0020.040.001 LCM/crd 11/27/89

# ORIGINAL

1988 Uniform Fire Code DGA 89-7

ORDINANCE NO. \_\_\_1537\_\_\_\_

AN ORDINANCE OF THE CITY OF REDMOND, WASHINGTON, AMENDING CHAPTER 20E.80 OF THE REDMOND MUNICIPAL CODE AND COMMUNITY DEVELOPMENT GUIDE BY ADOPTING THE 1988 EDITION OF THE UNIFORM FIRE CODE AND AMENDMENTS THERETO.

WHEREAS, the Planning Commission conducted a public hearing for the purpose of considering adoption of the 1988 edition of the Uniform Fire Code and amendments thereto, and at the conclusion of said hearing forwarded its recommendation to adopt said revised Code and amendments to the City Council, and

WHEREAS, the City Council has considered the recommendation of the Planning Commission and determined that the public health, safety and welfare require that the 1988 Uniform Fire Code and amendments thereto as set forth hereinafter be adopted, now, therefore,

THE CITY COUNCIL OF THE CITY OF REDMOND, WASHINGTON, HEREBY ORDAINS AS FOLLOWS:

Section 1. The Redmond Municipal Code and Community Development Guide are hereby amended by revising Chapter 20E.80.080 as set forth on Exhibit A, which is attached hereto and incorporated herein by this reference as if set forth in full.

Section 2. This ordinance, being an exercise of a power specifically delegated to the City legislative body, is not subject to referendum, and shall take effect five (5) days after

passage and publication of the ordinance or a summary thereof consisting of the title.

APPROVED:

ATTEST/AUTHENTICATED:

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CITY	CLERK,	DORI	S SCHAIR	BLE

APPROVED AS TO FORM:

OFFICE OF THE CITY ATTORNEY:

FILED WITH THE CITY CLERK:

PASSED BY THE CITY COUNCIL

PUBLISHED:

EFFECTIVE DATE:

ORDINANCE NO. \_\_\_\_1537

12-14-89 12-19-89

12-24-89

12-29-89

EXHIBIT A

### 1988 FIRE CODE ADOPTION

# **20E.80.000 FIRE CODE**

# **20E.80.010 SHORT TITLE**

This chapter and amendments hereto shall constitute the Redmond Fire Code and may be cited as such.

#### **20E.80.020 ADOPTION**

The Uniform Fire Code, 1988 Edition, including appendices of Division I-A,B & C; II-A,B,C,D & E; III-D; IV-A; V-A; & VI-A,B,D & E; and the 1988 Edition of the Uniform Fire Code Standards published by the Western Fire Chiefs' Association and the International Conference of Building Officials in their entirety, except such portions as are hereinafter by this Chapter deleted, modified, amended or added to, are hereby adopted and incorporated as fully as if set out at length herein.

#### **20E.80.030 DEFINITIONS**

The following terms as defined herein shall be used in conjunction with the Uniform Fire Code as adopted in Section 20E.80.020.

<u>APPLIANCE</u> is any device used in the control or suppression of fire, such as but not limited to dry lines, standpipes, ladders, extinguishing systems, etc.

<u>APPROVED</u> shall in all cases mean that a particular plan, system, operation or construction including all notations made during review or testing as to the best knowledge of the Chief or his designated representative met or exceeded all applicable codes, standards, regulations and/or

performance tests as of the date of approval. Any subsequent changes of circumstance which compromise the conditions of approval render such approval inapplicable.

<u>CHIEF</u> as used in the Redmond Fire Code shall mean the Chief of the fire department or his representative as assigned or as authorized by Redmond Fire Department Manual of Operations.

N.F.P.A. is the National Fire Protection Association. N.F.P.A. publishes numerous pamphlets which when referenced are applicable as guidelines and standards in applying codes or ordinances.

REDMOND FIRE DEPARTMENT STANDARDS as published and periodically updated by the Redmond Fire Department are a compilation of written and/or illustrated policies, procedures, criteria and guidelines designed to clarify and explicate the decisions of the Chief in regards to the application of adopted codes, ordinances and regulations. Redmond Fire Department Standards shall constitute the Redmond Fire Department's primary reference document.

TRANSMIT AN ALARM BY APPROVED MEANS shall mean an approved supervised system for transmitting an alarm signal to the fire department communications center. For approved methods see Redmond Fire Department Standards.

# 20E.80.040 RESTRICTIONS

80.040(05) Occupancies Prohibited. No Group H, Division 1 or 5 occupancies as defined in Section 901, Uniform Building Code, shall be permitted.

**Exception No. 1:** A Group H, Division I occupancy may be allowed when approved by the Chief and the building official.

80.040(10) Flammable or Combustible Liquid Storage - The limits, referred to in Section 79.501 of the Uniform Fire Code 1988 Edition in which storage of flammable or combustible liquid in outside above ground tanks is prohibited, are established throughout the City except where special permits are issued for temporary use during periods of construction.

80.040(15) Bulk Plants - Bulk plants referred to in Section 79.1401 of the Uniform Fire Code 1988 Edition shall be prohibited throughout the City, except in areas zoned for light or heavy industrial use pursuant to the City of Redmond Community Development Guide and shall be limited to underground storage only.

80.040(20) Explosives - The limits, referred to in Section 77.106(b) of the Uniform Fire Code 1988 Edition in which storage of explosives and blasting agents is prohibited, are established throughout the City, except where special permits are issued by the Chief and safe storage and handling practice are maintained at all times.

80.040(25) Liquefied Petroleum Gas Storage - The limits, referred to in Section 82.104(b) of the Uniform Fire Code 1988 Edition in which bulk storage of liquefied petroleum gas is restricted are established throughout the City limits except areas zoned light or heavy industry pursuant to the Community Development Guide.

#### **20.80.060 AMENDMENTS**

The following are modifications or amendments to the Uniform Fire Code, 1988 Edition as adopted in 20E.80.020 and shall correspond to the context of said Uniform Fire Code as if set out at length in their respective sections in lieu of or in addition to published sections or subsections. Where an amendment or modification replaces a published section or subsection, the published section or subsection shall be deemed void and deleted.

80.060(5) Add subsection 2.201(c) as follows: The owner, occupant or other person having under his control any property or materials on a property damaged by fire or explosion shall, when ordered by the Chief, immediately secure the property against entry or unauthorized access by the public; by boarding up all openings, fencing, barricading or utilizing other appropriate measures. Within thirty (30) days after written notice to do so has been served, all debris and/or damaged materials shall be removed from the property and proof furnished that contractual arrangements have been made for prompt demolition, replacement or repair of all fire or explosion damaged structures remaining on the property involved in the fire or explosion.

80.060(7) Add item a.4 to Section 4.108 as follows: a.4: Asphalt Kettles - to store, transport, and/or use, asphalt kettles and other related equipment. Such storage transport, and/or use must be done in accord with Uniform Fire Code 11.403 Redmond Fire Department Standards, and this Code [see 20E.80.070(10)].

80.060(10) Add subsection 10.206(a) as follows: The Chief shall have the power and authority to remove or cause to be removed without notice, any vehicle, vessel or thing parked or placed in violation of Section 10.206 or 10.207(k) of the Uniform Fire Code. The Chief may direct a property owner or property manager of a commercial or multi-family development to have such vehicles towed and/or contract with a towing company to have such vehicles towed when necessary to maintain fire access unobstructed. The owner of any item so removed shall be responsible for all towing, storage and other charges connected therewith.

80.060(15) Add subsection 10.207(b)1 to read as follows: The access roadway shall extend to within 150 feet of all portions of the exterior walls of the first story of any building and within 50 feet of at least 25% of the perimeter of the building. Where access roadway cannot be provided, approved fire protection system or systems shall be provided as required in Section 20E.80.100.

80.060(20) Add subsection 10.207(j)1 as follows: All required access roadways shall be constructed so that the maximum gradient is 10%. No access roadway or access road approach to a public way shall have an arc higher than 12 inches in less than 18 feet. Where these requirements cannot be provided, approved fire protection system or systems may be required by the Chief as indicated in Section 20E.80.100.

80.060(25) Add subsection 10.306(b)5 as follows: In any structure where the total area is 10,000 square feet or more. Computation of square footage shall be according to Redmond Fire Department Standards.

80.060(26) Add subsection 10.306(b)6 as follows: In any structure where the required fire flow as determined by the Chief in accordance with Redmond Fire Department Standards is 3,500 gallons per minute or more.

80.060(30) Amend Section 10.314 to read as follows: When required by the Chief, basement pipe inlets shall be installed in the first floor of every structure having a basement. Required basement pipe inlets shall be in accordance with the provisions of Appendix III-D.

80.060(32) Add to subsection 11.201(b) as follows: All ashtrays shall be of noncombustible construction where ashes are contained. Waste smoking material or any other previously ignited or spontaneously ignitable material shall be discarded into solid, noncombustible containers having tight fitting lids of the same construction.

<u>80.060(38) Add subsection 11.403(c) as follows:</u> A permit is required to use or store an asphalt kettle or other similar equipment.

80.060(39) Add to Section 11.413: Minimum protection shall consist of protective posts installed in conformity with Redmond Fire Department Standards.

80.060(40) Add 12.103(d) Height: All aisles, corridors or similar areas providing exit from any portion of the building shall have a clear height of at least 6'6" unless a higher minimum is otherwise required.

<u>80.060(41) Add 12.103(e) Overcrowding</u>: The number of occupants of any building or portion thereof shall not exceed the permitted and posted capacity unless a specific, temporary increase is allowed per UFC 12.204 and 25.114.

80.060(42) Add 12.104(f) Blocking of Self or Automatic Closing Doors: Any door which is an integral part of a rated assembly and which is normally self or automatic closing, shall not be blocked, obstructed or otherwise impaired or made inoperative.

80.060(43) Add Section 12.107(c): In the event of normal power supply failure, automatic emergency exit illumination consisting of minimum battery pack type units shall be provided in exit corridors, stairways, main aisles, and exit passageways when:

- There are one or more floors above or below the principle grade of exit in any
  occupancy except R-3 or M unless all exits are exterior open balconies and/or stairs.
- 2. There is an occupant load in excess of 50 for assembly or educational occupancies.

**80.060(45)** Add Section 12.108(e): For an occupant load of less than 50, signs are required wherever necessary to clearly indicate the direction of exit travel and may be non-illuminated (internal or self) when approved by the Chief.

80.060(47) Add to 12.108(c): All exit sign letters shall be green on a contrasting background.

80.060(55) Amend the last sentence of the exception under 25.106(b)2 to read as

follows: (last sentence) The use of this exception may be revoked for due cause by the Chief.

80.060(64) Add 79.105(f): Secondary Containment. Secondary containment shall be

provided for all new installations of aboveground and underground storage tanks and associated

piping.

80.060(66) Add to 80.301(b)5 last sentence: "and associated piping."

80.060(68) Add to 80.301(b)6: Secondary containment shall be provided for all new

installations of aboveground storage tanks and associated piping.

80.060(70) Add to 82.104(a):

1) Portable containers used for LPG, propane or similar gas of 15 gallons or less may be

used inside of buildings with the approval of the chief. Such a tank, all tubing, fittings, etc.

shall be legibly and clearly labeled, secured against physical damage, maintained in a

safe condition and used according to safe practice.

**20E.80.070 DELETIONS** 

The following portions cited from the Uniform Fire Code, 1988 Edition as adopted in 20E.80.020,

are hereby deleted:

80.070(5) Section 10.302(a) "Exception"

80.070(7) Section 10.307; Refer to Section 20E.80.080(30)

80.070(8) Article 11 Section 11.101b, 11.105, 11.106, 11.107, 11.108, 11.109 and 11.110

80.070(10) Section 11.403(b) "Exception".

80.070(15) Article 14 Fire Alarm System. Refer to Section 20E.80.080 "Fire Detection Systems".

### 80.070(25) Article 78. Fireworks

Refer to Redmond Municipal Code Chapter 9.26 (Fireworks) and to RCW 70.77.120 et. seq. (State Fireworks Law).

### 20E.80.080 FIRE DETECTION SYSTEMS

The following regulations constitute general requirements of fire alarm systems and supervisory requirements for sprinklered buildings. Specific requirements may be found in the Redmond Fire Department Standards.

80.080(05) General Requirements: An approved supervised fire detection system shall have detectors sensitive to any of the products of combustion or fixed temperature and rate of rise detectors, a fire alarm panel, audible devices for evacuating occupants, continuous central station monitoring, contractual arrangements for maintenance and repair, and exterior audible and visual signaling as required by Redmond Fire Department Standards for the particular occupancy.

80.080(10) Maintenance: All approved systems shall be maintained and shall be under supervision of a responsible and qualified person or organization having a specialty low voltage license issued by the State of Washington, having a City of Redmond business license, and satisfying the requirements of the Redmond Fire Department Standards. Inspections, tests, repairs, notifications of trouble and alarm, records of all notifications and work done shall be as required in the Redmond Fire Department Standards.

80.080(15) Where Required: An approved supervised and maintained fire detection system shall be required in the following structures. For the purposes of this section, an area separation or occupancy separation wall or a distance of 10' or less shall not constitute a separation between two structures on the same property.

- (a) Throughout every structure used for residential occupancy containing five or more dwelling units, and not having an approved sprinkler system.
- (b) Throughout every structure used for any purpose where the total area is 6,000 square feet or more and there is not an approved sprinkler system. Computation of square footage shall be according to Redmond Fire Department Standards.
- (c) Throughout any structure where the total area is 3,000 square feet or more and there is not an approved sprinkler system except R-3 single family residences, and provided that this section shall have no application to any structure for which a building permit application was on file with the City as of July 1, 1986. Computation of square footage shall be according to Redmond Fire Department Standards.
- (d) When the option referenced in U.B.C. 3305(g) exception 5 is used and a smoke detection system is to be used in lieu of one-hour corridor construction, then it shall be installed per Redmond Fire Department standards for "one-hour corridor smoke detection."
- (e) Group H Division 2 or 3 occupancies over 1,500 square feet in addition to an approved sprinkler system required under provisions of U.B.C. 3802(f) 1988 edition.
  - (f) Where required elsewhere by the Redmond Fire Code, U.B.C. or State of Washington.

80.080(18) Retroactive Application of Regulations. The requirements set forth in Section 20E.80.080(15) are intended to apply retroactively to those existing structures identified below.

The date by which all such structures are required to be in compliance is as indicated below:

	<u>Use/Structure</u>	Compliance Date
A.	Residential occupancy with five or	
	more dwelling units.	1/1/91
В.	Residential occupancy with a total	
	area of six thousand square	
	feet or more.	1/1/91
C.	Any occupancy except residential with	
	a total area of six thousand	
	square feet or more.	1/1/88

Notwithstanding the foregoing provisions, structures in areas annexed to the City shall not be required to comply with this chapter until the expiration of one year from the date of annexation. Except as provided above, Section 20E.80.080(15) shall apply prospectively only, commencing upon the effective date of this ordinance.

# 80.080(20) Approval Requirements:

- (a) Prior to the installation of a fire alarm system, specifications, calculations and a minimum of three copies of plans per Redmond Fire Department Standards shall be submitted to the fire department for approval and permit. The plans shall indicate the layout of all equipment to be used and an accurately scaled and dimensioned representation of floor and ceiling plans, with wall, ceiling, attic and roof support configurations. The manufacturer and model number of each component of the system shall be indicated.
- (b) Prior to occupancy of the building, the fire alarm system shall be tested and/or inspected in the presence of, and shall be approved by, the Chief.

# 80.080(25) Modifications:

- (a) When a building remodel or addition creates spaces which would otherwise be required to have detectors, the system shall be modified in an approved manner so that the building in its entirety will meet all the requirements for an approved system.
- (b) Prior to modifications, plans shall be submitted as per 20E.80.080(20)(a) for approval and permit.
- (c) Prior to occupancy of the remodeled or added portion the modified alarm system shall be tested and/or inspected in the presence of, and approved by, the Chief as outlined in Redmond Fire Department Standards.

# 80.080(30) Supervisory Requirements for Sprinkler Systems:

Any structure which has installed an approved sprinkler system shall have the flow and control valves supervised per Redmond Fire Department Standards. Exceptions: 1) Approved domestically supplied local systems with ten heads or less, if not otherwise required. 2) Approved residential sprinkler systems, if not otherwise required.

- (a) The supervisory system shall also monitor all above ground exterior control valves for tamper and monitor low/high air pressure on dry systems, as required in the Redmond Fire Department Standards.
- (b) All monitored systems shall have an approved alarm panel and transmitter. All panels shall have battery back up. Refer to Redmond Fire Department Standards.

# 80.080(35) Non-Conforming Buildings:

(a) The use of any building not conforming to the provisions of 20E.80.080 and to which the provisions of this section would apply shall be terminated on or before January 1, 1988, unless the building has been made to comply with the requirements of 20E.80.080. Buildings in portions of the City annexed subsequent to January 1, 1986 shall not be subject to the provisions of this section until the expiration of one year from the date of annexation. See 80.080(18) for retroactive application regulations.

Exception: Alarm systems which are required under 20E.80.080(15)(c) until such time as the occupancy use changes.

(b) Except as provided in Section 20E.80.080(35)(a) structures which are non-conforming to these requirements shall be required to meet current standards when alteration or expansion of the structure takes place and the following takes place within any three-year period: The gross floor area of the structure is increased by 100% or more; or the costs stated on all approved building permit applications for the structure equal or exceed the assessed value of the structure at the beginning of that three-year period. When such a non-conforming structure has been destroyed, damaged or has incurred a loss equal to or greater than fifty percent (50%) of its assessed or appraised value, whichever is greater, it shall thereafter conform to current requirements.

# 80.080(40) Smoke Detection Devices:

Compliance with state law is required. Compliance with the requirements of this section 20E.80.080 shall not relieve the owner or tenant of any structure governed by Chapter 50, Laws of the State of Washington, 1980, relating to installation and maintenance of smoke detection devices, from the duty to comply with said statute. Chapter 50, Laws 1980, one copy of which has been and is on file with the office of the City Clerk for public inspection, is hereby adopted by this reference and incorporated herein as if fully set forth.

# 20E.80.090 SPRINKLER SYSTEMS

The following regulations constitute general requirements for sprinkler systems.

80.090(05) General Requirements: All approved sprinkler systems shall meet the requirements of the Redmond Fire Department Standards and the Redmond Fire Code. All systems shall have an adequate water supply, system of piping, and sprinkler heads designed to discharge water on a fire at an appropriate time and in an effective manner and when applicable, a DSHS backflow preventer installed in either an exterior vault or inside the building at the riser. All underground sprinkler supply piping shall be included on civil drawings and shall be approved by the water supplier and the Redmond Fire Department.

80.090(10) Maintenance: All approved systems shall be maintained per Redmond Fire Department Standards. Additionally, those who perform required maintenance and repair shall keep accurate records of all notifications and work done and shall make such reports to the fire department as required by the Redmond Fire Department Standards.

80.090(15) Where Required: An approved sprinkler system shall be required in the following structures. For the purposes of this section, an area separation or occupancy separation wall or a distance of 10' or less shall not constitute a separation between two structures on the same property.

- (a) All high rise buildings constructed in Redmond shall be provided with an approved sprinkler system throughout.
- (b) In any structure where the total area is 10,000 square feet or more. Computation of square footage shall be according to Redmond Fire Department Standards.

- (c) In any structure where the required fire flow as determined by the Chief in accordance with Redmond Fire Department Standards is 3,500 gallons per minute or more.
- (d) When required by the Chief for the protection of exposures, etc., exterior sprinklers may be required when combustible materials are stored next to a fully sprinklered building.
- (e) When in an R-1 occupancy there are more than 4 dwelling units or over 8 guest units in a hotel or motel.
  - (f) When in an assembly occupancy the occupant load is over 200.
- (g) When any non-sprinklered structure adds square footage so that the total area exceeds 10,000 square feet.
  - (h) Where required elsewhere by the Redmond Fire Code or the Uniform Building Code.

# 80.090(20) Approval Requirements:

- (a) Prior to the installation of a sprinkler system, specifications, calculations and a minimum of three copies of plans per Redmond Fire Department Standards shall be submitted to the fire department for approval and permit. The plans shall indicate the layout of all equipment to be used and an accurately scaled and dimensioned representation of floor and ceiling plans, with wall, ceiling, attic and roof support configurations. The manufacturer and model number of each component or type component of the system shall be indicated.
- (b) Prior to the occupancy of the building, the sprinkler system shall be tested and/or inspected in the presence of, and shall be approved by, the Chief. This applies to both the flow and supervision portions of the systems where applicable.

# 80.090(25) Modifications:

- (a) When the remodel of, or addition to a building to which this code applies creates spaces which would otherwise be protected by sprinkler heads the system shall be modified in an approved manner so that the building in its entirety will meet all the requirements for an approved system.
- (b) Prior to modifications, plans shall be submitted as per 20E.80.090(20)(a) for approval and permit.
- (c) Prior to occupancy of the remodeled or added portion, the modified sprinkler system shall be tested and/or inspected in the presence of, and approved by, the Chief as per 20E.80.090(20)(b).

80.090(35) Non-conforming Buildings: Except as provided in the Uniform Fire Code, Section 1.103(b) requirements for non-conforming uses and structures shall be as provided in Chapter 80.090(15)(g) of the Redmond Community Development Guide.

# 20E.80.100 RESTRICTED ACCESS BUILDINGS

Where a building or portion of a building is so located or constructed with grades, elevations, vegetation or other natural or man-made obstacles which make exterior or interior access and/or use by fire apparatus, equipment or personnel unduly difficult, unsafe or impossible, additional safeguards shall be required by the Chief. Safeguards shall consist of the following applicable items or alternates suitable for fire fighting and rescue operations as specified by the Chief.

1. Automatic fire sprinkler throughout

- 2. Smoke detection system
- 3. Automatic fire alarm systems
- 4. Communication systems
  - a. Voice alarm system
  - b. Public address system
  - c. Fire department communication system
- 5. Central control station
- 6. Smoke control systems
- 7. Emergency elevator systems
- 8. Emergency exits
- Emergency areas of refuge including horizontal exits and smokeproof enclosures
- 10. Vertical and horizontal standpipes
- 11. Standby power, light and emergency systems

All systems shall meet the design requirements set forth in the Redmond Fire Department Standards and Redmond Fire Code.

# 20E.80.120 NEW MATERIALS, PROCESSES OR OCCUPANCIES WHICH MAY REQUIRE PERMITS:

The Director of Public Works, the Chief of the Fire Department and the Chairman of the Board of Appeals shall act as a committee to determine and specify, after giving the affected person an opportunity to be heard, any new materials, processes or occupancies which may require permits, in addition to those now enumerated in said code. The Chief of the Fire Department shall cause such list to be posted in a conspicuous place in his office and distribute copies thereof to interested persons.

#### **20E.80.130 APPEALS**

Whenever the Chief of the fire department disapproves an application or refuses to grant a permit applied for, or when it is claimed that the provisions of the code do not apply or that the true intent and meaning of the code has been misconstrued or wrongly interpreted, the applicant may appeal from the decisions of the Chief to the Board of Appeals (Section 2.303, Uniform Fire Code, 1988 Edition) within thirty days of the decision appealed.

#### **20E.80.140 PENALTIES AND ENFORCEMENT:**

80.140(05) Penalties for Violations: Any person who violates any of the provisions of the Redmond Fire Code or fails to comply therewith, or who violates or fails to comply with any order made thereunder, or who builds in violation of any detailed statement of specifications or plans submitted and approved thereunder, and from which no appeal has been taken, or who fails 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 fixed herein, shall, severally for each and every such violation and noncompliance respectively, be subject to the penalties for violations provided in Section 1.01.110 of the Redmond Municipal Code. The imposition of one penalty for any violation shall not

excuse the violation or permit it to continue; and all such persons shall be required to correct or remedy such violations or defects within a reasonable time.

The imposition of penalties upon conviction shall not preclude the City and the Chief from taking further appropriate legal action to cause compliance with the provisions of the Fire Code or to remove prohibited conditions.

# 20E.80.150 BUILDING PERMIT ISSUANCE AND OCCUPANCY:

The passage of the ordinance codified in this chapter is necessary for the protection of the public health, safety and welfare of the citizens of the City. No building permit shall be issued until plans, which are in compliance with this chapter, have been submitted and approved. No building shall be occupied until such approved systems have been inspected and are operational.