

# **ORDINANCE 99- 01**

## **ANALYSIS OF REVISIONS**

Tualatin Valley Fire & Rescue is an Exempt Jurisdiction. Exempt status indicates that a governmental subdivision, such as TVF&R, has enacted adequate regulations generally conforming to state and national standards concerning fire prevention, fire safety measures and building construction requirements for safety, and also provides reasonable enforcement of its regulations. Because TVF&R meets these requirements, the State Fire Marshal has exempted the District subject to such regulations from the statutes, rules and regulations administered by the State Fire Marshal. Basically this means that TVF&R has resources adequate to provide an equivalent level of fire prevention services that the State Fire Marshal's Office would otherwise provide if TVF&R did not exist.

*This analysis is created in order to explain the provisions included in the adoption of the District's Fire Prevention Ordinance as required to maintain Exemption status.*

### **SECTION I - ADOPTION OF UNIFORM CODES**

**Part A** - Adopts the 1997 edition (most current) of the Uniform Fire Code (UFC). The UFC is revised and reprinted on a three year cycle by the International Fire Code Institute. It is then amended by the Oregon State Fire Marshal's Office. The state amended version is then further amended by TVF&R and becomes, in this case, Ordinance 99-01. TVF&R is allowed to be more restrictive than the State, but not less restrictive.

**Part B** - Adopts the 1997 edition of the Uniform Fire Code Standards. The Standards are a companion document to the UFC and are therefor necessary to carry out the provisions of the Code. The Standards describe in detail the how-to's of a specific subject, such as UFC Standard 10-1 which states when fire extinguishers are required and also specifies type, size and location, etc.

### **SECTION II - DEFINITIONS**

This section is comprised of definitions that meet the specific needs of the District. These definitions are adopted because they are not found in the model fire code.

### **SECTIONS III, IV, V, VI, VII, & VIII - ESTABLISHMENT OF LIMITS**

These six sections are necessary to establish limits for the storage of flammable or combustible liquids, explosives and blasting agents, liquefied petroleum gas, compressed natural gas, cryogenic fluids and hazardous materials as set forth by the District. Each category prescribes special circumstances under which storage may be allowed.

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

This section is new to the Ordinance. It is added to address the growing concern connected with liability with regard to enforcement of the Fire Code. This paragraph, written by the attorney representing the District, is designed to provide discretionary power for those individuals charged with enforcement of the Fire Code. The District can only provide a certain level of service with its current staffing and funding, this section addresses that issue. The intent of the District is to provided the highest level of service with the resources available, however, this requires prioritization of some functions. This new section is intended to relieve the District of the liability of those functions that cannot be accomplished.

### **SECTION X - AMENDMENTS TO THE UNIFORM FIRE CODE**

**Item 1** - The appendices contained in the Uniform Fire Code cannot be enforced unless specifically adopted. The appendices listed in this section are the ones needed for enforcement of the code, some are not needed and therefore not adopted.

- Item 2** - The UFC calls out certain statutes and regulations that a fire department or district is authorized to enforce. RFPD's such as TVF&R are formed by authority of Oregon Revised Statute, Chapter 478. The amendment to this section adds additional items that an RFPD may regulate as authorized by ORS 478.920 above and beyond those listed in the Fire Code.
- Item 3** - Left as is, this section would require the District to inspect all buildings and premises. Therefore, the word "shall" is changed to "may", because budgetary constraints do not allow for this to happen. This amendment allows for a more flexible approach to inspections based on the degree of hazard for each occupancy. Some low hazard occupancies do not need to be inspected every year and some high hazard occupancies need inspected more than one time a year.
- Item 4** - The word "misdemeanor" is replaced with the phrase "Violation of the Fire Code". ORS 478.930 uses this terminology when referring to an RFPD. This amendment is necessary in order to comply with statutory language regarding RFPDs.
- Item 5** - The District does not adopt the procedures specified in the *Uniform Code for the Abatement of Dangerous Buildings*. The District does not have the authority to require repairs or order destruction of a building, therefore this portion is removed.
- Item 6** - The UFC has an extensive list of items or processes that require a permit. This section is amended to reflect the items or processes for which the District requires a permit. The entire section is deleted and reformatted as per District requirements.
- Item 7** - Model code language does not specify design or layout requirements for No Parking signs, this section specifies the District's requirements.
- Item 8** - Model code language does not specify provisions for fire lane curb and surface marking, this section specifies the District's requirements.
- Item 9** - This section amends the fire apparatus access requirements with regard to residential occupancies, and allows for less restrictive provisions when automatic sprinkler systems are installed.
- Item 10** - Specifies the design, inspection and acceptance requirements for bridge construction to reflect the District's needs.
- Item 11** - The addition of this section gives the Chief the authority to have vehicles towed in the event they are an obstruction to fire suppression efforts. This amendment is necessary because the UFC does not address the authority to have vehicles towed.
- Item 12** - A district SOG requires Knox Box type key boxes on certain buildings. This addition is a copy of the SOG language added to the Ordinance as per a request by the building officials during the adoption process. A Knox Box is a secure box that is placed on the outside of a building and keys for that building are placed inside. TVF&R fire apparatus carry a master key for the box, which allows entry to any building with only a single key.
- Item 13** - Lessens the requirement for fire department water supplies by increasing the threshold distance to 250 feet from 150 feet. Currently the code requires on-site fire hydrants when any portion of a building is in excess of 150 feet from an existing hydrant on a public street. This change loosens that distance to 250 feet. The reason for the less restrictive distance is the current provisions are overkill and sometimes unreasonably costly. The District can function operationally and efficiently at the increased distance.
- Item 14** - UFC fire flow requirements are nonspecific in order to accommodate a broad range of fire departments and fire districts. This amendment expands on model code language by designating fire flow requirements for the District. These requirements are based on

calculated fire flows necessary to suppress a fire in any given structure. The District Board determines the level of fire protection the taxpayers can provide and any requirements beyond that level must be provided by the developer in the form of built-in fire protections systems or etc.

- Item 15** - The UFC requires the installation of fire hydrants, but is very general. This section details the District requirements for distribution and placement of fire hydrants and fire department connections for both commercial and non-commercial structures and meets Insurance Services Office (ISO) requirements for distance to hydrants. (ISO evaluates individual fire districts, and assigns a classification between one and ten that is used by the insurance industry in setting fire insurance rates.) This section has been further modified from Ordinance 96-01 and now prescribes specific language regarding the placement of fire department connections and their associated hydrants for R1 occupancies (apartments).
- Item 16** - This section is amended to correspond with the State Fire Marshal's amendment which permits the use of Class II type ventilating hood as allowed by Oregon Mechanical Code Interpretive Ruling 92-13.
- Item 17** - This section is amended to correspond with the State Fire Marshal's amendment which allows the use of an "approved" type extinguisher rather than a specific type.
- Item 18** - This section is added to address an increasing demand for partial fire alarm systems in buildings that would otherwise not require a fire alarm system. The current code does not address partial systems. The underlying philosophy to this amendment is the premise that "some is better than none". In the past, the District has not allowed a non-required fire alarm system unless it was complete, this amendment allows a building owner to install a system in selected portions of a building. This amendment also assures that partial systems, when installed, will conform to all applicable standards and codes and that they receive appropriate maintenance.
- Item 19** - This section is amended to correspond with the State Fire Marshal's amendment which calls out specific provisions for smoke detectors used in conjunction with patient rooms in institutional occupancies.
- Item 20** - Correlates with item 18 by removing patient rooms from the exception for activation of an audible alarm signal throughout a building.
- Item 21** - This section is amended to correspond with the State Fire Marshal's amendment which redefines the requirements for establishing alarm zones with regard to fire alarm systems. This amendment makes it easier to establish the exact location of the specific device that is sending the alarm signal to the panel.
- Item 22** - This section is amended to correspond with the State Fire Marshal's amendment which establishes limits and standards for the use of portable electric heaters.
- Item 23** - This section is adopted in order to address the growing concerns encompassing the storage and handling of recyclable materials. The language contained in this amendment reflects the cooperative efforts of the Oregon fire service and the recycling industry. A majority of the original draft of this amendment for the 1991 UFC was developed by TVF&R in conjunction with the State Fire Marshal.
- Item 24** - This section is added to alleviate the District of the responsibility of approval and maintenance of written fire and life safety plans in lieu of an area of rescue assistance. An area of rescue assistance is a designated place in a building where handicapped persons are taken during an emergency to await rescue. The building code allows for the area of rescue assistance to be eliminated when a building contains an automatic sprinkler system,

but requires a written fire and life safety plan which must be approved and maintained by the fire department. It is the opinion of the Fire Marshal's Office that an automatic sprinkler system is a sufficient trade-off for an area of rescue assistance without a written fire and life safety plan, which are extremely difficult to maintain. The District's Operational Guideline 300I will serve as the fire and life safety plan. This guideline contains provisions for a systematic search of all buildings during emergency situations.

- Item 25** - The phrase "When required by the Chief" is added because new model code language requires emergency plans and drills for all R-1 (apartment) Occupancies as well as other types of occupancies. This requirement is far from realistic and therefore discretionary language was needed in order to alleviate the District of this responsibility. The District does not want to be charged with requiring emergency plans and fire drills to be conducted at all apartment buildings and various other occupancies.
- Items 26 through 28** - These sections are amended to correspond with the State Fire Marshal's amendments to Article 24. These changes came about as a result of a collaborative effort between the airline industries, Oregon airports and the Oregon Fire Code Committee. These sections address fueling of airplanes – specifically, overwing fueling, bonding and certification of attendants.
- Item 29** - This section is amended to correspond with the State Fire Marshal's amendment which specifies provisions for the use of Class I liquids in basements or pits.
- Items 30 through 34** - These amendments merge the previous Article 53 into Article 45. The entire article 53 was an Oregon amendment regulating the application of organic and thermosetting plastics (basically fiberglass application). The requirements contained in Article 53 are now merged, more appropriately, into Article 45. Article 45 regulates the application of flammable finishes.
- Items 35 & 36** - These amendments merge a portion of the previous Article 53 into Article 51. (see explanation for items 30 through 34)
- Items 37 through 41** - These revisions integrate Appendix II-F (Protected Aboveground Tanks) into the body of the Uniform Fire Code within Article 52 (Motor Vehicle Fuel-Dispensing Stations). These revisions expand the scope of protected aboveground tanks containing flammable or combustible liquids to general storage applications. (A protected aboveground tank is a tank which is provided with protection from physical damage and fire resistive protection). The District has already been allowing the expanded use of protected aboveground tanks by policy prior to this code change. This amendment will appear as model code in the next edition of the Uniform Fire Code and is currently contained in the latest supplement to the 1997 UFC.
- Item 42** - This section is amended to correspond with the State Fire Marshal's amendment which prescribes specific provisions for standpipes, fire department access and water supply and automatic sprinkler systems at piers, wharves and floats.
- Item 43** - This section is amended to correspond with the State Fire Marshal's amendment requiring emergency breakaway devices on compressed natural gas dispenser hoses. Breakaway devices are already required for LPG and gas/diesel dispenser hoses.
- Item 44** - This section is amended to correspond with the State Fire Marshal's amendment which more stringently regulates the filling of liquid oxygen inside of buildings by limiting the amount. This amendment came about as a result of an increasing number of oxygen dependent school-age children who require bottles refilled while at school. The current code allowed a large quantity of liquid oxygen within a school building.

- Items 45 through 47** - Certificates to purchase explosives are regulated by the State Fire Marshal. This amendment reflects the State Fire Marshal's amendments to Article 77. The use of explosives is regulated by the local authority (TVF&R).
- Items 48 through 51** - Pyrotechnics and Fireworks are regulated by the State Fire Marshal. This amendment to Article 78 is necessary in order to stay in line with state regulations, it reflects State Fire Marshal requirements and statutory language governing pyrotechnics and fireworks.
- Item 52** - Model code language requires plans to be submitted to store more than 5,000 gallons of a flammable or combustible liquid in an aboveground tank. This is a very liberal amount and is therefore modified downward by the District to a quantity of "more than 250 gallons". The decrease in the threshold limit is necessary due to the population density of the District and the potential hazard associated with the storage of flammable and combustible liquids.
- Items 53 through 62** - These revisions integrate Appendix II-F (Protected Aboveground Tanks) into the body of the Uniform Fire Code within Article 79 (Flammable and Combustible Liquids). See analysis for items 37 through 41.
- Item 63** - Liquefied petroleum gas is closely regulated by the State Fire Marshal. This section is amended to cite the Oregon Revised Statutes that regulate those individuals licensed to work on or install LP-Gas tanks or vehicles powered by LP-Gas. The District is bound by these statutes and therefore recognizes them in this section.
- Item 64** - This section is amended to reflect the District's requirements for the submittal of fees and plans for installation of LP-Gas containers. An exempt jurisdiction is allowed to require permits for items or processes that the UFC does not address.
- Item 65** - Utility Plants for LP-Gas are not addressed in model code language. They are, however, present within the boundaries of the District and require a permit to operate.
- Item 66** - This section refers to the State Fire Marshal requirements needed to be fulfilled for a person to obtain a gas installation license to install, alter, extend or repair LP-Gas equipment or appliances.
- Item 67** - The amendment to this Footnote is required due to conflicting distance requirements between the UFC and the UFC Standard. This is an oversight by the publishers of the UFC and is also amended by the State Fire Marshal.
- Item 68** - This amendment is a result of a fire Portland Fire Bureau experienced which spread due to the use of a combustible trash chute. These provisions, created by the Portland Fire Bureau, are intended to mitigate the spread of fires due to trash chutes.
- Item 69** - This change correlates with items 37 through 41 and items 53 through 62.
- Item 70** - A new standard added that correlates with item 44.
- Item 71** - This change correlates with items 37 through 41 and 53 through 62.
- Item 72** - These appendices are State Fire Marshal amendments to the UFC. They are adopted by the District because the items regulated in these appendices present unique fire and life safety issues. Appendices must be specifically adopted in order for them to be enforceable.
- Item 73** - Appendix III-A is a companion Appendix to Article 9. This Appendix is used to calculate required fire flows and water supplies for fire suppression. It is modified by the District in order to reflect Standard Operating Guidelines and the specific needs of the District. (See item 14 of this document for additional explanation)

**Item 74** - Appendix III-F is a new appendix added to the Ordinance developed by TVF&R. It requires that a final set of plans for new buildings be submitted to the District for use during pre-fire surveys, creating quick-action plans and other prevention activities. The scope is limited to certain buildings.

### **SECTION XI - PENALTIES**

This section describes the penalties for failure to comply with the provisions of the Ordinance, as authorized by Oregon Revised Statute.

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

This section specifies the parameters for submittal of plans for approval by the District.

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

One of the required elements for exemption status is to provide a board of appeals. This board is established in order to address any application for adjustment or variance to the provisions of the Ordinance on a case by case basis.

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

This section repeals all former Ordinances, or parts thereof, which are conflicting or inconsistent with the provisions of Ordinance 99-01 or of the code or standards adopted.

### **SECTION XV - VALIDITY**

This section validates the remainder of the ordinance in the event any portion is deemed invalid.

### **ATTACHMENTS**

The attachments to the Ordinance are reprints of State Fire Marshal amendments made to the 1997 UFC, with the exception of Appendix III-F, which are adopted by reference within the body of the Ordinance. Appendix III-F was developed by TVF&R.