Ordinance No. 6004

AN ORDINANCE TO ADOPT THE 2012 INTERNATIONAL FUEL GAS CODE BY AMENDING CHAPTER 15.22 OF THE RAPID CITY MUNICIPAL CODE

WHEREAS, in Chapter 15.22 of the Rapid City Municipal Code, the City of Rapid City has adopted the 2009 edition of the International Fuel Gas Code; and

WHEREAS, the City wishes to amend R.C.M.C. Chapter 15.22 to adopt the 2012 edition of the International Fuel Gas Code; and

WHEREAS, the City wishes to retain those additional requirements it had adopted with regard to the 2009 edition of the International Fuel Gas Code and apply them to the 2012 edition of the International Fuel Gas Code; and

WHEREAS, the Common Council desires to amend R.C.M.C. Chapter 15.22 to adopt the 2012 edition of the International Fuel Gas Code and to incorporate the additional requirements that the City had applied to the previous edition of the International Fuel Gas Code.

NOW THEREFORE, BE IT ORDAINED by the City of Rapid City, that Chapter 15.22 of the Rapid City Municipal Code is hereby amended to read in its entirety as follows:

CHAPTER 15.22: INTERNATIONAL FUEL GAS CODE

Section

- 15.22.010 IFGC adoption.
- 15.22.020 IFGC Chapter 2, Section 201.3 Terms defined in other codes-Amended.
- 15.22.030 IFGC Chapter 3, Section 301.2 Energy utilization—Deleted.
- 15.22.040 IFGC Chapter 3, Section 301.3 Listed and labeled Amended.
- 15.22.050040 IFGC Chapter 3, Section 301.6 Plumbing connections—Amended.
- 15.22.060050 IFGC Chapter 3, Section 301.11 Flood hazard–Amended.
- 15.22.070060 IFGC Chapter 3, Section 303.3 Prohibited locations-Amended.
- 15.22.080070 IFGC Chapter 3, Section [M] 306.1 Clearances Access for maintenance and replacement—Amended.
- 15.22.090 IFGC Chapter 3, Section [M] 306.3 Appliances in attics—Amended.
- 15.22.100 IFGC Chapter 3, Section [M] 306.3.1 Electrical requirements Amended.
- 15.22.110 IFGC Chapter 3, Section [M] 306.4 Appliances under floors Amended.
- 15.22.120 IFGC Chapter 3, Section [M] 306.4.1 Electrical requirements Amended.
- 15.22.130080 IFGC Chapter 3, Section [M] 306.5 Equipment and appliances on roofs or elevated structures—Amended.
- 15.22.140 IFGC Chapter 3, Section [M] 306.5.2 Electrical requirements—Amended.
- 15.22.150090 IFGC Chapter 3, Section [M] 307.3 Drain pipe materials and sizes–Amended.
- 15.22.160 IFGC Chapter 3, Section 309.2 Connections Amended.
- 15.22.170100 IFGC Chapter 3, Section 310 Electrical bonding–Deleted.
- 15.22.180 IFGC Chapter 5, Section 504.3.9.1 Tee and wye fittings—Deleted.
- 15.22.190110 IFGC Chapter 6, Section 621.2 Prohibited use–Deleted.

- 15.22.200120 IFGC Chapter 6, Section 621.4 Prohibited locations—Amended.
- 15.22.210130 IFGC Chapter 6, Section 624.1.1 Installation requirements–Amended.
- 15.22.220140 IFGC Chapter 6, Section 624.2 Water heaters utilized for space heating—Amended.
- 15.22.230 IFGC Chapter 7, Section 703.6 Electrical wiring and equipment Amended.

15.22.010 IFGC adoption.

There is adopted by the City of Rapid City, for the purpose of regulating fuel-gas appliances, that certain code published by the International Code Council, Inc., known as the International Fuel Gas Code, 20092012 edition, specifically Chapters 2, 3, 5, 6, 7, 8 and Appendix B thereof. A copy of said code is on file in the office of the City Building Official. The administration and regulation of fuel-gas appliances shall be regulated by Chapter 15.04 Administration.

15.22.020 IFGC Chapter 2, Section 201.3 Terms defined in other codes-Amended.

<u>IFGC Chapter 2, Section 201.3 Terms defined in other codes is hereby amended to read in its</u> entirety as follows:

201.3 Terms defined in other codes. Where terms are not defined in this code and are defined in the current Electrical Code adopted by the City of Rapid City, International Building Code, International Fire Code, the current Mechanical Code adopted by the City of Rapid City, or the current Plumbing Code adopted by the City of Rapid City, such terms shall have meanings ascribed to them as in those codes.

15.22.030 IFGC Chapter 3, Section 301.2 Energy utilization—Deleted.

IFGC Chapter 3, Section 301.2, Energy utilization, is hereby deleted in its entirety.

15.22.040 IFGC Chapter 3, Section 301.3 Listed and labeled-Amended.

-301.3 Listed and labeled. Appliances regulated by this code shall be listed and labeled.

15.22.050040 IFGC Chapter 3, Section 301.6 Plumbing connections—Amended.

<u>IFGC Chapter 3, Section 301.6 Plumbing connections is hereby amended to read in its</u> entirety as follows:

301.6 Plumbing connections. Potable water supply and building drainage system connections to appliances regulated by this code shall be in accordance with the current Plumbing Code adopted by the City of Rapid City.

15.22.060050 IFGC Chapter 3, Section 301.11 Flood hazard-Amended.

IFGC Chapter 3, Section 301.11 Flood hazard is hereby amended to read in its entirety as follows:

301.11 Flood hazard. See Chapter 15.32, Flood Area Construction Regulations, of the Rapid City Municipal Code.

15.22.070060 IFGC Chapter 3, Section 303.3 Prohibited locations-Amended.

<u>IFGC Chapter 3, Section 303.3 Prohibited locations is hereby amended to read in its entirety as follows:</u>

303.3 Prohibited locations. Appliances shall not be located in, or obtain combustion air from, any of the following rooms or spaces:

- 1. Sleeping rooms.
- 2. Bathrooms.
- 3. Toilet rooms.
- 4. Storage closets.
- 5. Surgical rooms.

Exceptions:

- 1. Direct-vent appliances that obtain all combustion air directly from the outdoors.
- 2. Vented room heaters, wall furnaces, vented decorative appliances and decorative appliances for installation in vented solid fuel-burning fireplaces, provided that the room meets the required volume criteria of Section 304.5.
- 3. Appliances installed in an enclosure in which all combustion air is taken from sources other than a bedroom or bathroom. Access to such enclosure shall be through a solid weather-stripped door, equipped with an approved self-closing device.

15.22.080070 IFGC Chapter 3, Section [M] 306.1 <u>Clearances Access</u> for maintenance and replacement–Amended.

IFGC Chapter 3, Section [M] 306.1 Access for maintenance and replacement is hereby amended to read in its entirety as follows:

[M] 306.1 Clearances Access for maintenance and replacement. Clearances around appliances to elements of permanent construction, including other installed equipment and appliances, shall be a minimum 30 inches or the manufacturer's suggested clearance to allow inspection, service, repair, or replacement without removing such elements of permanent construction or disabling the function of a required fire resistance rated assembly. These

elearances shall be at all service sides of appliances and equipment. The required clearance shall be from the floor to a height of 6'6" above the floor. Mechanical equipment shall be allowed within this area. Appliances shall be accessible for inspection, service, repair and replacement without disabling the function of a fire-resistance-rated assembly or removing permanent construction, other appliances, or any other piping or ducts not connected to the appliance being inspected, serviced, repaired or replaced. A level working space at least 30 inches deep and 30 inches wide (762 mm by 762 mm) shall be provided in front of the control side to service an appliance.

Exception: This section shall not apply to replacement appliances installed in existing compartments and alcoves, where the working space clearances are in accordance with the equipment or appliance manufacturer's installation instructions.

15.22.090 IFGC Chapter 3, Section [M] 306.3 Appliances in attics-Amended.

[M] 306.3 Appliances in attics. Attics containing appliances requiring access shall be provided with an opening and unobstructed passageway large enough to allow removal of the largest appliance. The passageway shall not be less than 30 inches (762 mm) high and 22 inches (559 mm) wide. The passageway shall have continuous solid flooring not less than 24 inches (610 mm) wide. A level service space not less than 30 inches (762 mm) deep and 30 inches (762 mm) wide shall be present at the front or service side of the appliance. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm), where such dimensions are large enough to allow removal of the largest appliance.

Exceptions:

- 1. The passageway and level service space are not required where the appliance is capable of being serviced and removed through the required opening.
- 2. Where the passageway is unobstructed and not less than 6 feet (1,829 mm) high and 22 inches wide for its entire length, the passageway shall be not greater than 50 feet (15,250 mm) in length.

15.22.100 IFGC Chapter 3, Section [M] 306.3.1 Electrical requirements Amended.

[M] 306.3.1 Electrical requirements. A luminaire controlled by a switch located at the required passageway opening and a receptacle outlet shall be provided at or near the equipment location in accordance with the current Electrical Code adopted by the City of Rapid City.

15.22.110 IFGC Chapter 3, Section [M] 306.4 Appliances under floors-Amended.

[M] 306.4 Appliances under floors. Under floor spaces containing appliances requiring access shall be provided with an access opening and unobstructed passageway large enough to remove the largest appliance. The passageway shall not be less than 30 inches (762 mm) high and 22 inches (559 mm) wide. A level service space not less than 30 inches (762 mm) deep and 30 inches (762 mm) wide shall be present at the front or service side of the appliance. If the

depth of the passageway or the service space exceeds 12 inches (305 mm) below the adjoining grade, the walls of the passageway shall be lined with concrete or masonry. Such concrete or masonry shall extend a minimum of 4 inches (102 mm) above the adjoining grade and shall have sufficient lateral bearing capacity to resist collapse. The clear access opening dimensions shall be a minimum of 22 inches by 30 inches (559 mm by 762 mm), where such dimensions are large enough to allow removal of the largest appliance.

Exceptions:

- 1. The passageway is not required where the level service space is present when the access is open and the appliance is capable of being serviced and removed through the required opening.
- 2. Where the passageway is unobstructed and not less than 6 feet high (1,829 mm) and 22 inches wide for its entire length, the passageway shall not be limited in length.

15.22.120 IFGC Chapter 3, Section [M] 306.4.1 Electrical requirements-Amended.

[M] 306.4.1 Electrical requirements. A luminaire controlled by a switch located at the required passageway opening and a receptacle outlet shall be provided at or near the equipment location in accordance with the current Electrical Code adopted by the City of Rapid City.

15.22.130080 IFGC Chapter 3, Section [M] 306.5 Equipment and appliances on roofs or elevated structures—Amended.

<u>IFGC Chapter 3, Section [M] 306.5 Equipment and appliances on roofs or elevated structures</u> is hereby amended to read in its entirety as follows:

[M] 306.5 Equipment and appliances on roofs or elevated structures. Equipment and appliances installed on roofs or elevated structures shall be readily accessible. Where equipment requiring access or appliances are located on an elevated structure or the roof of a building such that personnel will have to climb higher than 12 feet above grade to access such equipment or appliances, an interior or exterior means of access shall be provided. Such access shall not require climbing over obstructions greater than 30 inches (762 mm) in height or walking on roofs having a slope greater than 4 units vertical in 12 units horizontal (33-percent slope). Such access shall not require the use of portable ladders.

Permanent ladders installed to provide the required access shall comply with the following minimum design criteria:

- 1. The side railing shall extend above the parapet or roof edge not less than 30 inches (762 mm).
- 2. Ladders shall have rung spacing not to exceed 14 inches (356 mm) on center. The uppermost rung shall be a maximum of 24 inches (610 mm) below the upper edge of the roof hatch, roof or parapet, as applicable.

3. Ladders shall have a toe spacing not less than 6 inches (152 mm) deep. 4. There shall be a minimum of 18 inches (457 mm) between rails. 5. Rungs shall have a minimum 0.75-inch (19 mm) diameter and be capable of withstanding a 300-pound (136.1 kg) load. 6. Ladders over 30 feet (9144 mm) in height shall be provided with offset sections and landings capable of withstanding 100 pounds per square foot (488.2 kg/m²). Landing dimensions shall be not less than 18 inches (457 mm) and not less than the width of the ladder served. A guard rail shall be provided on all open sides of the landing. 7. Climbing clearance. The distance from the centerline of the rungs to the nearest permanent object on the climbing side of the ladder shall be a minimum of 30 inches (762 mm) measured perpendicular to the rungs. This distance shall be maintained from the point of ladder access to the bottom of the roof hatch. A minimum clear width of 15 inches (381 mm) shall be provided on both sides of the ladder measured from the midpoint of and parallel with the rungs except where cages or wells are installed. 8. Landing required. The ladder shall be provided with a clear and unobstructed bottom landing area having a minimum dimension of 30 inches (762 mm) by 30 inches (762 mm) centered in front of the ladder. 9. Ladders shall be protected against corrosion by approved means. 10. Access to ladders shall be provided at all times. Catwalks installed to provide the required access shall be not less than 24 inches (610 mm) wide and shall have railings as required for service platforms. - Exceptions: 1. Permanent exterior ladders providing roof access need not extend closer than twelve (12) feet to the finish grade. The requirement for a permanent exterior ladder shall begin when the roof line is at twelve (12) feet. 2. A portable ladder may be used for access for furnaces on the single-story portion or a Group R or U Occupancy. 3. Permanent ladders for equipment access need not be provided at parapets or walls less than thirty (30) inches (762 mm) in height. — Permanent ladders installed to provide the required access shall comply with the following minimum design criteria:

The side railing shall extend above the parapet or roof edge not less than 30 inches (762 mm).
 Ladders shall have rung spacing not to exceed 14 inches (356 mm) on center.
 Ladders shall have a toe spacing not less than 6 inches (152 mm) deep.
 There shall be a minimum of 14 inches (356 mm) between rails.
 Rungs shall have a minimum 0.75 inch (19 mm) diameter and be capable of withstanding a 300 pound (136.1 kg) load.
 Ladders over 18 feet in height shall be provided with offset sections and landings capable of withstanding 100 pounds (488.2 kg/m²) per square foot.
 Ladders shall be protected against corrosion by approved means.
 Catwalks installed to provide the required access shall be not less than 24 inches (610 mm)

Exception: This section shall not apply to Group R-3 occupancies.

wide and shall have railings as required for service platforms.

15.22.140 IFGC Chapter 3, Section [M] 306.5.2 Electrical requirements-Amended.

[M] 306.5.2 Electrical requirements. A receptacle outlet shall be provided at or near the equipment location in accordance with the current Electrical Code adopted by the City of Rapid City.

15.22.150090 IFGC Chapter 3, Section [M] 307.3 Drain pipe materials and sizes—Amended.

<u>IFGC Chapter 3, Section [M] 307.3 Drain pipe materials and sizes is hereby amended to read in its entirety as follows:</u>

[M] 307.3 Drain pipe materials and sizes. Components of the condensate disposal system shall be cast iron, galvanized steel, copper, cross-linked polyethylene, polybutylene, polyethylene, ABS, CPVC or PVC pipe or tubing. All components shall be selected for the pressure and temperature rating of the installation. Joints and connections shall be made in accordance with the applicable provisions of the current pPlumbing Code adopted by the City of Rapid City relative to the material type. Condensate waste and drain line size shall be not less than 3/4-inch (19 mm) internal diameter and shall not decrease in size from the drain pan connection to the place of condensate disposal. Where the drain pipes from more than one unit are manifold together for condensate drainage, the pipe or tubing shall be sized in accordance with an approved method.

15.22.160 IFGC Chapter 3, Section 309.2 Connections Amended.

—309.2 Connections. Electrical connections between equipment and the building wiring, including the grounding of the equipment, shall conform to the current Electrical Code adopted by the City of Rapid City.

15.22.170100 IFGC Chapter 3, Section 310 Electrical bonding–Deleted.

IFGC Chapter 3, Section 310, Electrical bonding, is hereby deleted in its entirety.

15.22.180 IFGC Chapter 5, Section 504.3.9.1 Tee and wye fittings Deleted.

— IFGC Chapter 5, Section 504.3.9.1, Tee and wye fittings, is hereby deleted in its entirety.

15.22.190110 IFGC Chapter 6, Section 621.2 Prohibited use-Deleted.

IFGC Chapter 6, Section 621.2, Prohibited use, is hereby deleted in its entirety.

15.22.200120 IFGC Chapter 6, Section 621.4 Prohibited locations-Amended.

IFGC Chapter 6, Section 621.4 Prohibited locations is hereby amended to read in its entirety as follows:

621.4 Prohibited locations. Unvented room heaters shall not be installed within occupancies other than Group U, unattached accessory structures. The location of unvented room heaters shall also comply with Section 303.3.

15.22.210130 IFGC Chapter 6, Section 624.1.1 Installation requirements-Amended.

IFGC Chapter 6, Section 624.1.1 Installation requirements is hereby amended to read in its entirety as follows:

624.1.1 Installation requirements. The requirements for water heaters relative to sizing, relief valves, drain pans and scald protection shall be in accordance with the current Plumbing Code adopted by the City of Rapid City.

15.22.220140 IFGC Chapter 6, Section 624.2 Water heaters utilized for space heating—Amended.

IFGC Chapter 6, Section 624.2 Water heaters utilized for space heating is hereby amended to read as follows:

624.2 Water heaters utilized for space heating. Water heaters utilized both to supply potable hot water and provide hot water for space-heating applications shall be listed and labeled for such applications by the manufacturer and shall be installed in accordance with the manufacturer's installation instructions and the current Plumbing Code adopted by the City of Rapid City.

15.22.230 IFGC Chapter 7, Section 703.6 Electrical wiring and equipment-Amended.

-703.6 Electrical wiring and equipment. Electrical wiring and equipment shall comply with the current Electrical Code adopted by the City of Rapid City.

	CITY OF RAPID CITY	
ATTEST	Mayor	_
Finance Officer	_	
(seal)		
First Reading: Second Reading: Published: Effective:		