section 8201 is amended by adding a paragraph to read:

Refer to ORS 480.410 through 480.460 and OAR 837-30-100 through 837-30-280 for administrative provisions pertaining to liquefied petroleum gas licensing and notification of LP-gas installations.

64. Section 8202 is amended as follows:

**8202.1 Permits and Plans.** The Chief shall be notified prior to the installation of containers or receptacles approved for liquefied petroleum gas, including installations at private homes and apartments.

**EXCEPTION:** The replacement of empty containers or receptacles with other containers constructed in accordance with the Interstate Commerce Commission specifications.

**8202.2 Fees.** All fees due and payable shall accompany the notification. The Chief shall collect from the installer an installation inspection fee to cover the cost of initial inspection by the Chief after installation. The installation inspection fee shall be set by ordinance.

**8202.3 Plans.** Where a single container is over 2,000-gallons (7571L) water capacity or the aggregate capacity of containers is over 4,000-gallon (15142L) water capacity, the installer shall submit plans for such installation prior to setting any tank(s).

**65. Article 82** is amended by adding a new Section 8215 as follows:

**Section 8215 — Utility Plants.**

**8215.1 General.** No person shall maintain or operate a liquefied petroleum gas utility plant without first obtaining a permit from the Chief.

**66. Article 82** is amended by adding a new Section 8216 as follows:

**Section 8216 — Licenses.**

**8216.1 General.** No person shall engage in or work at the business of installing, altering, extending or repairing liquefied petroleum gas equipment or appliances unless the person has received a gas installation license from the State Fire Marshal in accordance with ORS 480.410 to 480.460, as now enacted.

**67. Table 8204-A, Footnote 5** is amended as follows:

<sup>5</sup>The following shall apply to above ground containers installed alongside buildings “and property lines”:

**68. Sections 8704.5.1 through 8704.5.1.3** are added as follows:

**8704.5.1 Combustible Trash Chutes**

**8704.5.1.1** Combustible trash chutes shall not be used on non-sprinkled buildings.

**Exception:** Non-sprinkled Type I or Type II structures under initial construction prior to the installation of combustible interior finish or on preexisting non-combustible exterior buildings not exceeding four stories in height (48 feet) (14.6 m) with an approved safety plan .

**8704.5.1.2** Combustible trash chutes when used on sprinkled buildings shall have an approved safety plan when the exterior is combustible or the building exceeds two stories (28 feet) (8.5 m) in height.

**8704.5.1.3** An approved safety plan shall address the following:

1. A continuous fire watch (working hours only) stationed at the dropbox(es) with a continuous means of water application and a means of communication (radio or cell phone).
2. Water application shall be provided at each chute access opening or an approved barrier for each non exposed building opening and all exposed combustible exterior surfaces shall be provided. The approved barrier shall extend 3 feet (1 m) to each side of the chute.
3. Where water is required at the chute access, a trained person shall be continuously assigned and an approved means of communication or alarm shall be provided.
4. Signage shall be placed at each chute access to address: **NO SMOKING, NO OPEN FLAME, NO WELDING OR CUTTING WITH IN 20 FEET (7 M).**
5. At the end of the day the chute shall be disconnected or removed to a distance of 12 feet (3.7 m) away from the drop box.

**69. Section 9002** is amended as follows:

79-7; 7902.1.8.2.1, 7902.1.8.2.7, 7902.1.9.5, 7902.1.9.7 and 7903.3.3

Testing Requirements for Protected Aboveground Tanks

**70. Section 9003** is amended by adding the following standard:

c.1.3. P-2.6-1995 Transfilling of Liquid Oxygen used for Respiration

**71. Section 9003** is amended by adding the following standard:

u.1.17. UL 2085 Standard for Insulated Aboveground Tanks for Flammable and Combustible Liquids.

**72. Appendices I-D, I-E, I-F, I-G, II-K, and V-B** as written by the State Fire Marshal's Office, are added to this Ordinance. (see attachments #2, #3, #4, #5, #6 and #7 to this Ordinance)

**73. Appendix III-A** is amended as follows:

**Section 4 is amended:**

**4.2 Area Separation.** Each portion of a building separated by one or more area separation wall(s), in accordance with the Uniform Building Code, Section 504.6 may be considered as a separate fire area(s) for the purpose of determining the required fire flow.

**Section 5 is amended:**

**5.2 Buildings other than One and Two Family Dwellings.** The required building fire flow and duration shall be determined by the size and construction type of the structure under consideration.

**5.2.1 Occupancy Hazards**

**5.2.1.1 Single Occupancy Hazards.** Where only a single occupancy hazard is housed in a building the minimum required building fire flow shall be multiplied by the hazard factor in Table A-III-A-2 to determine the total required fire flow.

**5.2.1.2 Multiple Occupancy Hazards.** Where more than one hazard is housed in a building the minimum required building fire flow shall be proportioned by percentage of the floor area used for each occupancy hazard. The proportioned building fire flow shall be multiplied by the hazard factor, relating to that portion of the building in table A-III-A-2 and totaled to determine the required fire flow.

Table A-III-A-2

Light Hazard Occupancies	1.0
Ordinary Hazard (Group 1)	1.2
Ordinary Hazard (Group 2)	1.3
Extra Hazard (Group 1)	1.4
Extra Hazard (Group 2)	1.5

**Note:** For examples of Occupancy Hazard Classifications see UBC Volume 3, Standard 9-1, Appendix Section A-1-4.7.

**5.2.2** The product of the multiplication in either Section 5.2.1.1 or Section 5.2.1.2 provides the total required fire flow.

**5.2.3** The total required fire flow may be reduced by one of the following options, but in no case shall be less than 1500 GPM @ 20 psi residual.

1. Reduced by 75 percent where a complete approved automatic fire extinguishing system meeting the requirements of the Uniform Building Code, Chapter 9, is installed throughout the building and the system is fully and electrically supervised in accordance with the Uniform Fire Code Standard 10-2 and is monitored by an approved underwriters laboratory listed remote central station.
2. Reduced by 50 percent where a complete automatic fire extinguishing system meeting the requirements of the Uniform Building Code, Chapter 9 is installed throughout the building.
3. Reduced by 25 percent where an approved complete smoke sensing fire detection and manual fire alarm system is installed throughout the building and electrically interconnected one with the other and electrically intertied to an approved central receiving station. The smoke detection system shall meet the requirements of Uniform Fire Code Standards 10-2 and 10-3, and manual fire alarm pull stations and systems shall meet the requirements of Uniform Fire Code Standard 10-2. The remote central station shall be Underwriters Laboratory listed and approved by the Chief. The smoke detection option may be revoked by the Chief when excessive false alarms may occur or when other potential conditions may cause malfunctioning of the system.

**74.** **Appendix III-F** is added and included as Attachment #8

## **SECTION XI – PENALTIES**

Any person who violates any of the provisions of these regulations hereby adopted or fails to comply therewith, or violates or fails to comply with any order made thereunder, or who builds in violation of any detailed statements, specification or plans submitted and approved thereunder and from which no appeal has been taken, or shall fail to comply with such an order as affirmed or modified by the Board of Appeals or by a court of competent jurisdiction within the time affixed herein, shall severally, for each and every such violation and non-compliance respectively, be guilty of a violation of the Fire Prevention Code as provided in ORS 478.930, punishable upon conviction as prescribed by ORS 478.990. All fines or punishments authorized upon conviction shall include the costs to the District to remedy the violation including costs of towing, storage or removal of the hazard or obstruction if necessary.

Any person who violates the provisions of ORS 478.960 (Burning of certain materials permitted only with permission of the Chief; Burning Schedule (1) through (8)) shall be guilty of a misdemeanor, shall severally, for each and every violation be punishable upon conviction as prescribed by ORS 478.990 and shall be subject to costs under 478.965.

The corporate counsel, the Chief, or the Fire Marshal or designated representative may bring a complaint in law or in equity to alleviate a violation of this ordinance as well as in addition to the rights to enforce said ordinance under the provisions of ORS 478.930 and ORS 478.990.

## **SECTION XII – PLAN REVIEW, SUBMITTAL OF PLAN FOR FIRE CODE APPROVAL**

Plans and specifications shall be submitted to the Chief of the District or authorized representative for examination and approval with respect to conformance with these regulations and no construction shall proceed prior to such approval for the following: Flammable liquid storage, utilization or transportation or dispensing facilities; facilities for the storage, handling, transport and use of explosives and blasting agents; dry cleaning plants; facilities for the storage, handling, use and transportation of liquefied petroleum gas; or any other building, structure or facility wherein highly combustible or hazardous materials are manufactured, utilized, dispensed, conveyed or stored.

When the Chief or authorized representative approves any such plan it shall be so signified by means of a stamp and signature. All construction or alteration shall thereafter comply with the approved plan, in all respects, unless modified by subsequent written permit or order of the Chief. Plans and specifications shall be drawn to scale upon substantial paper or cloth and shall be of sufficient clarity and detail to permit the Chief to determine the question of conformity with these regulations and shall include a plot plan showing type and location of the proposed buildings, structures, facilities and fire hydrant locations and access ways in relationship to the property lines, and all other buildings, structures and facilities proposed or existing on the premises. Approval of plans shall not be construed as a permit to violate any applicable law or regulation of the State, County, City, or Fire District.

## **SECTION XIII – FIRE CODE BOARD OF APPEALS**

Through adoption of the Uniform Fire Code, 1997 Edition, the District has the authority to establish a board of appeals. Such board of appeals may be implemented through bylaws and other procedures adopted by ordinance of the District. In the event that the fire district Board adopts a board of appeals, the provisions of this ordinance, where appropriate, be subject to the board of appeals procedures.

## **SECTION XIV – REPEAL OF CONFLICTING ORDINANCES**

Pursuant to ORS 478.924, the provisions of this ordinance, i.e. the Fire Code, shall be controlling within the territorial limits of the District and within each city or county within the District approving pursuant to ORS 478.924. The existing fire code, Ordinance 96-01, has been approved within each city and county within the District. The District desires that the existing fire code continue in effect until such time as the cities and counties within the District have approved this new Fire Code pursuant to ORS 478.924. Accordingly, Ordinance 96-01, and all former ordinances or parts thereof, which are conflicting or inconsistent with the provisions of this ordinance or of the code or standards hereby adopted, are hereby repealed, effective the effective date of this ordinance; provided, however, that Ordinance 96-01 shall continue in effect in each city or county which has approved it until the city or county approves this Ordinance 99-01. Further, prosecutions or violations under repealed ordinances may continue after the effective date of this ordinance.

## **SECTION XV – VALIDITY**

The District hereby declares that should any section, paragraph, sentence or word of this ordinance or of the Codes or Standards hereby adopted be declared for any reason to be invalid, it is the intent of the District that it would have passed all other portions of this ordinance independent of the elimination of any such portion as may be declared invalid.

**SECTION XVI – DATE OF EFFECT**

The Board of Directors of the Fire District finds and determines that it is necessary and expedient that the provisions of this ordinance become effective 30 days following the final reading.

First reading by Title only this \_\_\_\_\_ day of \_\_\_\_\_, 1999.

Second reading by Title only this \_\_\_\_\_ day of \_\_\_\_\_, 1999.

PASSED by the District this \_\_\_\_\_ day of \_\_\_\_\_, 1999.

\_\_\_\_\_  
PRESIDENT

\_\_\_\_\_  
SECRETARY-TREASURER

## Attachment # 1

### **SECTION 1114 COLLECTION AND STORAGE OF COMBUSTIBLE RECYCLABLE MATERIALS**

**1114.1 Scope.** Buildings containing the collection and storage of combustible, recyclable materials shall be in accordance with Section 1114 and shall be commensurate to the occupancy in which storage or recycling practices are conducted. This section excludes commercial rubbish handling occupancies and commercial paper recycling and plastic recycling occupancies.

#### **1114.2 Definitions.**

**1114.2.1 General.** For definitions of APPROVED; LISTED; NONCOMBUSTIBLE; OCCUPANCY CLASSIFICATION and RUBBISH, see Article 2.

**1114.2.2 Limited application.** For the purpose of Section 1114, certain terms are defined as follows:

**RECYCLABLE PAPER AND PLASTIC MATERIAL** means any paper or plastic that would otherwise be a useless, unwanted or discarded material, except for the fact the material still has useful physical or chemical properties after serving a specific purpose, and the material has been kept separate from rubbish and waste material.

**1114.3 Collection and Storage of Recyclable Material.** Recyclable paper collection and storage shall be maintained as follows:

1. Desk size shall not exceed 15 gallons (57 l) total per desk [maximum of two 9-inch by 12-inch by 16-inch (229 mm by 305 mm by 406 mm) containers], in addition to collection and storage totals specified for small, medium and large rooms. Containers shall be noncombustible or accepted containers.
2. Small rooms [500 square feet (46.4 m<sup>2</sup>) or less] shall not exceed three 15 gallon (57 L) containers. Containers shall be noncombustible or accepted containers.
- 3 Medium, rooms [over 500 square feet (46.4 m<sup>2</sup>) but less than 1,000 square feet (93 m<sup>2</sup>) or copy rooms] shall not exceed three 55 gallon (208 l) containers. Containers shall be noncombustible or accepted containers.
4. Large rooms [over 1,000 square feet ( 93 m<sup>2</sup>)] shall not exceed three 55 gallon ( 208 l) for every 75 feet (22 860 mm) of travel. Containers shall be noncombustible or accepted containers.

NOTE: Areas completely separated by partition walls in accordance with the *Oregon Structural Specialty Code* may be reclassified as small or medium rooms for the purpose of placing recycling containers

5. Full containers shall be removed to an outside location or to an approved inside storage room.

**1114.4 Accepted Containers.** For the purposes of Section 1114, examples of accepted containers include, but are not limited to, the following:

1. At desk side fiber or polyethylene barrels or cardboard boxes or polypropylene-bag/rack systems may be used.
2. In small rooms fiber or polyethylene barrels or cardboard boxes or polypropylene-bag/rack systems may be used.

3. In medium rooms polypropylene-bag/rack systems or fiber or polyethylene barrels may be used.

4. In large rooms metal containers or fiber or polyethylene barrels may be used.

**NOTE:** In large rooms as of October 1, 2002, containers unable to support the contents under fire conditions will be permitted only for use inside a metal can or other approved solid containers. This limitation will be reviewed by the State Fire Marshal in collaboration with the recycling industry in 1997 and 2000 to determine if hazards and fire incidents justify its implementation.

**EXCEPTION:** In Group I and Group SR, Division 1, Division 2, and Division 3.1, Containers used for the short-term storage of combustible recyclable materials shall be of noncombustible or other listed material, not to exceed 15 gallon (57 L) capacity.

**1114.5 Location of Containers in Buildings/Facilities.** Location of containers in buildings and facilities shall be as follows:

1. Containers shall not be placed near any exit, in any exit corridor, in or under any stairway, or near any possible heat source.
2. Containers shall not be used or stored in any location that constitutes a hazard greater than would be expected in a normal office or classroom, specifically: furnace rooms, mechanical labs, chemistry labs, biology labs, electrical rooms, wood shops, machine shops, or other hazardous areas as determined by the chief.

**1114.6 Central Collection and Storage Area.** Central collection and storage areas shall be as follows:

1. Central storage locations are preferred to be located outside building/ facilities, but approved inside storage rooms are permitted.
2. Inside storage shall be in areas of not less than one hour construction with openings protected as required for occupancy separations and provided with an approved automatic sprinkler system or subject to the requirements of the chief.
3. "Hazardous Area-No Smoking" signs shall be posted and good housekeeping shall be maintained.
4. Containers made of metal, fiber, polyethylene or noncombustible approved material are required.
5. Recyclable paper in the central storage area shall be removed from the building/facility on a regular basis as needed to maintain good housekeeping. In Group I and Group SR, Division 1, Division 2, and Division 3.1 Occupancies, containers shall be emptied each day.
6. Allowable quantities of paper stored in rooms, facilities or other areas of storage shall be in accordance with Article 11.
7. In Group I and Group SR, Division 1, Division 2 and Division 3.1 Occupancies, containers for long-term storage shall be placed outside and a minimum of 5 feet (1524 mm) from the exterior of the building and shall be of a metal or other noncombustible and listed material with a metal or noncombustible lid in place at all time.

**1114.7 Collection and Storage of Recyclable Plastic.**

Recyclable plastic collection and storage shall be maintained as follows:

1. Collection

1.1 Metal or other approved noncombustible containers with tight fitting lids shall be used at all times while within a structure.

1.2 Full containers shall be removed to an outside location or to an approved inside storage room.

2. Storage

2.1 Central storage locations are preferred to be located outside buildings/facilities, but approved inside storage is permitted.

2.2 Central storage rooms shall have a minimum of one hour construction with rated openings or equipped with an approved automatic sprinkler system. Good housekeeping shall be maintained and “Hazardous Area- No Smoking” signs shall be posted.

2.3 Outside storage will be posted “Hazardous Area-No Smoking” and good housekeeping shall be maintained.

2.4 Barrels made of metal or noncombustible approved material with metal or noncombustible lids are required in central collection and storage areas.

2.5 Recyclable plastic in the central storage area shall be removed from the building/facility on a regular basis as needed to maintain good housekeeping.

2.6 Allowable quantities of recyclable plastic stored in rooms, facilities or other areas of storage shall be in accordance with Article 11.

**Attachment # 2**

**APPENDIX I-D**

**FIRE PREVENTION GUIDELINES FOR HAUNTED HOUSES AND  
SIMILAR TEMPORARY INSTALLATIONS**

**SECTION 1- SCOPE**

Haunted or fun houses or other similar installations set up for 90 days or less inside a structure not designed for this specific use shall comply with the requirements of the Building Official and the following:

**SECTION 2- PERMITS**

When a permit is required to operate a haunted house or similar installation, it shall be obtained from the chief before the facility is opened to the public.

**SECTION 3-GENERAL REQUIREMENTS**

Haunted houses and similar temporary installations shall comply with all the following:

1. There may be no dead-end corridors and there must be an obvious exit out of any maze every 50 feet (15 240 mm) of linear travel. All stairways must be illuminated at a level of at least 1 footcandle (10.8 lx)
2. Groups shall consist of not more than 20 persons. Each group of children age 12 and under must be accompanied and supervised by a staff person who is 18 years of age or older. The staff person must have in his/her possession an operable flashlight and be completely familiar with the facility.
3. There will be no smoking allowed at any time inside the occupancy as noted in Article 11.

4. All electrical installations shall meet the requirements of the Electrical code.

5. The chief shall be contacted for an inspection and the planning of an evacuation procedure prior to opening the facility to the public. The evacuation plan and occupancy shall be approved by the chief prior to public access.

6. The total number of occupants in the facility at any time shall be limited to a number determined by the chief.

7. No open-flame devices or temporary heaters are allowed in the occupancy.

8. Use of untreated combustible material is prohibited. All combustible material shall be treated or protected so that it is essentially rendered and maintained flameproof in a manner acceptable to the chief. This includes all harvest decorations such as cornstalks, dry branches and hay.

9. Blocking, locking or in any way impeding ready access to any marked or required exit is prohibited. All exit ways shall be kept clear of any obstructions or storage.

10. Sufficient numbers of fire extinguishers shall be provided to ensure that the maximum travel distance to any extinguisher does not exceed 50 feet (15 240 mm). The minimum acceptable rating (size) is 2A:10BC. All fire extinguishers shall be mounted in a conspicuous location. Staff members shall be instructed in the proper use of the extinguishers.

## Attachment # 3

### APPENDIX I-E

#### ADULT FOSTER HOMES

##### SECTION 3- CONSTRUCTION

##### SECTION 1- SCOPE

The purpose of Appendix I-E is to provide a reasonable degree of safety to persons occupying adult foster homes by outlining minimum requirements necessary for continued licensing of the home.

##### SECTION 2- DEFINITIONS

**ADULT FOSTER HOME (AFH)** means any family home or other facility in which residential care is provided, for compensation, to five or fewer elderly adults or adults with a physical disability, mental illness or developmental disability who are not related to the provider by blood or marriage.

**MEANS OF EGRESS** is a continuous and unobstructed way of exit travel from any point in a building or structure to a public way and consists of three separate and distinct parts: (1) the exit access, (2) the exit and (3) exit discharge. A means of egress comprises the vertical and horizontal travel and shall include intervening room spaces, doorways, hallways, corridors, passageways, balconies, ramps, stairs, enclosures, lobbies, escalators, horizontal exits, courts and yards.

**PRIMARY MEANS OF ESCAPE** shall be a door, stairway or ramp providing a means of unobstructed travel to the dwelling. (The most common used entry and exit).

**PROVIDER** as defined in ORS 443.705 means any person operating an adult foster home and includes a certified resident manager.

**RELATIVE FOSTER HOME** means a home which provides care and services to only a relative, by blood or marriage.

**RESIDENT** means any person who is receiving room, board, care and services in an adult home for compensation on a 24-hour basis.

**RESIDENTIAL CARE** means the provisions of care on a 24-hour basis.

**SECONDARY MEANS OF ESCAPE** shall be an alternate to the common primary exit and shall be a door stairway hall or an approved window.

**SELF-PRESERVATION** means an occupant who is ambulatory, unrestrained and possesses the ability to

perceive a life-threatening emergency and take appropriate physical and mental action to preserve his or her life.

1. Construction of general buildings shall be of sound construction, meeting all applicable state and local codes for fire and life safety in effect at time of construction.

2. Mobile home units must have been built since 1976 and designed for use as a home rather than a travel trailer. The units shall have a manufacturer's label permanently affixed to the unit, which states it meets the requirements of the Department of Housing and Urban Development (HUD) or the authority having jurisdiction.

##### SECTION 4- EXITS AND EMERGENCY EGRESS

All adult foster homes shall have approved exits, the use of which is within the capability of the persons they are intended to serve.

1. Every sleeping room shall have at least one operable window or door approved for secondary means of escape or rescue. Windows must have a minimum net clear opening of 5.7 square feet (0.53 m<sup>2</sup>) or 821 square inches (529 676 mm<sup>2</sup>). The minimum net clear opening height dimensions of windows shall be 24 inches (610 mm). The minimum net clear opening width of windows shall be 20 inches (508 mm). Where windows are provided as a means of egress, they shall have a sill height of not more than 44 inches (1118 mm) above the floor.

**EXCEPTION:** Windows with a clear opening of not less than 5 square feet (0.46 m<sup>2</sup>) or 720 square inches (464 515 mm<sup>2</sup>) with sill heights of 48 inches (1219mm) may be accepted when approved by the authority having jurisdiction.

2. Exterior exit doors shall have latching knob hardware. All doors in the means of egress shall have an obvious method of operation. The means of egress shall be maintained clear and unobstructed. Hasp, sliding bolt, hood and eyes, and double-key dead bolts shall not be permitted.

3. Only ambulatory residents capable of self-preservation shall be housed on a second floor or in a basement.

4. Hallways and exitways shall be a minimum 36 inches (914 mm) wide or as approved by the authority having jurisdiction.

5. Split-level homes shall be evaluated according to accessibility, emergency egress and evacuation capability of residents.

6. Lifts or elevators shall not be used as a substitute for a resident's capability to ambulate stairs.

7. Ladders, rope and chain ladders, and other devices shall not be used as a secondary means of egress.

##### SECTION 5- FLAME SPREAD AND SMOKE DENSITY

1. The maximum flame spread of finished materials used on interior walls and ceilings in sleeping rooms and exit ways shall not exceed Class III (76-200).

2. Smoke density shall not be greater than 450.

### **SECTION 6- SMOKE DETECTORS**

1. Smoke detectors shall be installed in each sleeping room, adjacent hallways, common living areas, basements, and in two-story homes at the top of each stairway.
2. All detectors shall be connected to a sounding device or interconnected to other detectors to provide when actuated an alarm which is audible in all sleeping rooms.
3. If an occupant is hearing impaired, a smoke detector(s) for hearing impaired shall be provided.
4. Smoke detectors may be battery operated when installed in existing buildings. In new construction, smoke detectors shall receive their primary power from the building wiring.
5. All smoke detectors shall be approved and shall be installed in accordance with manufacturer's instructions and the One and Two Family Dwelling Code or other nationally recognized standards.
6. The facility shall test and maintain all smoke detectors as required.

### **SECTION 7-PORTABLE FIRE EXTINGUISHERS**

At least one 2-A, 10-B:C rated fire extinguisher shall be visible and readily accessible in a location on each floor, including basements, and maintained in accordance with Uniform Fire Code Standard 10-1.

### **SECTION 8- HEATING EQUIPMENT**

- 1 Heating equipment, including wood stoves, shall be installed according to manufacturer's specifications and in accordance with applicable fire and life safety codes, and under permit where applicable.
2. Approved and listed protective glass screens or metal mesh screens anchored top and bottom shall be required on fireplaces and solid-fuel-burning appliances.
3. Unvented oil, gas or kerosene heaters shall not be used.
4. Sealed electric transfer heaters may be used when approved by the chief.
5. Portable electric heaters shall be listed and have tip-over protection.
6. Portable electric heaters shall not be used with electrical extension cords.

### **SECTION 9- ELECTRICAL EQUIPMENT AND WIRING**

Electrical equipment and wiring shall be in accordance with Article 85 of the Oregon Uniform Fire Code and other

nationally recognized standards. The use of UL approved multiplug extension cords with circuit breaker protection is permitted.

### **SECTION 10-EMERGENCY PROCEDURES**

1. An emergency evacuation procedure shall be developed, posted and practiced with occupants. Drills shall be held at least once every 90 days with at least one drill practice per year occurring during sleeping hours.
2. Drill records shall be maintained for three years and include date, time of day, length of time to evacuate the facility, and names of residents requiring assistance.
3. Within 24 hours of arrival, new residents shall be shown how to respond to a fire alarm and how to exit from the facility in an emergency.
4. Providers shall be required to demonstrate the ability to evacuate all residents from the facility within three minutes to a point of safety which is exterior to, and away from, the structure, and has access to a public way. If the facility fails to meet this requirement, the authority having jurisdiction shall notify the licensing authority.
5. The provider shall provide, keep updated and post a floor plan containing room size, location of each resident's sleeping room, resident manager or provider's sleeping room, fire exits, smoke detectors and fire extinguishers.
6. There shall be, on each occupied floor of the facility, at least one plug-in rechargeable flashlight, readily accessible, or other approved emergency lighting.

### **SECTION 11- SPECIAL HAZARDS**

1. Flammable and combustible liquids and hazardous materials shall be safely and properly stored in the original labeled container or in an approved and listed safety container in accordance with the Oregon Uniform Fire Code.
2. Medical oxygen cylinders in service or storage shall be adequately secured to prevent cylinders from falling or being knocked over in accordance with the Oregon Uniform Fire Code.
3. Areas where oxygen cylinders are used or stored shall be posted NO SMOKING. Oxygen cylinders shall not be used or stored in rooms where wood stoves, fireplaces or open flames are located in accordance with the Oregon Uniform Fire Code
- 4 Smoking regulations shall be adopted to allow smoking only in designated areas. Smoking shall be prohibited in sleeping rooms. Ashtrays shall be of noncombustible materials.

## Attachment # 4

### APPENDIX I-F SPECIAL RESIDENCES AND OCCUPANCIES

#### SECTION 1- GENERAL

The following are evacuation capability formulas for determining the classification of Group SR Occupancies.

#### SECTION 2- DEFINITIONS

Group SR Occupancies are special residences where personal care is administered in buildings or portions thereof which will be licensed by or under the authority of the Department of Human Resources (DHR) under ORS Chapter 418 or 443, or any other state agency. Group SR Occupancies shall be:

**DIVISION 1.** A building or part thereof used for the lodging, boarding and personal care of residents whose evacuation capability is classified as Impractical. Division 1 has the following classifications:

- SR 1.1- Large, licensed to provide care for 17 or more residents.
- SR 1.2- Small, licensed to provide care for six to 16 residents.
- SR 1.3- Licensed to provide care for five or fewer residents in a home.

**DIVISION 2.** A building or part thereof used for the lodging, boarding and personal care of residents whose evacuation capability is classified as Slow, Division 2 has the following classifications:

- SR 2.1- Large, licensed to provide care for 17 or more residents.
- SR 2.2 Small, licensed to provide care for six to 16 residents.
- SR 2.3 Licensed to provide care for five or fewer residents in a home.

**DIVISION 3.** A building or part thereof used for the lodging, boarding and personal care of residents whose evacuation capability is classified as Prompt. Division 3 has the following classifications:

- SR 3.1 Large, licensed to provide care for 17 or more residents.
- SR 3.2 Small, licensed to provide care for six to 16 residents.
- SR 3.3 Licensed to provide care for five or fewer residents in a home.

**EXCEPTIONS;** 1. Group SR Occupancies shall not include foster care homes as defined in ORS Chapter 418 and ORS 443.705. Foster care homes are considered dwellings constructed under the One and Two Family Specialty Code.

2. Correctional facilities including jails, prisons, half-way houses and juvenile detention and correctional education facilities where egress is limited and occupants are confined under the authority of the state. A county or city shall comply with the Building Code, Section 308 provisions applying to Group 1, Divisions 3 and 3.1.

#### SECTION 3- EVACUATION CAPABILITY

**3.1 General.** All group SR Occupancies must maintain the capability to exit within the evacuation rates defined as prompt, slow or impractical as specified by the facility occupancy classification. Records of fire drills required by licensing agents shall be made available to the authorities having jurisdiction. Impromptu fire drills may be required to verify occupancy classification.

**3.2 Evacuation Capability Defined.** Evacuation capability is the ability of the occupants, including residents and staff as a group to either evacuate the building or relocate from a point of occupancy to a point of safety. Evacuation capability shall be determined by using Tables A-I-F-A, A-I-F-B, A-I-F-C, A-I-F-D and A-I-F-E. There are three categories of evacuation capability:

1. Impractical (SR-1). A group, even with staff assistance, that cannot reliably move to a point safety in a timely manner, determined by an evacuation capability score of 5 or greater or with evacuation drill times in excess of 13 minutes.
- 2 Slow (SR-2). A group that can move to a point of safety in a timely manner, determined by an evacuation capability score greater than 1.5 and less than 5 or with evacuation drill times over three minutes but not in excess of 13 minutes.
3. Prompt (SR-3). A group with an evacuation capability score of 1.5 or less or equivalent to that of the general population or with evacuation drill times of three minutes or less.

**3.3 Rating Residents.** These tables are a worksheet for rating the individual resident and are a form for record keeping purposes. This method of determining evacuation capability has been designed to minimize speculation about how a resident might perform in an actual fire emergency by using ratings based upon observed performance. Instead of speculating, raters who are not familiar enough with a resident to provide ratings confidently should consult with an individual who has observed the resident on a daily basis or observed the resident during fire drills. Due to the stress of an actual fire emergency, some residents are not likely to perform at full capacity. Therefore, ratings based on commonly observed examples of poor performance provide the best readily available indication of behavior that could be reduced by the unusually stressful conditions of an actual fire. All persons are less capable on some occasions, and the ratings should be based on examples of resident performance on a typical "bad" day. Ratings should not be based on rare instances of poor performance. Table A-I-F-A rates the risk of a possibility that, during an emergency evacuation, the resident might resist leaving the facility. Unless there is specific evidence that

resistance might occur, the resident should be rated as “minimal risk”. Specific evidence of resistance means that staff

have had to use some physical force in the past. For additional instructions in completing these tables, see NFPA 101A, Chapter 5, 1995 Edition.

**WORKSHEET FOR RATING RESIDENTS**

Complete one worksheet for each resident. Base ratings on commonly observed examples of poor performance.

**Resident’s Name** \_\_\_\_\_

**Evaluator** \_\_\_\_\_

**Facility** \_\_\_\_\_

**Zone Date** \_\_\_\_\_

WRITE ANY EXPLANATORY REMARKS HERE:

**TABLE A-I-F-A- WORKSHEET FOR RATING RESIDENTS**  
**Rating the Resident on the Risk Factors**

Rate the resident on each of the factors below by selecting one score in each risk factor that best describes the resident. For the first six factors, write the selected scores in the appropriate score boxes in the far right column. For “response to fire drills”, write the three selected scores in the square boxes. Write the sum of the three (“fire drills”) score boxes in the large box on the right

<b>I. Risk of Resistance</b> (Circle only one)	Minimal Risk score=0	Risk of Mild Resistance score=6	Risk of Strong Resistance score=20		SCORE BOXES <input type="text"/>
<b>II. Impaired Mobility</b> (Circle only one)	Self-Starting score=0	Slow score=3	Needs Limited Assistance score=6	Needs Full Assistance or Very Slow score=20	<input type="text"/>
<b>III. Impaired Consciousness</b> (Circle only one)	No Significant Risk score=0	Partially Impaired score=6	Totally Impaired score=20		<input type="text"/>
<b>IV. Need for Extra Help</b> (Circle only one)	Needs at Most One Staff score=0	Needs Limited Assistance from 2 Staff score=30	Needs Full Assistance from 2 Staff score=40		<input type="text"/>
<b>V. Response to Instructions</b> (Circle only one)	Follows Instructions score=1	Requires Supervision score=3	Requires Considerable Attention/May Not respond score=10		<input type="text"/>
<b>VI. Waking Response to Alarm</b> (Circle only one)	Response Probable score =0	Response Not Probable score=6			<input type="text"/>

<b>VII. Response to Fire Drills</b> (Without Guidance or Advice from Staff)	Initiates and Completes Evacuation Promptly	Yes score=0	No score=8	<input type="text"/>	
	Chooses and Completes Back-up Strategy	Yes score=0	No score=4	<input type="text"/>	+
	Stays at Designated Location	Yes score=0	No score=6	<input type="text"/>	+
					SUM OF THESE THREE SCORES <input type="text"/>

**Finding the Resident’s Overall Need for Assistance**

Compare the numbers in the 7 score boxes you have filled in. Take the one highest score from the score boxes and write it in this box .

EVACUATION ASSISTANCE SCORE



**TABLE A-I-F-C- STAFF SHIFT SCORE**

Facility: \_\_\_\_\_ Zone: \_\_\_\_\_

Evaluator: \_\_\_\_\_ Date: \_\_\_\_\_

Staff Shift: From: \_\_\_\_\_ To: \_\_\_\_\_

This form is to be completed for the time of day, week, etc., when the combined ratings for staff and residents yield the highest score. This usually is late at night. Where it is not obvious which staff shift will score highest, complete separate forms for each staff shift and utilize the highest score. Refer to instructions in NFPA 101A, Chapter 5, when filling out this form.

<b>CHECKLIST</b>	<b>STAFF RESPONSE AND TRAINING</b>	<b>YES</b>	<b>NO</b>
A protection plan has been promulgated and all staff members considered in this rating have been trained in its implementation.			
The total available staff at any given time is able to handle the individual evacuation needs of each resident who is in the facility.			
Every staff member considered in this rating can meaningfully participate in the evacuation of every resident			
All staff members considered in this rating are required to be in the facility when on duty, except as permitted.			
At least 12 fire drills were conducted during the previous year.			

All items must score "Yes" before proceeding.

**TABLE A-I-F-D--DETERMINING THE STAFF SHIFT SCORE**

NOTE: In large facilities, staff might be responsible for assisting residents in a fire or smoke zone but also might have responsibilities for residents in other zones.

Promptness of Response

Staff Availability	Alarm Effectiveness	
	Assured	Not Assured
Standby or asleep	16	2
Immediately available	20	2
Immediately available and close by	20	10

1. On Score Sheet, list the names of staff members who are required to be on duty in the facility during the shift being rated.
2. Determine whether the effectiveness of the alarm is “assured” or “not assured.”
3. Using the values from the table, determine each staff member “promptness of response score” for the shift being rated. Enter each staff member’s name and score in the appropriate spaces on Score Sheet.
4. Total the “promptness of response scores” for the shift rated.

Score Sheet		Staff Scores
Staff Name		Promptness of Response Score
Staff Shift Score	Total	

**TABLE A-I-F-E—RATING THE FACILITY**

Rate the facility by checking the box that indicates the vertical distance a resident must travel from a sleeping room (SR) to an exit.

	Vertical Distance from Sleeping Rooms to Exits		
	All SR on Floors with Direct Exit	Any SR One Floor from Exit	Any SR Two or More Floors from Exit
Small Facility	<input type="checkbox"/> Score 0.8	<input type="checkbox"/> Score 1.0	<input type="checkbox"/> Score 1.2
Large Facility or Apartment	<input type="checkbox"/> Score 1.0		

NOTE: Small facilities have 16 or fewer residents.

**DETERMINING EVACUATION CAPABILITY**

Multiply the “Total Resident Evacuation Assistance Score” by the facility score (“Vertical Distance, Sleeping Room to Exit”); divide the answer by the “Staff Shift Score” to determine the Evacuation Capability Score.

<b>Calculation of Evacuation Capability Score</b>			
Total Resident Evacuation Assistance  <input style="width: 100%; height: 30px;" type="text"/>	X	Vertical Distance from Sleeping Room to Exit  <input style="width: 100%; height: 30px;" type="text"/>	
			=
	<input style="width: 100%; height: 30px;" type="text"/> Staff Shift Score		Evacuation Capability Score  <input style="width: 100%; height: 80px;" type="text"/>

Determine and record evacuation capability below:

Evacuation Capability Score	Level of Evacuation Capability	Evacuation Capability for this Facility or Zone
≤ 1.5	Prompt	
> 1.5 ≤ 5.0	Slow	
> 5.0	Impractical	

ORS 443.415 is not a part of this code but is reproduced for paraphrased here for the reader's convenience:  
ORS 443.415 defines the parameters for license applications, fees, investigations, and grounds for issuance and denial of license.

ORS 443.420 is not a part of this code but is reproduced or paraphrased here for the reader's convenience:  
ORS 443.420 defines the qualifications required for a person applying for a license under ORS 443.414.

ORS 443.422 is not a part of this code but is reproduced or paraphrased here for the reader's convenience.:  
ORS 443.422 (1) To prevent the perpetuation of segregated housing patterns, the Department of Human Resources shall determine the location and type of licensed residential facilities and the location of facilities subject to the provisions of ORS 169.690.  
(2) Before a license is issued for a residential facility as defined in ORS 443.400, the issuing agency shall determine the number and type of any other licensed residential facilities and the number and type of facilities subject to the provisions of ORS 169.690 within a 1,200 foot radius.  
(3) None of the data collected under this section shall be used in a manner that violates the Fair Housing Amendments Act of 1988.

ORS 443.425 is not a part of this code but is reproduced or paraphrased here for the reader's convenience:  
ORS 443.425 defines the parameters for the term, the contents, and the renewal of licenses and the fees involved.

ORS 443.430 is not a part of this code but is reproduced or paraphrased here for the reader's convenience:  
ORS 443.430 defines the parameters for the transfer of licenses and the disposition of license fees.

ORS 443.435 is not a part of this code but is reproduced or paraphrased here for the reader's convenience.  
ORS 443.435. The director or authorized representative shall periodically visit and inspect every residential facility to determine whether it is maintained and operated in accordance with ORS 443.400 to 443.455 and 443.991 (2) and the rules of the director, and to consult with and advise management concerning methods of care, treatment, training, records, housing and equipment. Employees of the department and the State Fire Marshal or authorized representative on request shall be permitted access to the premises and records of individuals in a residential facility pertinent to fire safety.

ORS 443.437 is not a part of this code but is reproduced or paraphrased here for the reader's convenience:  
ORS 443.437 states that a resident in a residential facility must have a choice of prescription and nonprescription drugs and supplies.

#### **SECTION 4- STATE OF OREGON GROUP SR OCCUPANCY REQUIREMENTS**

For state of Oregon requirements for group SR Occupancies, see the Building Code, Section 312A and the following statutes and rules: ORS Chapter 418, ORS 479.210, ORS 443.400 through 443.460, ORS 443.500, OAR 309-35-100 to 309-35-190 and OAR 309-49-030 through 309-49-220

ORS Chapter 418 is not a part of this code but is reproduced or paraphrased here for the reader's convenience:

ORS Chapter 418 defines the State of Oregon's statutes governing Child Welfare Services.

ORS 479.210 is not part of this code but is reproduced or paraphrased here for the reader's convenience:  
ORS 479.210. Institutions defined as used in ORS 479.215 to 479.220, unless the context requires otherwise, "institution" means:

- (1) A child -caring facility which provides residential care and which receives state aid under ORS 418.005 to 418.025, 418.035 to 418.185, 418.205 to 418.315, and 418.625 to 418.685.
- (2) An inpatient care facility required to be licensed under ORS 441.015 to 441.087, 441.525 to 441.595, 441.815, 441.820, 441.990, 442.342, 442.344 and 442.400 to 442.450 or
- (3) A residential facility subject to licensure under ORS 443.400 to 443.455 and 443.991 (2)

ORS 443.400 is not a part of this code but is reproduced or paraphrased here for the reader's convenience:  
ORS 443.400 provides definitions for the following terms: Department, Director, Resident, Residential care, Residential care facility, Residential facility, Residential training facility, Residential training home, Residential treatment facility, Residential treatment home, Training and Treatment.

ORS 443.405 is not a part of this code but is reproduced or paraphrased here for the reader's convenience:  
ORS 443.405 provides exclusions from the definition of "residential facility".  
ORS 443.410 is not a part of this code but is reproduced or paraphrased here for the reader's convenience.  
ORS 443.410. A license issued by the department is required in order to operate or maintain any residential facility for persons who are developmentally disabled, physically disabled or socially dependent, psychiatrically disabled or alcohol or drug dependent. In the case of a combination of residents, the category of licenser shall be determined by the director.

ORS 443.440 is not a part of this code but is reproduced or paraphrased here for the reader's convenience:  
ORS 443.440. The department may revoke or suspend the license of any residential facility which is not operated in accordance with ORS 443.440 to 443.400 and 443.991(2) or the rules adopted thereunder. Such revocation or suspension shall be taken in accordance with rules of the department and ORS 183.310 to 183.550. However, in cases where an imminent danger to the health or safety of the residents exists, a license may be suspended immediately pending a fair hearing not later than the 10th day after such suspension.

ORS 443.445 is not a part of this code but is reproduced or paraphrased here for the reader's convenience:  
ORS 443.445 defines the requirements for persons admissible at facilities and homes, the transfer of persons requiring certain treatment and operation of facilities by person relying on spiritual means for healing.

ORS 443.450 is not a part of this code but is reproduced or paraphrased here for the reader's convenience.  
ORS 443.450 (1) requires the director to adopt rules governing: Physical properties of the residential facility: Storage, preparation and service of food: Care, treatment or training of the staff: the number, experience and training of the staff, and any other factors affecting the care, treatment or training provided. (2) Distinct rules shall be adopted for homes of five or fewer residents, for facilities of six or more but fewer than 16 residents, and for facilities for 16 or more residents. The rules shall differentiate among categories of residents. (3) For purposes of this section, "categories" refers to different population of residents, differentiated by, but not limited to, age and need, as defined by rule.

ORS 443.452 is not a part of this code but is reproduced or paraphrased here for the reader's convenience.  
ORS 443.452 defines situations whereby the director may waive the requirements of ORS 443.410.

ORS 443.455 is not a part of this code but is reproduced or paraphrased here for the reader's convenience.  
ORS 443.455 requires the director to prescribe a schedule of penalties appropriate to residential facilities licensed under ORS 443.400 to 443.455 and 443.991(2).

ORS 443.460 is not a part of this code but is reproduced or paraphrased here for the reader's convenience:  
ORS 443.460 allows the director to exempt residential care facilities from the license, inspection and fee provisions when they exist in a county where there is a county agency which provides similar programs for licensing and inspection that the director finds are equal to or superior to the requirements of ORS 443.400 to 443.455.

ORS 443.500 is not a part of this code but is reproduced or paraphrased here for the reader's convenience.  
ORS 443.500 requires that access be granted to the Senior and Disabled Services Division, the state or local fire inspector, or the state or local health officer in order to investigate complaints of abuse in all facilities registered under ORS 443.480 to 443.500.

OAR 309-35-100 to 309-35-190 is not a part of this code but is reproduced or paraphrased here for the reader's convenience:  
OAR 309-35-100 to 309-35-190. These rules prescribe the standards and procedures by which the Mental Health and Developmental Disabilities Services Division approves and licenses residential care facilities for mentally or emotionally disturbed persons only. These rules are authorized by ORS 430.041 and carry out the provisions of ORS 443.400 through 443.455.

OAR 309-49-030 to 309-49-220 is not a part of this code but is reproduced or paraphrased here for the reader's convenience:  
OAR 309-49-030 to 309-49-220 prescribe standards by which the Mental Health and Developmental Disability Services Division approves programs that provide 24-hour residential support services for individuals with developmental disabilities.

Attachment # 5

**APPENDIX I-G  
MOTION PICTURE PRODUCTION STUDIOS, SOUND STAGES  
AND APPROVED PRODUCTION FACILITIES**

**SECTION 1 - SCOPE**

Production studios, sound stages and approved production facilities used by the entertainment industry for the purpose of motion picture, television and commercial production shall be in accordance with Appendix I-G.

**SECTION 2 - DEFINITIONS**

For the purpose of Appendix I-G, certain terms are defined as follows:

**COMMERCIAL** is an informational film designed to promote or sell a product.

**ENTERTAINMENT PRODUCTION FACILITIES** are approved production facilities, production studios, and sound stages, defined as follows:

**APPROVED PRODUCTION FACILITY** is an existing building, or portion of a building, or group of buildings that has been modified for the purpose of motion picture, television and commercial production.

**PRODUCTION STUDIO** is a building, portion of a building, or a group of buildings designed and constructed solely for the purpose of motion picture, television, and commercial production.

**SOUND STAGE** is a building or portion of a building usually insulated from outside noise and natural light for the purpose of motion picture, television and commercial productions, may also be referred to as a production facility.

**LIVE AUDIENCE STAGE** is an entertainment production facility with a live studio audience.

**PLATFORM** is a part of a set which is a floor or horizontal surface raised above stage floor level.

**SET** is a temporary structure built, constructed or assembled for the purpose of motion picture, television or commercial production.

**SECTION 3 - PERMITS**

Permits for specific uses within entertainment production facilities shall meet the requirements of Section 105, Permits.

**|| Sections 4 through 13 are specifically deleted.**

**SECTION 4 - GENERAL REQUIREMENTS**

**4.1 Occupancy classification.** The occupancy classification of entertainment production facilities shall be determined by the Building Official. Any change of use shall be obtained from the Building Official for existing buildings used for entertainment production facilities or places of assembly. penetration fire-stop system is utilized for protection of the opening.

**4.2 Plans.** Plans for sets, entertainment productions facilities and temporary stages in existing buildings shall be submitted to the Chief when required.

**4.3 Live Audiences.** A seating plan shall be submitted to the Chief for approval. The seating plan shall show aisles, exits, chair arrangement and other features as required by the Chief.

**4.4 Exits.** Exits shall be as required by the Building Official. Such exits shall be maintained in accordance with Article 12.

**4.5 Housekeeping.** Entertainment production facilities, sets, and stages shall be maintained clear of obstructions and combustible material in accordance with Article 11.

**4.6 Foam Plastics.** Foam plastics shall meet the requirements of Article 11.

**4.7 Standby Personnel.** When required by the Chief, standby personnel may be required in accordance with Article 25.

**SECTION 5 - ELECTRICAL**

**5.1 Electrical.** Electrical equipment and wiring in entertainment production facilities shall be in accordance with the Electrical Code.

**5.2 Distribution.** Distribution equipment shall be listed for stage or production use. Electrical wiring to such equipment shall be considered permanent and shall comply with the electrical code. Temporary feeders shall not be tapped from electrical panelboards and switchboards where deadfront covers have to be removed.

**5.3 Installations.** Permanent or temporary electrical equipment and installations shall not obstruct exits, means of egress or fire department access.

**5.4 Generators.** Approved portable, mobile or stationary power-generating equipment may be used to supplement building electrical power for temporary wiring in accordance with the Electrical Code. Generator locations shall be approved by the Chief.

**5.5 Auxiliary Power.** Temporary auxiliary power cables supplied from mobile generators or adjacent buildings may pass through exterior walls and interior fire-resistive assemblies provided an approved through-

**SECTION 6 - MECHANICAL EQUIPMENT**

**6.1 Mechanical Equipment** Mechanical equipment used or installed as part of the building's heating or ventilation system shall be installed and maintained in accordance with the Mechanical Code.

**6.2 Auxiliary Equipment.** Auxiliary heating and air-conditioning equipment shall be approved and listed for the intended use. Flexible duct shall be noncombustible. Such auxiliary equipment shall not obstruct exists, means of egress or fire department access.

#### **SECTION 7 - FIRE EXTINGUISHING SYSTEMS**

**7.1 Fire Extinguishing Systems.** All fire extinguishing systems shall be installed in accordance with Section 7.

**7.2 Existing Approved Production Facilities and Sound Stages.** Existing approved production facilities and sound stages shall be protected by a fire extinguishing system in accordance with the Building Code.

**7.3 New Production Facilities and Sound Stages ..** All new production facilities and sound stages shall be protected throughout with a fire extinguishing system meeting the requirements of Extra Hazard, Group 2 and the Building Code.

#### **7.4 Solid-Ceiling Sets and Platforms**

**7.4.1 In Excess of 600 Square Feet (55.7m<sup>2</sup>)** Solid ceiling sets and platforms in excess of 600 square feet (55.7m<sup>2</sup>) shall be protected by an automatic fire-extinguishing system.

**Exceptions:**

1. Platform less than 3 feet (914mm) in height.
2. Installation of listed heat detectors installed beneath solid-ceiling sets over 600 square feet (55.7m<sup>2</sup>) in area and under platforms (when provided) over 600 square feet (55.7m<sup>2</sup>) in area which exceed 3 feet (914mm) in height. Heat detectors shall be installed in accordance with the listing and connected to a constantly attended location.

**7.4.2 Less Than 600 Square Feet (55.7m<sup>2</sup>)** Solid-ceiling sets less than 600 square feet (55.7m<sup>2</sup>) in area shall be positioned to allow for the operation of the automatic fire extinguishing system.

#### **SECTION 8 - FIRE DETECTION EQUIPMENT**

**8.1 Fire Alarm Panels.** Fire alarm panels shall be installed in accordance with Article 10.

**8.2 Heat Detectors.** Heat detectors shall be installed in accordance with the listing and Article 10.

**Exception:**

Heat detectors may be temporarily supported by sets, platforms or pedestals when approved by the Chief.

#### **SECTION 9 - FLAMMABLE LIQUIDS**

Flammable liquids shall be used, handled and stored in accordance with Article 79.

#### **SECTION 10 - LIQUEFIED PETROLEUM GASES**

Liquefied petroleum gases shall be used, handled and stored in accordance with Article 82.

#### **SECTION 11 -FIREWORKS AND PYROTECHNIC SPECIAL EFFECTS MATERIAL**

Fireworks and pyrotechnic special effects materials shall be used, handled and stored in accordance with Article 77 and Article 78.

#### **SECTION 12 - HAZARDOUS MATERIALS**

All other hazardous materials shall be used, handled and stored in accordance with Article 80.

#### **SECTION 13 - FIRE APPLIANCES**

Fire appliances shall be provided and installed in accordance with Article 10.

Attachment # 6

APPENDIX II-K

**NONPROTECTED ABOVEGROUND STEEL TANKS FOR MOTOR VEHICLE FUEL-DISPENSING STATIONS OUTSIDE BUILDINGS**

(See UFC Sections 5202.3.1 and 5202.4.1)

**SECTION 1 — SCOPE**

Storage and dispensing of motor fuels into the fuel tanks of motor vehicles from aboveground steel tanks, other than protected tanks located outside buildings in approved locations, shall be in accordance with Appendix II-K.

**SECTION 2 — DEFINITIONS**

For the purpose of Appendix II-K, certain terms are defined as follows:

**FUEL-DELIVERY SYSTEM** is a system that consists of a tank vehicle containing a pump, fill hose with appropriate connections, and a person who performs the tank filling operation of transferring fuel from the tank vehicle to an aboveground steel tanks are as follows:

**2.1 PRECONNECTED FLEXIBLE HOSE SYSTEM** is a fuel delivery system containing a reel-mounted preconnected flexible hose having a maximum nominal diameter of 2 inches (51mm) and a manually controlled fuel-delivery nozzle at the downstream end of the hose.

**2.2 RIGID HOSE SYSTEM** is a fuel-delivery system utilizing one or more sections of large diameter hose [ usually 3 or 4 inches (76.2 to 101.6 mm) in nominal diameter] which does not contain a nozzle but which contains interlocking connections for manually connecting the hose from the tank vehicle to the tank.

**SECTION 3 — PERMITS AND PLANS**

A permit is required to install, operate, repair or modify aboveground steel tanks used for storage and dispensing of flammable or combustible liquid motor fuels.

The installation plans shall be submitted with permit applications. The plans shall include the design, details and specifications for the following:

- 3.1 Quantities and types of liquids to be stored;
- 3.2 Distances from tanks and dispensers to property lines and buildings;
- 3.3 Vehicle access;
- 3.4 Fire appliances;

- 3.5 Vehicle impact protection;
- 3.6 Aboveground tanks and their supports;
- 3.7 Method of storage and dispensing;
- 3.8 Overfill prevention, spill containment, vents, vapor recovery, dispensers, and other equipment and accessories;
- 3.9 Seismic design in accordance with the Building Code;
- 3.10 Secondary containment;
- 3.11 Venting;
- 3.12 Piping;
- 3.13 Electrical systems;
- 3.14 Grounding;
- 3.15 Corrosion protection for tank bottoms and underground piping.
- 3.16 Emergency controls; and
- 3.17 Other information as required by the chief.

**SECTION 4 — TANK DESIGN**

**4.1 General.** Aboveground steel tanks within the scope of Appendix II-K shall be designed in accordance with Section 7902.1.8.2 and shall also be listed and meet the requirements of Section 9003, Standard u.1.7.

**4.2 Size.** Aboveground steel tanks shall not exceed a 6,000 gallon (22 712 L) individual or 18,000 gallon (68 137) aggregate capacity.

**EXCEPTION:** Unprotected tanks containing Class II or III-A liquids may be of greater capacity as approved by the chief.

**4.3 Vents.**

**4.3.1 Capacity.** Aboveground steel tanks shall be provided with vents for normal venting in accordance with Section 7902.1.11. Aboveground steel tanks shall be provided with construction or vents for emergency relief venting in accordance with Section 7902.2.6. The vent capacity reduction factor as provided for in Section 7902.2.6.3.4. shall not be allowed.

**4.3.2 Flame arresters.** Approved flame arresters shall be installed in normal vents.

## **SECTION 5 —INSTALLATION OF TANKS**

The installation of aboveground steel tanks within the scope of Appendix II-K shall be in districts or zones established by the jurisdiction, or in approved locations. Installations shall be in accordance with the following:

### **5.1 Separation Distances.**

**5.1.1 Individual tanks.** An aboveground steel tank shall be separated from property lines, important buildings, public ways and other tanks in accordance with the following:

1. A minimum of 50 feet (15 240mm) from the nearest side of any public way or from the nearest important building on the same property;
2. A minimum of 100 feet (30 480 mm) from any property line which is or can be built upon, including the opposite side of a public way; and
3. A minimum of 3 feet (914 mm) between tanks.

**5.1.2. Aggregate capacity.** Aboveground steel tank installations having the maximum allowable aggregate capacity shall be separated from other installations of aboveground tanks by not less than 100 feet (30 480 mm).

**5.2 Secondary Containment.** Aboveground steel tanks shall be provided with spill control and secondary containment in accordance with Section 7901.8 or with drainage control and diking in accordance with Section 7902.2.8 or with a listed secondary containment system. Secondary containment systems shall be monitored either visually or automatically. Enclosed secondary containment systems shall be provided with emergency venting.

**5.3 Vehicle Impact Protection.** Guard posts or other approved barrier protection shall be separately provided for each aboveground steel tank and for connected piping subject to vehicle impact. The design of guard posts shall be in accordance with Section 8001.11.3.

**5.4 Overfill Prevention.** Aboveground steel tanks shall not be filled in excess of 90 percent of their capacity. An overfill prevention system shall be provided for each tank. During tank filling operation, the system shall:

1. Provide an independent means of notifying the person filling the tank that the fluid level has reached 85 percent of tank capacity by providing an audible or visual alarm signal, providing a tank level gauge marked at 85 percent of tank capacity, or other approved means, and

2. Automatically shut off the flow of fuel to the tank when the quantity of liquid in the tank reaches 90 percent of tank capacity or other approved method of overfill prevention. For rigid hose fuel-delivery systems, an approved means shall be provided to empty the fill hose into the tank after the automatic shutoff device is activated.

3. A permanent sign shall be provided at the fill point for the tank documenting the filling procedure and the tank calibration chart. The filling procedure shall require the person filling the tank to determine the gallonage required to fill it to 90 percent of capacity before commencing the fill operation.

**5.5 Fill Pipe Connections.** The fill pipe shall be provided with a means for making a direct connection to the tank vehicle's fuel-delivery hose so that the delivery of fuel is not exposed to the open air during the filling operation. When any portion of the fill pipe exterior to the tank extends below the level of the top of the tank, a check valve shall be installed in the fill pipe not more than 12 inches (304.8mm) from the fill hose connection. See Section 7901.11 for tanks valves.

**5.6 Spill Containers.** A spill container having a capacity of not less than 5 gallons (18.9) shall be provided for each fill connection. For tanks with a top fill connection, spill containers shall be noncombustible and shall be fixed to the tank and equipped with a manual drain valve that drains into the primary tank. For tanks with a remote fill connection, a portable spill container shall be provided.

**5.7 Signs.** Warning signs and identification signs shall be installed to clearly identify hazards. The design of such signs shall be in accordance with Section 5201.8 and 7901.9. Conspicuous signs prohibiting simultaneous tank filling and fuel dispensing shall be posted.

## **SECTION 6 — INSTALLATION OF DISPENSING AND PIPING SYSTEMS**

**6.1 General.** Dispensing and piping systems and electrical controls shall be installed in accordance with Section 7901.11 and Article 52, except as provided in Appendix Sections 6.2, 6.3 and 6.4.

**6.2 Tank Openings.** Tank openings shall be through the top only.

**6.3 Dispensing Devices.** Dispensing devices are allowed to be installed on top of or immediately adjacent to unprotected aboveground tanks.

**6.4 Antisiphon Devices.** Approved antisiphon devices shall be installed in each external pipe connected to the tank when the pipe extends below the level of the top of the tank.

## **SECTION 7 — PARKING OF TANK VEHICLES**

The vehicles shall not be parked within 25 feet (7620 mm) of an aboveground tank.

**EXCEPTION:** When the tank is being filled by the tank vehicle.

## **SECTION 8 — MAINTENANCE**

Aboveground steel tanks, piping and dispensing systems shall be maintained in a safe operating condition. Aboveground steel tanks and components of dispensing systems shall be maintained in accordance with their listings.

Damage to aboveground steel tanks shall be repaired using materials having equal or greater strength.

## Attachment # 7

### APPENDIX V-B

#### STATUTES AND ADMINISTRATIVE RULES SUPPLEMENTING THE UNIFORM FIRE CODE

**ORS 476.280 and 476.290.** Grant extraterritorial authority permitting a local fire department to extinguish a fire in an unprotected area and collect the cost from the owner of the property. See also ORS 478.310

**ORS 476.380.** Requires a person outside a rural fire district or forest protection district to obtain a permit from the county conducting open burning. Requires the county to prescribe the conditions for issuing a burning permit. County requirements must observe Environmental Quality Commission restrictions but may be more restrictive. See ORS 478.960 on permits inside rural fire districts.

**ORS 476.410 to 476.440.** Require use of standardized fire protection equipment and prohibit sale of nonstandard equipment.

**ORS 476.510 to 476.610.** Establish procedures and obligations in case of a state emergency due to a conflagration.

**ORS 476.710.** Restricts ocean beach fires as regulated by the State Department of Transportation.

**ORS 476.715.** Prohibits throwing away lighted material (cigarettes, matches, etc. ) on forest land, private roads and the right-of-way of public roads and railroads.

**ORS 479.100** Requires a permit from state fire marshal personnel or the local assistant under ORS 476.060 to exhibit or use a motor vehicle in a building that is not a public garage.

**ORS 479.250 to 479.300.** Dwelling units sold since 1979, rental dwelling units, lodging houses and hotel guests must have smoke detectors complying with state fire marshal regulations. The State Fire Marshal or local official charged with providing fire protection can cite a landlord if acting on a complaint of a tenant.

**ORS 480.010 to 480.280.** Explosives and Fireworks.

**ORS 480.310 to 480.340.** Gasoline Dispensing.

**ORS 480.410 to 480.460** Liquid Petroleum Gas.

#### ADMINISTRATIVE RULES

The following summarized administrative rules of the State Fire Marshal are in addition to this code. These are found in Oregon Administrative Rules, Chapter 837,

**1. Sections 11-050 through 11-070. Assistants to the State Fire Marshal.** County sheriffs are designated as assistants to the State Fire Marshal for the purpose of processing applications for possession of explosives.

**2. Sections 12-005 through 12-570. Fireworks.** These sections regulate the possession, sale and use of fireworks and set standards and procedures for obtaining permits.

**3. Sections 30-100 through 30-130. Liquefied Petroleum Gases.** These sections relate to rules outlined in the following NFPA publications:

Liquefied Petroleum Gases, 1995 (No.58)

Gas Appliances, Gas Piping, 1995 (No 54)

LP Gases at Utility Plants, 1995 (No.59)

**4. Sections 30-140 through 30-280. Liquefied Petroleum Gas as Motor Fuel.** These sections regulate the conversion or manufacture of vehicles and machinery to use liquefied petroleum gas as a motor fuel.

**5. Section 41-050. Exitway Protection.** This section requires upgrading of existing deficient buildings where a high life hazard exists to assure safe and adequate exits. The effect is to require exit system improvements in multifamily and other buildings or alternate protection through use of automatic sprinklers or fire detection system.

**6. Sections 44-005 No Smoking in Elevators.** This section requires "no smoking" signs in elevators.

**7. Sections 45-005 through 45-025 Smoke Detectors.** These sections establish standards for the smoke detectors required by ORS 479.250 to 479.300

**8. Sections 61-005 through 61-010. Fire Fighting Equipment.** Standards for screw threads and gaskets for fire hose couplings are stated.

**9. Sections 80-005 through 80-015. Liquefied Natural Gas.** These sections adopt NFPA No. 59A, Standard for Production, Storage and Handling of Liquefied Natural Gas, 1985 edition.

## Attachment # 8

### APPENDIX III-F

#### FIRE DEPARTMENT BUILDING SURVEY AND PLANS

##### SECTION 1 – SCOPE

When a building permit is required by Oregon Structural Specialty Code, building survey and plans for use by the fire department, shall be prepared by the permit applicant and submitted to building department for routing to the fire department in accordance with the provisions of Appendix Chapter III-F, at the time of the issuance of the permit.

**Exceptions:** 1. Remodels or tenant modifications where no changes or modifications are made to the items listed in Section 3 of this Appendix.  
2. Group R, Division 3 Occupancies.  
3. Agricultural buildings as defined in ORS Section 455.315.  
4. Structures housing Group B, F, M, R, S and U Occupancies that are less than 4000 square feet ground floor area or less than 20 feet from the lowest finished floor to the highest finished ceiling.

##### SECTION 2 – BUILDING SURVEY

See the attachment to this Appendix Chapter for the building survey form.

**Note:** Upon request the survey form and a set of instructions can be obtained from the fire department.

##### SECTION 3 – PLANS DOCUMENTATION

Plans shall contain, but shall not be limited to, the following information:

###### Building Exterior

- Property lines
- Building foot print
- Access Roads (Required access roads shall be indicated)
- Fire Hydrant locations
- Fire Department Connection locations
- Under Ground Location and size of water mains used for fire protection (Public and Private)
- Above ground and below ground tanks (Flammables, Combustibles, Chemicals, LPG, Propane, Cryogenics, etc.) Material within the tank and size shall be indicated.
- Fences with gates (access points)

###### Building Interior

- Area Separation Walls
- Occupancy classifications and occupancy separation walls
- Corridors and hallways
- Rated corridors shall be indicated
- Unprotected openings in floors
- Unprotected stairways, escalators, etc.
- Protected stair enclosures
- Protected shafts (Elevator, etc.)

- Horizontal Exits and exit enclosures and extensions from enclosed stairway systems

###### Building Interior and/or Exterior

- Location of fire protection system controls
- Location of fire alarm system panels
- Location of electrical main disconnect
- Location of domestic water shut off valve
- Location of main natural gas shut of valve
- Location of tanks above or below the floors their size and contents.

###### General Plan information

Name and address of the building

Type of Construction per OSSC

Edition Date of Code and date built

Direction arrow (North)

Architectural firm or individual that prepared the plans

Address and phone #



# Tualatin Valley Fire & Rescue

## Fire Prevention

4755 SW Griffith - PO Box 4755 - Beaverton, OR 97005 - (503) 526-2459 -

Page 1 of 2

### Building Survey Report

FMZ : \_\_\_\_\_ (to be filled out by TVF&R) Code Edition: \_\_\_\_\_

Name of Facility: \_\_\_\_\_

Name of Building: \_\_\_\_\_

Address: \_\_\_\_\_

Owner: \_\_\_\_\_ Telephone No. (     ) \_\_\_\_\_

Architect: \_\_\_\_\_ Telephone No. (     ) \_\_\_\_\_

Architect Address: \_\_\_\_\_

ITEM	COMM	DESCRIPTION		
1. Occupancy		Type	Use	Capacity
2. Construction Type				Year Built
3. Area (Sq. Ft.)		Total	Largest Floor	Basement
4. Stories		No.	Height	High Rise <input type="checkbox"/> <input type="checkbox"/>
5 a. Exterior Wall Construction				
b. Opening Protection				
6. Interior Wall Construction				
7. Floor Construction				
8. Roof Construction				
9. Attic Draft Stops		No.		
10a. Occ. Sep. Wall Construction		No.		
b. Opening Protection				
11a. Area Sep. Wall Construction		No.		
b. Opening Protection				
12a. Smoke Barrier Wall Construction		No.		
b. Opening Protection				
13a. Corridor Wall Construction				
b. Opening Protection				
14a. Corridor Ceiling Construction				
b. Opening Protection				
15a. Shafts		No.	Type	
b. Opening Protection				

## Building Survey Report

FMZ : \_\_\_\_\_ (to be filled out by TVF&R)

Name of Facility: \_\_\_\_\_

ITEM	COMM.	DESCRIPTION		
16a. Stair Enclosure		No.		
b. Opening Protection				
17. Stairs		No.		
18. Ramps		No.		
19. Interior Finish Class		Room	Corridor	Exit Enclosure
20. Exits		No.	Total Width	
21. Exit Hardware Type				
22a. Exit Signs/Illumination				
b. Emergency Lighting				
23. Auto Sprinkler Coverage				
24. Standpipe Class/Locations				
25. Fire Alarm Type/Coverage				
26. Heating, Ventilation & Air Conditioning		Type	Fuel	
27. Electrical Installation				
28. Stage/Platform				
29. Hazardous Area				
30. Other				
Comments:				
Alternate Materials & Methods				
TVF&R Use Only				
Inspected By:		Date		No. Attachments
Reviewed By:			Date	
Updated				