CITY OF REDMOND ORDINANCE NO. 2834

AN ORDINANCE OF THE CITY OF REDMOND, WASHINGTON, AMENDING RMC 15.06, FIRE CODE, SUBSECTIONS 15.06.010 - .013 AND 15.06.016, TO COORDINATE WITH THE 2015 INTERNATIONAL FIRE CODE AND SUBSEQUENT STATE AMENDMENTS

WHEREAS, the Fire Department has recommended that the City adopt the 2015 International Fire Code, with certain deletions and amendments, as required by RCW 19.27.031; and

WHEREAS, the City Council, through adoption of this ordinance, concurs with the recommendations of the Fire Department.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF REDMOND, WASHINGTON, DOES ORDAIN AS FOLLOWS:

Section 1. Classification. This ordinance is of a general and permanent nature and shall become a part of the City Code.

Section 2. Amendment of Subsections. RMC 15.06.010-.013 and 15.06.016 of the City of Redmond Fire Code are hereby amended to read as follows:

Chapter 15.06 FIRE CODE*

Sections:

Short title.
Adoption.
Restrictions.
Amendments.
Reserved.
Fire detection systems.
Fire sprinkler systems.
Restricted access buildings.
Preventable fire alarms.
New materials, processes or occupancies
which may require permits.
Wellhead protection ordinance coordination.
Appeals.
Penalties and enforcement.
Building permit issuance and occupancy.
Nonconforming structures.

*Prior legislation: Ords. 1537, 1926, 2014, and 2215. Formerly Chapter 20E.100 RCDG.

Code reviser's note: This chapter was previously codified as Chapter 15.28 RMC.

15.06.010 Short title.

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

15.06.011 Adoption.

(A) The International Fire Code, [2012] 2015
Edition, published by the International Code Council

including Appendices F and I, together with the amendments, modifications, and exceptions in Chapter 51-54A WAC excluding the changes to IFC Section[§] 503 [AND 605.11], in their entirety as the same now exist or as they may be hereafter amended, 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.

15.06.012 Restrictions.

[(1)] (A) Occupancies Prohibited. No Group H, Division 1 occupancy as defined in Section 307, International Building Code, [2012] 2015 Edition, shall be permitted.

Exception No. 1: A Group H, Division 1 occupancy may be allowed when approved by the Chief and the Building Official and authorized by a valid Fire Code Permit.

[(2)] (B) Bulk Plants. Bulk plants referred to in Section [3402] 5702 of the International Fire Code, [2012] 2015 Edition, shall be prohibited throughout the City except in areas zoned Manufacturing Park (MP) or Industry (I) pursuant to the Redmond Zoning Code and shall be limited to underground storage only.

Exception No. 1: Unless prohibited by the City of Redmond Wellhead Protection Ordinance.

[(3)](C) Liquefied Petroleum Gas Storage. The limits referred to in Section 6104.2 of the International Fire Code, [2012] 2015 Edition, in which bulk storage of liquefied petroleum gas is restricted are established throughout the City limits except areas zoned Manufacturing Park (MP) or Industry (I) pursuant to the Redmond Zoning Code.

[(4)] (D) Flammable Cryogenic Fluids. Flammable cryogenic fluids referred to in Section 5806 of the International Fire Code, [2012] 2015 Edition, shall be prohibited throughout the City except in areas zoned Manufacturing Park (MP) or Industry (I), or when approved by the Fire Code Official and the Building Official and authorized by a valid Fire Code Permit.

15.06.013 Amendments.

The following modifications (A) are amendments to the International Fire Code, [2012] 2015 adopted 15.06.011 Edition, as in RMC and shall correspond to the context of said International Fire Code as if set out at length in their respective in lieu of or in addition to published sections

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.

(1) Amend 102.7 to read as follows:

102.7 Referenced codes and standards. The codes and standards referenced in this code shall the Redmond be Fire Department Standards and those that are listed Chapter 80. Such codes and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference and as further regulated in 102.7.1; 102.7.2, and 102.7.3. sections Redmond Fire Department Standards shall constitute the primary reference document quideline. Where differences between the provisions of this code and the referenced standards, the provisions of this code shall apply.

(2) Add Section 102.7.3 as follows:

102.7.3 Supplemental Rules and Regulations.

Fire Code Official is authorized render interpretations of this code and to and enforce rules and supplemental make order to the regulations in carry application and intent of its provisions. Such interpretations, rules, and regulations shall be known as "Redmond Fire Department Standards" and shall be in conformance with the intent and purpose of this code and shall be available to the public during normal business hours.

(3) Amend Section 104.11.2 to read as follows: 104.11.2 Obstructing operations.

No person shall obstruct the operations of the fire department in connection with extinguishment, control, or investigation of any fire or control of any fire, or actions relative to other emergencies, or disobey any lawful command of the fire chief or officer of the fire department in charge of the emergency, or any part thereof, or any lawful order of a police officer assisting the fire department.

(4) Add Section 104.12 as follows:

104.12 Assistance from other agencies.

Police and other enforcement agencies shall have authority to render necessary assistance in the enforcement of this code as requested by the Fire Code Official.

(5) Amend Section [105.6.23] **105.6.24** to read as follows:

[105.6.23] **105.6.24** Hot work operations.

An operational permit is required for hot work including, but not limited to:

- 1. Public exhibitions and demonstrations where hot work is conducted.
- 2. Use of portable hot work equipment inside a structure.

Exception 1: Work that is conducted under a construction permit.

Exception 2: Less than 16 ounces in self-contained, hand-held devices that do not allow gas flow or flame when the trigger is released.

- Fixed-site hot work equipment such as welding booths.
- 4. Hot work conducted within a wildfire risk area.
- 5. Application of roof coverings with the use of an open-flame device.
- 6. When approved, the Fire Code Official shall issue a permit to carry out a Hot Work approved Program. This program allows personnel to regulate their facility's hot work operations. The approved personnel shall be trained in the fire safety aspects denoted in this chapter and shall responsible for issuing permits requiring compliance with the requirements found in Chapter [26] **35.** These permits shall

issued only to their employees or hot work operations under their supervision.

(6) Amend Section [105.6.27] 105.6.28 to read as follows:

[105.6.27] **105.6.28** LP-gas.

An operational permit is required for:

1. Storage and use of LP-gas.

Exception 1: A permit is not required for individual containers with a 500-gallon (1893 L) water capacity or less or multiple container systems having an aggregate quantity not exceeding 500 gallons (1893L) serving occupancies in Group R-3.

Exception 2: In other than R-3 occupancies, a permit is not required in noncommercial outdoor use of propane barbecue grills.

- Operation of cargo tankers that transport LP-gas.
- (7) Add Section [$\frac{105.6.47}{105.6.50}$] as follows: [$\frac{105.6.47}{105.6.47}$] 105.6.50 Battery systems.

An operational permit is required to operate a stationary storage battery system having a liquid capacity of more than 50 gallons (189 L).

(8) Add Section [105.6.48] 105.6.51 to read as follows:

[105.6.48] 105.6.51 Fire alarm systems.

An operational permit is required when using an approved Central Station Service alternative.

(9) Add Section [105.6.49] <u>105.6.52</u>, Emergency responder radio coverage system, as follows:

[105.6.49] <u>105.6.52</u> Emergency responder radio coverage system.

An operational permit is required to operate an emergency responder radio coverage system as prescribed in Section 510.

(10) Amend Section 105.7.4 to read as follows:

105.7.4 Cryogenic fluids.

A construction permit is required for installation of or alteration to stationary cryogenic fluid storage systems where the system capacity exceeds the amounts listed in Table [105.6.10] 105.6.11. Maintenance performed in accordance with this code is not considered an alteration and does not require a construction permit.

(11) Amend Section 105.7.14 as follows:

105.7.14 Smoke control or smoke exhaust systems.

Construction permits are require for installation of or alteration to smoke control or smoke exhaust systems regulated by Chapter 9. Maintenance performed in accordance with this code is not considered to be an alteration and does not require a permit.

 $([\frac{11}{2}]$ Add Section $[\frac{105.7.17}{105.7.21}]$ as follows: $[\frac{105.7.17}{105.7.17}]$ 105.7.21 HPM Facilities.

A construction permit is required to install equipment or facilities that store, handle, or use hazardous production materials.

 $([\frac{12}{13}]$ Add Section $[\frac{105.7.18}{105.7.22}]$ as follows:

 $[\frac{105.7.18}{105.7.22}]$ 105.7.22 High Piled Storage.

A construction permit is required to establish and construct high piled storage areas exceeding 500 square feet in a building or portion thereof.

 $([\frac{13}{14}]$ Add Section $[\frac{105.7.19}{105.7.23}]$ as follows: $[\frac{105.7.19}{105.7.19}]$ 105.7.23 Refrigeration Equipment.

A construction permit is required to install a mechanical refrigeration unit or system regulated by Chapter 6 of the IFC.

([14]15) Add Section [105.7.20] 105.7.24 as follows:

 $[\frac{105.7.20}{105.7.24}]$ Places of Assembly.

A construction permit is required for all new Place of Assembly uses.

[(15) ADD SECTION 105.7.21 AS FOLLOWS:

105.7.21 SMOKE CONTROL SYSTEM. A
CONSTRUCTION PERMIT IS REQUIRED FOR ALL NEW
INSTALLATIONS OF, OR MODIFICATIONS—TO, SMOKE
CONTROL SYSTEMS RECULATED BY SECTION 909.]

[-(16) REPEALED BY ORD: 2693.]

 $([\frac{17}{16}]$ Add Section 110.5 as follows:

110.5 Fire or explosion damaged buildings. The owner, occupant or other person having under his control any property or materials on a property damaged by fire or explosion shall, ordered by the when 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 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.

([18]17) Add/amend Section 202 as follows:

1. Amend the definition(s) of "Facility" and
"High Rise Buildings" to read as follows:

FACILITY.

A building or use in a fixed location including exterior storage areas for flammable and combustible substances and hazardous materials, piers, wharves, tank farms, parks, plazas, sport fields or other public assembly areas and similar uses. This term includes recreational vehicles, mobile home and manufactured housing parks, sales and storage lots.

HIGH-RISE BUILDINGS:

A building with an occupied floor level located more than 75 feet above the lowest level of fire department vehicle access.

2. Add the following definition(s):
GROSS AREA:

The gross area means the total area of all floors, measured from the exterior face, outside dimensions or exterior column line of a building, including basements, cellars, and balconies, but not including unexcavated areas. Where walls and columns are omitted in the construction of a building, such as an open shed or marquee, the exterior wall of the open side or sides, for the purpose of calculating gross area, will be the edge of the roof, including gutters.

POWER TAP:

[POWER TAP.] A listed device for indoor use consisting of an attachment plug on one end of a flexible cord and two or more receptacles on the opposite end with overcurrent protection.

 $([\frac{19}{18}]$ Amend Section 307.1 to read as follows:

307.1 General. A person shall not kindle or maintain, or authorize to be kindled or maintained, any open burning unless conducted and approved in accordance with

Sections 307.1.1 through 307.5, see also Chapter 173-425 WAC.

([20]19) Amend Section 307.4.3 to read as follows:

307.4.3 Portable outdoor fireplaces. Portable outdoor fireplaces shall be used in accordance with the manufacturer's instructions and shall not be operated within 15 feet (3048 mm) of a structure or combustible material.

([21]20) Add Section [308.1.6.3] 308.1.6.4 as follows:

[308.1.6.3] 308.1.6.4 Fixed installations of open flame devices. Fixed installations of open flame devices, including but not limited to LPG fireplaces and fire pits, shall require permits as set forth in Section 105.

([22]21) Amend 314.4 to read as follows:

314.4 Vehicles.

Liquid- or gas-fueled vehicles, fueled equipment, boats or other motorcraft shall not be located indoors except as follows:

- 1. Batteries are disconnected.
- 2. Fuel in fuel tanks does not exceed one-quarter tank or 5 gallons (19 L) (whichever is least).
- 3. Fuel tanks and fill openings are closed and sealed to prevent tampering.
- 4. Vehicles, fueled equipment, boats, or other motorcraft equipment are not fueled or defueled within the building.

([23]22) Add Section 503.1.1.1 to read as follows:

503.1.1.1 Extent of access.

The fire apparatus access roadway shall extend to within 50 feet of at least 25 percent of the perimeter of the building. Where access roadway cannot be provided, the Fire Code Official is authorized to require an approved fire protection system or systems as provided in RMC 15.06.017.

Exception: Detached one- and two-family dwelling units.

([24]23) Add Section 503.1.1.2 to read as follows:

503.1.1.2 Easements.

When directed by the Fire Code Official, emergency vehicle access routes or areas, including Emergency Vehicle Operations Areas, turnarounds, overhang areas, firefighter access, emergency egress, or similar, that are not within a public right-of-way shall be maintained in an approved and recorded Emergency Vehicle Access and/or Firefighter Access Easement.

([25]24) Add Section 503.2.7.1 as follows:

503.2.7.1 Maximum grade.

All required access roadways shall be constructed so that the maximum gradient is 10 percent. Where this requirement cannot be met, the Fire Code Official is authorized to require approved safeguards as identified in RMC 15.06.017.

([26]25) Amend Section 503.2.8, to read as follows:

503.2.8 Angles of approach and departure.

The angles of approach and departure for fire apparatus access roads shall be within the limits established by the Fire Code Official based on the fire department's apparatus. No access roadway or access road approach to a public way shall have an arc higher than 12 inches in less than 20 feet. Where these requirements cannot be provided, the Fire Code Official is authorized to require approved safeguards as identified in RMC 15.06.017.

([27]26) Amend Section [503.4.1] 503.4 as follows:

[503.4.1] 503.4 Obstructions of fire lanes and fire apparatus access roads. Fire lanes and fire apparatus access roads shall not be obstructed in any manner, including the parking of vehicles. The minimum widths and clearances established in Section 503.2.1 and 503.2.2 shall be maintained at all

times. 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 503.4 of the International 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 removed shall be responsible for all towing, storage, and other charges connected therewith.

([28]27) Add Section 505.3 to read as follows:

505.3 Street and road designations. Street and road designations shall be as determined and assigned by the Chief.

([29]28) Amend Section 507.5 to read as follows:

507.5 Fire hydrant systems.

Fire hydrant systems shall comply with Sections 507.5.1 through 507.5.6. Hydrant spacing in commercial and multi-family shall be 300' on center; hydrant spacing for single-family residences shall be 600' on center.

 $([3\theta]\underline{29})$ Amend Section 507.5.1 to read as follows: 507.5.1 Where required.

Where a portion of the facility or building hereafter constructed or moved into or within the jurisdiction is more than 150 feet from a hydrant on a fire apparatus access road, as measured by an approved route around the exterior of the facility or building, on-site fire hydrants and mains shall be provided where required by the Fire Code Official.

Exceptions:

1. For group R-3, Group U and one- and two-family dwellings, the distance requirement shall be 300 feet.

2. For Group R-3, Group U, and one- and two-family dwellings equipped throughout with an approved automatic sprinkler system installed in accordance with Section 903.3, the distance requirement shall be 600 feet.

([31]30) Amend Section 507.5.1.1 to read as follows:

507.5.1.1 Hydrant for sprinkler and standpipe systems. Buildings equipped with a sprinkler or standpipe system installed in accordance with Section 903 or 905 shall have a fire hydrant within 40 feet (12.2 m) of the fire department connections.

Exception: The distance shall be permitted to exceed 40 feet (12.2 m) where approved by the Fire Code Official.

 $([\frac{32}{31}]$) Replace the existing language in Section 510 with the following:

Section 510 Emergency responder radio coverage.

Emergency responder radio coverage systems shall be provided in buildings if it is

determined by the Fire Code Official that there is inadequate emergency radio coverage within the building. Such systems shall be installed as required in Redmond Fire Department Standards.

([33]32) Amend Section 602 to read as follows:

602.1 Definitions. The following terms are defined in Chapter 2:

BATTERY SYSTEMS, STATIONARY LEAD-ACID

BATTERY TYPES

COMMERCIAL COOKING APPLIANCES

CRITICAL CIRCUIT

EMERGENCY POWER SYSTEM

HOOD

Type I

Type II

POWER TAP

REFRIGERANT

REFRIGERATION SYSTEM

 $([\frac{34}{33}]$ Amend Section 603.3 to read as follows:

603.3 Fuel oil storage systems.

Fuel oil storage systems shall be installed in accordance with this code. Fuel oil piping systems shall be installed in accordance with the International Mechanical Code. Secondary containment shall be provided for all new installations of storage tanks and associated piping.

Exception: Piping that is integral to the fuel-fired appliance.

([35]34) Amend Section 901.4.1 to read as follows:

901.4.1 Required fire protection systems.

Fire protection systems required by this code or the International Building shall be installed, repaired, operated, tested, and maintained in accordance with this code. A fire protection system for which a design option, exception, reduction to the provisions of this code or the International Building Code has been granted shall be considered to be a required The Redmond Fire Department system. Standards applicable to the particular system shall constitute the primary reference document.

([36]35) Amend Section 901.7 to read as follows:

901.7 Systems out of service.

Where a fire protection system is out of service, the fire department and the Fire Code Official shall be notified immediately and, where required by the Fire Code Official, the building shall either be evacuated or an approved fire watch shall be provided for all occupants left unprotected by the shut down until the fire protection system has been returned to service.

Where utilized, fire watches shall be provided with at least one approved means for notification of the fire department and their only duty shall be to perform constant patrols of the protected premises and keep watch for fires.

([37]36) Add Section 901.11 to read as follows:

901.11 Problematic Fire Protection Systems:
In the event of repeated system malfunctions or maintenance related activations, the Fire Code Official may declare the system to be a problematic system and is authorized to direct corrective action to be taken. The Fire Code Official is authorized to have the fire protection system placed out of service. The procedures found in Section 901.7 "Systems out of service" shall be followed.

([38]37) Amend Section 903.2 to read as follows:

903.2 Where Required.

Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in the Redmond Municipal Code Section 15.06.016, and Sections 903.2.1 through 903.2.12.

([39]38) Amend Section 903.4.2 to read as follows:

903.4.2 Alarms.

Approved audible and visible notification appliances shall be provided for every automatic sprinkler system accordance with Section 907 and throughout areas designated by the Fire Code Official. Sprinkler water-flow alarm devices shall be activated by water flow equivalent to the flow of a single sprinkler of the smallest orifice size installed in the system. Alarm devices shall be provided on the exterior of the building in an approved location. Where a fire alarm system is installed, activation of the automatic sprinkler system shall activate the building fire alarm system. Exception: With approval of the Fire Code

Exception: With approval of the Fire Code Official, audible and visible alarm notification appliances may be omitted for approved residential sprinkler systems in 1-or 2-dwelling units if not otherwise specifically required.

([40]39) Amend Section 903.4.3 to read as follows:

903.4.3 Floor control valves.

Approved supervised indicating control valves shall be provided at the point of connection to the riser on each floor in multi-story buildings.

Exception: When specifically approved by the Fire Code Official.

([41]40) Add Section 905.3.9 to read as follows:

905.3.9 High Rise Building Standpipes.

High rise standpipe risers shall be combination standpipe/sprinkler risers using a minimum pipe size of 6 inches. [TWO] One 2 1/2 inch hose connection[s] shall be provided on every intermediate floor level landing in every required stairway and elsewhere as required by NFPA 14. Where, and only where, static or residual water pressures at any hose outlet exceeds 175 psi (1207kPa), approved pressure regulating devices (PRV) shall be installed to limit the pressure to a range between 125 and 175 psi at not less than 300 gpm. The pressure on the inlet side of the pressure-regulating

device shall not exceed the rated working pressure of the device. An additional nonregulated hose connection located directly below the PRV or an equally sized bypass around the PRV with a normally closed control valve shall be provided at each reduced pressure connection. Each nonregulated hose connection shall be labeled 'High Pressure-No PRV'. Each sigh shall have 1/2" white letters on a red background [PRESSURE REDUCTION VALVES (PRV) ARE REQUIRED, EACH HOSE CONNECTION SHALL BE PROVIDED WITH ITS OWN PRV. THE SYSTEM SHALL BE DESIGNED TO PROVIDE A MINIMUM FLOW OF 300 CPM AT A -MINIMUM PRESSURE OF - 150 PSI (MAXIMUM - 200 PSI) AT -EACH STANDPIPE CONNECTION, IN ADDITION TO THE FLOW AND PRESSURE REQUIREMENTS CONTAINED IN NFPA 14.]

([42]41) Amend Section 907.2 to read as follows:

907.2 Where required - new buildings and structures.

An approved fire alarm system installed in accordance with the provisions of this code NFPA 72 shall be provided in new and buildings and structures where there is a required sprinkler system, except one- and two-family dwellings as defined in the IRC in accordance with Sections 907.2.1 and 907.23, and provide occupant through notification in accordance with Section 907.5, unless other requirements are provided [REQUIRED] by another section of this code.

A minimum of one manual fire alarm box shall be provided in an approved location to initiate a fire alarm signal to fire alarm systems employing automatic fire detectors or water-flow detection devices. Where other sections of this code allow elimination of fire alarm boxes due to sprinklers, a single fire alarm box shall be installed.

Exceptions:

1. The manual fire alarm box is not required for fire alarm systems dedicated to elevator recall control and supervisory service.

([43]42) Amend section 1103.8.1 to read as follows:

and R occupancies shall be provided with single-station smoke alarms in accordance with Section 907.2.11. Interconnection and power sources shall be in accordance with [7 EXCEPT AS PROVIDED IN] sections 1103.8.2 and 1103.8.3, respectively.

Exception: Where smoke detectors connected to a fire alarm system have been installed as a substitute for smoke alarms.

([44]43) Amend Section 3311.1 to read as follows:

3311.1 Stairways required.

Where a building has been constructed to a building height of 50 feet or four stories as measured from the lowest level of fire department vehicle access, or where an existing building exceeding 50 feet in

building height is altered, at least one temporary lighted stairway shall be provided unless one or more of the permanent stairways are erected as the construction progresses.

([45]44) Amend Section 5001.5.1 to read as follows:

5001.5.1 Hazardous Materials Management Plan.

Where required by the Fire Code Official, an application for a permit shall include a Hazardous Materials Management Plan (HMMP). The HMMP shall include a facility site plan designating the following:

- 1. Access to each storage and use area.
- 2. Location of emergency equipment.
- 3. Location where liaison will meet emergency responders.
- Facility evacuation meeting point locations.
- 5. The general purpose of other areas within the building.

- 6. Location of all above-ground and underground tanks and their appurtenances including, but not limited to, sumps, vaults, below grade treatment systems, and piping.
- 7. The hazard classes in each area.
- Locations of all control areas and GroupH occupancies.
- 9. Emergency exits.
- 10. Location of spill control equipment.

([46]45) Amend Section 5001.5.2 to read as follows:

5001.5.2 Hazardous Materials Inventory Statement (HMIS).

Where required by the Fire Code Official, an application for a permit shall include an HMIS. The HMIS shall be provided using a Redmond Fire Department approved format. The HMIS shall include the following information:

- 1. Manufacturer's name.
- Chemical name, trade names, hazardous ingredients.

- 3. Hazard classification.
- 4. MSDS or equivalent.
- 5. United Nations (UN), North America (NA)
- or the Chemical Abstract Service (CAS) identification number.
- Maximum quantity stored or used on-site at one time.
- 7. Storage conditions related to the storage type, temperature, and pressure.

([47]46) Amend Section 5003.1 to read as follows:

5003.1 Scope. The storage, use and handling of all hazardous materials shall be in accordance with this section and shall comply with the provisions of the City of Redmond Wellhead Protection Ordinance.

([48]47) Add Section 5003.9.11 as follows:

5003.9.11 Manufacturer's limitations. The storage and use of hazardous materials shall not exceed the manufacturer's limitations on shelf life and any other restrictions on use.

([49]48) Amend Section 5004.2.2 to read as follows:

5004.2.2 Secondary containment for hazardous material liquids and solids.

Where required by Table 5004.2.2 buildings, rooms, [AREAS,] tanks, and associated piping or areas used for the storage of hazardous materials, liquids, or solids shall be provided with secondary containment in accordance with this section when the capacity of an individual vessel or the aggregate capacity of multiple vessels exceeds the following:

- 1. Liquids: Capacity of an individual vessel exceeds 55 gallons (208 L) or the aggregate capacity of multiple vessels exceeds 1,000 gallons (3785 L); and
- 2. Solids: Capacity of an individual vessel exceeds 550 pounds (250 kg) or the aggregate capacity of multiple vessels exceeds 10,000 pounds (4540 kg).

(49) Amend Section 5307.5.2 to read as follows:

5307.5.2 Emergency alarm system.

- An emergency alarm system shall comply with all the following:
- 1. Continuous gas detection shall be provided to monitor areas where carbon dioxide can accumulate.
- 2. The threshold for activation of an alarm shall not exceed 5,000 parts per million (9,000 mg.m³).
- 3. Activation of the emergency alarm system shall initiate a local alarm at the entrance to, and inside rooms or areas where a CO₂ system is installed.
- 4. A warning sign is required at the entrance to the room or area: 'Carbon Dioxide Alarm. Do Not Enter. Call 911'
- (50) Add Section 5608.1.1 as follows:
 5608.1.1 Fireworks.

 Refer to Chapter 9.26 RMC (Fireworks) and to
 RCW 70.77.120 et seq. (State Fireworks Law).
- (51) Add Section 5703.4.1, to read as follows: 5703.4.1, Secondary Containment.

Secondary containment shall be provided for all new installations of storage tanks and associated piping.

15.06.016 Fire sprinkler systems.

- (A) The following regulations constitute general requirements for fire sprinkler systems [-]:
- (1) All approved fire sprinkler systems shall meet the requirements of the Redmond Fire Department Standards, Redmond Fire Code, and the applicable NFPA Standards. 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. All underground sprinkler supply piping shall be included on civil drawings and shall be approved by the water supplier and the Redmond Fire Department.
- (2) An area separation wall or fire wall, or occupancy separation or fire barrier wall, or a distance of 10 feet or less shall not constitute a separation between two structures on the same property.

(B) For the purposes of this section, the following definition shall apply:

Gross Area. The gross area means the total area of all floors, measured from the exterior face, outside dimensions or exterior column line of a building, including basements, cellars, and balconies, but not including unexcavated areas. Where walls and columns are omitted in the construction of a building, such as an open shed or marquee, the exterior wall of the open side or sides, for the purpose of calculating gross area, will be the edge of the roof, including gutters.

(C) Where Required. An approved fire sprinkler system shall be required in the following structures:

(1) Commercial.

(a) In any structure where the gross area is 3,000 square feet or more.

Exception: Fire Sprinklers are allowed to be omitted under roof structures when all of the following conditions exist:

- (i) Roof structures are stand alone, detached, and built with non-combustible building materials.
- (ii) Used to provide weather protection for people.
- (iii) Are open on greater than fifty percent of the perimeter sides to allow ventilation of heat and smoke.
- (iv) Are not intended to store combustibles or have combustible materials contained beneath the roof line. The roof structure shall not extend over any transit vehicle or curb.
- (v) When no other code or applicable standard is requiring fire sprinklers.
- * These can include: bus and transit shelters, covered pedestrian paths, and similar structures not attached to or within ten feet of buildings.
- (b) In any structure where the calculated fire flow demand exceeds available flow.

- (c) In buildings with an A-2 occupancy where one or more of the following exists:
- An occupant load greater than 100,
- \bullet An A-2 fire area is located on a floor other than the level of exit discharge.
 - (d) All nightclubs, defined as follows:

Nightclub. An A-2 Occupancy use under the [2012] 2006
International Building Code in which the aggregate area of concentrated use of unfixed chairs and standing space that is specifically designated and primarily used for dancing or viewing performers exceeds three hundred fifty square feet, excluding adjacent lobby areas. "Nightclub" does not include theaters with fixed seating, banquet halls, or lodge halls.

- (e) In any building with an assembly occupancy where the total occupant load of the building is over 200.
- (f) Existing commercial buildings,
 where one of the following applies:

- Additions resulting in a gross area greater than 5,000 square feet, or
- Sprinklers may be required in buildings that undergo a change of use or occupancy, refer to IFC Section 102.3.
- (2) Residential One- and Two-Family
 dwellings:
- (a) An approved automatic fire sprinkler system shall be installed in new one- and two-family dwellings and townhouses as described in the International Residential Code in accordance with Section 903.3.1 of the International Fire Code, [2012] 2015 Edition.

Exception: This subsection (2)(a) does not require the installation of an approved fire sprinkler system in any mobile home or manufactured home. This exception is limited to this subsection (2)(a) and nothing herein exempts a mobile home or manufactured home from any other requirement to install an approved automatic fire sprinkler system under any other section or

subsection of this code or of any international code adopted by the City.

(b) Existing detached one- and two-family dwelling units where additions result in a gross area greater than 6,000 square feet must be retrofitted with an automatic sprinkler system throughout.

Exception: Additions to detached one- or two-family dwellings of up to 500 square feet are permitted without compliance with this section. This is a one-time exemption, and this exemption must be recorded with King County Records and Elections.

Point of Information:

Application of this exception only applies if you have adequate fire flow as required by RFDS 3.0; this exception is uncommon due to the water system design.

(3) Where required elsewhere by the Redmond Fire Code or the International Building Code.

Section 3. Severability. If any section, sentence, clause or phrase of this ordinance should be held to be invalid or

unconstitutional by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity or constitutionality of any other section, sentence, clause or phrase of this ordinance.

Section 4. Effective date. A summary of this ordinance shall be published in the city's official newspaper, or as otherwise provided by law, and shall take effect on July 1, 2016.

ADOPTED by the Redmond City Council this 7th day of June, 2016.

CITY OF REDMOND

ATTEST:

Wichelle M. Har MICHELLE M. HART, MMC, CITY CLERK

(SEAL)

APPROVED AS TO FORM:

JAMES HANEY, CITY ATTORNEY

FILED WITH THE CITY CLERK: May 17, 2016 PASSED BY THE CITY COUNCIL: June 7, 2016 SIGNED BY THE MAYOR: PUBLISHED: EFFECTIVE DATE: ORDINANCE NO. 2834

June 10, 2016 June 13, 2016 June 18, 2016

YES: ALLEN, BIRNEY, CARSON, MARGESON, SHUTZ, STILIN