ORDINANCE NO. 3478

AN ORDINANCE OF THE CITY OF MESQUITE, TEXAS, AMENDING CHAPTER 5 OF THE CODE OF THE CITY OF MESQUITE BY DELETING SECTIONS 5-186 AND 5-187 OF ARTICLE VI IN THEIR ENTIRETY AND ADDING NEW SECTIONS 5-186 AND 5-187 OF ARTICLE VI THEREBY ADOPTING THE INTERNATIONAL PLUMBING CODE, 2000 EDITION, AND PROVIDING CERTAIN ADDITIONS AND DELETIONS THERETO; PROVIDING FOR A REPEALER CLAUSE; PROVIDING FOR A SEVERABILITY CLAUSE; PROVIDING FOR A PENALTY NOT TO EXCEED TWO THOUSAND ($2,000.00) DOLLARS FOR EACH OFFENSE; AND DECLARING AN EFFECTIVE DATE.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF MESQUITE, TEXAS:

SECTION 1: That Chapter 5 of the Code of the City of Mesquite, Texas, is hereby amended by deleting Sections 5-186 and 5-187 of Article VI in their entirety and adding new Sections 5-186 and 5-187 of Article VI to read as follows, in all other respects said Code, Chapter and Article to remain in full force and effect:

## ARTICLE VI. PLUMBING CODE

## DIVISION 1. GENERALLY

### Sec. 5-186. Adopted.

The *International Plumbing Code*, 2000 Edition, a publication of the International Code Council (ICC), is hereby adopted and designated as the official plumbing code of the City of Mesquite to the same extent as if such Code were copied verbatim in this Article subject to the amendments prescribed in this Article. The Code shall be applicable to all construction, alterations, repairs and maintenance of all buildings, structures, materials and equipment related to the building industry in the city. A copy of the *International Plumbing Code*, 2000 Edition, and the amendments thereto shall be maintained in the office of the City Secretary as an original document and ordinance of the city.

### Sec. 5-187. Amendments to the International Plumbing Code, 2000 Edition.

The following amendments are made to the *International Plumbing Code*, 2000 Edition:

(1) *Chapter 1, Administration.*

(a) *Section 102.8.* Amend by deleting the section in its entirety and adding a new Section 102.8 to read as follows:

Referenced codes and standards. The codes and standards referenced herein shall be those that are listed in Chapter 13 which have been specifically adopted by the City, and such codes and standards shall be considered part of the requirements of this code to the prescribed extent of each such reference. Where differences occur between provisions of this code and the referenced standards, the provisions of this code shall apply. Whenever amendments have been adopted to the referenced codes and standards, each reference to said code and standard shall be considered to reference the amendments as well. Where NFPA 70 or the ICC Electrical Code are referenced herein, it shall mean the corresponding provision of the *National Electrical Code* as adopted.

(2) *Chapter 3, General Regulations.*

(a) *Section 305.6.1.* Amend by deleting the section in its entirety and adding a new Section 305.6.1 to read as follows:

*Sewer depth.* Building sewers shall be a minimum of 12 inches (304 mm) below grade.

(b) *Section 305.9.* Amend by deleting the section in its entirety and adding a new Section 305.9 to read as follows:

*Protection of components of plumbing system.* Components of a plumbing system installed within three feet along alleyways, driveways, parking garages or other locations in a manner in which they would be exposed to damage shall be recessed into the wall or otherwise protected in an approved manner.

(c) *Section 310.4.* Amend by deleting Section 310.4 in its entirety.

(d) *Section 312.9.1.* Amend by deleting the section in its entirety and adding a new Section 312.9.1 to read as follows:

*Inspections.* Annual inspections shall be made of all backflow prevention assemblies and air gaps to determine whether they are operable. The owner is responsible to ensure that testing is performed. All backflow testers shall be licensed by the State and registered with the City of Mesquite, Building Inspection Division. Copies of individual backflow tests shall be furnished to Building Inspection Division, City of Mesquite upon completion.

(e) *Section 312.9.2.* Amend by deleting the section in its entirety and adding a new Section 312.9.2 to read as follows:

> *Testing.* Reduced pressure principle backflow preventer assemblies, double check-valve assemblies, double-detector check-valve assemblies and pressure vacuum breaker assemblies shall be tested at the time of installation, immediately after repairs or relocation and at least annually. The testing procedure shall be performed in accordance with Texas Natural Resource Conservation Commission AWWA M-14 regulations.

(f) *Section 314.2.1.* Amend by deleting the section in its entirety and adding a new Section 314.21. to read as follows:

> *Condensate disposal.* Condensate from all cooling coils and evaporators shall be conveyed from the drain pan outlet to an approved place of disposal. Condensate shall not discharge in a publicly exposed area such as into a street, alley, sidewalk or other areas so as to cause a nuisance.

(g) *Section 314.2.2.* Amend by adding a second paragraph to Section 314.2.2 to read as follows:

> Condensate waste pipes from air-cooling coils may be sized in accordance with equipment capacity as follows:

| Equipment Capacity in Tons of Refrigeration | Minimum Condensate Pipe Inside Diameter |
|---|---|
| Up to 20 tons | ¾ inch |
| Over 20 to 40 tons | 1 inch |
| Over 40 to 90 tons | 1 ¼ inch |
| Over 90 to 125 tons | 1 ½ inch |
| Over 125 to 250 tons | 2 inch |

> The size of condensate waste pipes may be for one unit or a combination of units or as recommended by the manufacturer. The capacity of waste pipes assumes a 1/8-inch-per-foot slope with the pipe running three-quarters full.

(h) Section 314.2.3. Amend by adding a new item number 4 after 1, 2 and 3 in Section 314.2.3. to read as follows:

> 4. Discharge, as noted, shall be to a conspicuous point of disposal to alert occupants in the event of a stoppage of the drain. However, the conspicuous point shall not create a

hazard such as dripping over a walking surface or other areas so as to create a nuisance.

(3) *Chapter 4, Fixtures, Faucets and Fixture Fittings.*

(a) *Section 401.1.* Amend by adding a sentence to the end of the paragraph of Section 401.1 to read as follows:

The provisions of this chapter are meant to work in coordination with the provisions of the *International Building Code*. Should any conflicts arise between the two Codes, the most restrictive provision shall apply.

(b) *Section 403.1.* Amend by deleting the section in its entirety and adding a new Section 403.1 to read as follows:

*Minimum number of fixtures.* Plumbing fixtures shall be provided for the type of occupancy and in the minimum number as follows:

1. *Assembly Occupancies:* At least one drinking fountain shall be provided at each floor level in an approved location.

*Exception:* A drinking fountain need not be provided in a drinking or dining establishment.

2. *Groups A, B, F, H, I, M and S Occupancies:* Buildings or portions thereof where persons are employed shall be provided with at least one water closet for each sex except as provided for in Section 403.2.

3. *Group E Occupancies:* Shall be provided with fixtures as shown in Table 403.1.

4. *Group R Occupancies:* Shall be provided with fixtures as shown in Table 403.1.

The minimum number of fixtures provided shall comply with the number shown in Table 403.1. If an occupancy is not listed in Table 403.1, the Code Official shall determine which occupancy most closely resembles the proposed use and apply that number to the occupancy. The number of occupants shall be determined by

the *International Building Code.* Occupancy classification shall be determined in accordance with the *International Building Code.*

(c) *Section 403.1.2.* Amend by adding a new Section 403.1.2 to read as follows:

*Finish material.* Finish materials shall comply with Section 1209 of the *International Building Code.*

(d) *Section 404.2.* Amend by deleting the section in its entirety and adding a new Section 404.2 to read as follows:

*Unisex toilet and bathing rooms.* In assembly and mercantile occupancies, an accessible unisex toilet room shall be provided where an aggregate of six or more male or female water closets are provided. In buildings of mixed occupancy, only those water closets required for the assembly or mercantile occupancy shall be used to determine the unisex toilet room requirement. In recreational facilities where separate-sex bathing rooms are provided, an accessible unisex bathing room shall be provided.

(e) *Section 405.6.* Amend by deleting Section 405.6 in its entirety.

(f) *Section 409.2.* Amend by deleting the section in its entirety and adding a new Section 409.2 to read as follows:

*Water connection.* The water supply to a commercial dishwashing machine shall be protected against backflow by an air gap or backflow preventer in accordance with Section 608.

(g) *Section 410.1.* Amend by deleting the section in its entirety and adding a new Section 410.1 to read as follows:

*Approval.* Drinking fountains shall conform to ASME A112.19.1, ASME A112.19.2 or ASME A112.19.9, and water coolers shall conform to ARI 1010.

*Exception:* A drinking fountain need not be provided in a drinking or dining establishment.

(h) *Section 412.4.* Amend by deleting the section in its entirety and adding a new Section 412.4 to read as follows:

*Required location.* Floor drains shall be installed in the following areas:

1. In public coin-operated laundries and in the central washing facilities of multiple family dwellings, the rooms containing the automatic clothes washers shall be provided with floor drains located to readily drain the entire floor area.

2. Commercial kitchens. Floor sinks may be used in commercial kitchens as a substitute to floor drains.

(i) *Section 413.4.* Amend by deleting the section in its entirety and adding a new Section 413.4 to read as follows:

*Water supply required.* All food waste grinders shall be provided with a supply of cold water. The water supply shall be protected against backflow by an air gap or with the installation of a backflow preventer in accordance with Section 608.

(j) *Section 417.5.* Amend by deleting the section in its entirety and adding a new Section 417.5 to read as follows:

*Shower floors or receptors.* Floor surfaces shall be constructed of impervious, non-corrosive, non-absorbent and waterproof materials. Thresholds shall be a minimum of two inches (51 mm) and a maximum of nine inches (229 mm), measured from top of the drain to top of threshold or dam. Thresholds shall be of sufficient width to accommodate a minimum 22-inch (559 mm) door.

*Exception:* Showers designed to comply with ICC/ANSI A117.1.

(k) *Section 417.5.2.* Amend by deleting the section in its entirety and adding a new Section 417.52 to read as follows:

*Shower lining.* Floors under shower compartments except where prefabricated receptors have been provided shall be lined and made watertight utilizing material complying with Sections 417.5.2.1 through 417.5.2.4. Such liners shall turn up on all sides at least three inches (51 mm) above the finished threshold level and shall extend outward over the threshold and fastened to the outside of the threshold jamb. Liners shall be recessed and fastened to an approved backing so no point less than one inch (25.4 mm) is above the finished threshold. Liners shall be pitched ¼ inch unit vertical in 12 units horizontal (2% slope) and shall be sloped

towards the fixture drains and be securely fastened to the waste outlet at the seepage entrance making a watertight joint between the liner and the outlet.

(l) *Section 417.7.* Amend by adding a new Section 417.7 to read as follows:

*Test for shower receptors.* Shower receptors shall be tested for watertightness by filling with water to the level of the rough threshold. The drain shall be plugged in a manner so that both sides of the pans shall be subjected to the test at the point where it is clamped to the drain.

(m) *Section 419.3.* Amend by deleting the section in its entirety and adding a new Section 419.3 to read as follows:

*Surrounding material.* Wall and floor space to a point two feet (610 mm) in front of a urinal lip and four feet (1219 mm) above the floor and at least two feet (610 mm) to each side of the urinal shall be waterproofed with a smooth, readily cleanable, hard, non-absorbent material.

(4) *Chapter 5, Water Heaters.*

(a) *Section 502.5.* Amend by deleting the section in its entirety and adding a new Section 502.5 to read as follows:

*Water heaters installed in attics.* Attics containing a water heater shall be provided with an opening and unobstructed passageway large enough to allow removal of the water heater. The passageway shall be not less than 30 inches (762 mm) high and 22 inches (559 mm) wide and not more than 20 feet (6096 mm) in length when measured along the centerline of the passageway from opening to the water heater. The passageway shall have a continuous solid flooring not less than 24 inches (610 mm) wide. A level service space at least 30 inches (762 mm) deep and 30 inches (762 mm) wide shall be present at the front or service side of the water heater. The clear access opening dimensions shall be a minimum of 20 inches by 30 inches (508 mm by 762 mm) or larger where such dimensions are not large enough to allow removal of the water heater.

(b) *Section 502.5.1.* Amend by adding a new Section 502.5.1 to read as follows:

*Electrical requirements.* A lighting fixture 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 electrical code.

(c) *Section 502.7.* Amend by adding a new Section 507.2 to read as follows:

*Water heaters above ground or floor.* When the attic, roof, mezzanine or platform in which a water heater is installed is more than eight feet (2438 mm) above the ground or floor level, it shall be made accessible by a stairway or permanent ladder fastened to the building.

(d) *Section 502.7.1.* Amend by adding a new Section 502.7.1 to read as follows:

*Platform electrical requirements.* Whenever the mezzanine or platform is not adequately lighted or access to a receptacle outlet is not obtainable from the main level, lighting and a receptacle outlet shall be provided in accordance with Section 502.5.1.

(e) *Section 504.6.1.* Amend by deleting the section in its entirety and adding a new Section 504.6.1 to read as follows:

*Discharge.* The relief valve shall discharge through full-size piping to a safe place of disposal such as the floor drain, outside the building or an indirect waste receptor. The discharge pipe shall not have any trapped sections. When the drain pipe run is exposed in an area outside of the room where the water heater is located in a manner that would make it subject to damage, the drain shall have a visible air gap or air gap fitting located in the same room as the water heater. The discharge shall be installed in a manner that does not cause personal injury to occupants in the immediate area or structural damage to the building. The end of the discharge pipe shall not be threaded. The discharge pipe shall not discharge into the pan required in Section 504.7. When discharging outside the building, the point of discharge shall be with the end of the pipe not more than two feet (610 mm) nor less than six inches (152 mm) above the ground or the floor level of the area receiving the discharge and pointing downward.

(f) *Section 505.1.* Amend by deleting the section in its entirety and adding a new Section 505.1 to read as follows:

*Unfired vessel insulation.* Unfired hot water storage tanks shall be insulated so that heat loss is limited as specified in Section 504, *International Energy Conservation Code*.

(g) *Sections 506 and 506.1.* Amend by adding new Sections 506 and 506.1 to read as follows:

SECTION 506
COMBUSTION AIR AND VENTILATION

*506.1. Combustion air and ventilation.* Combustion air and ventilation for fuel-burning water heaters other than gas-fired shall be in accordance with the *International Mechanical Code*. Combustion air and ventilation for gas-fired water heaters shall be in accordance with the *International Fuel Gas Code.*

(5) *Chapter 6, Water Supply and Distribution.*

(a) *Section 604.4.1.* Amend by adding a new Section 604.4.1 to read as follows:

*State maximum flow rate.* Where the State mandated maximum flow rate is more restrictive than those of this section, the State flow rate shall take precedence.

(b) *Table 605.4.* Amend by deleting *Polybutylene (PB) plastic pipe and tubing* from Table 605.4.

(c) *Table 605.5.* Amend by deleting the following materials from Table 605.5:

1. Chlorinated polyvinyl chloride (CPVC) plastic pipe and tubing;

2. Cross-linked polyethylene (PEX) plastic tubing;

3. Cross-linked polyethylene/cross-linked polyethylene (PEX-AL-PEX) pipe; and

4. Polybutylene (PB) plastic pipe and tubing.

(d) *Section 606.1.* Amend by deleting Items 4, 5 and 6 from Section 606.1 in their entirety.

(e) *Section 606.2.* Amend by deleting Items 1 and 2 from Section 606.2 in their entirety and adding new Items 1 and 2 to Section 606.2 to read as follows:

1. On the fixture supply to each plumbing fixture except for tub and shower frostproofs.

*Exception:* Tub and shower valves.

2. On the water supply pipe to each sillcock.

(f) *Section 607.2.1.* Amend by deleting the section in its entirety and adding a new Section 607.2.1. to read as follows:

*Piping insulation.* Piping in required return circulation systems shall be insulated as required in Section 504, *International Energy Conservation Code.*

(g) *Section 608.1.* Amend by deleting the section in its entirety and adding a new Section 608.1 to read as follows:

*General.* A potable water supply system shall be designed, installed and maintained in such a manner so as to prevent contamination from non-potable liquids, solids or gases being introduced into the potable water supply through cross-connections or any other piping connections to the system. Backflow preventer applications shall conform to Texas Natural Resource Conservation Commission AWWA M-14 regulations and Table 608.1, and as specifically stated in Sections 608.2 through 608.16.9.

(h) *Section 608.17.* Amend by deleting the section in its entirety and adding a new Section 608.17 to read as follows:

*Protection of individual water supplies.* An individual water supply shall be located and constructed so as to be safeguarded against contamination in accordance with Texas Natural Resource Conservation Commission AWWA M-14 regulations.

(6) *Chapter 7, Sanitary Drainage.*

(a) *Section 708.3.4.* Amend by deleting the section in its entirety and adding a new Section 708.3.4 to read as follows:

*Upper terminal.* Each horizontal drain shall be provided with a cleanout at its upper terminal.

*Exception:* Cleanouts may be omitted on a horizontal drain less than five feet (1524 mm) in length unless such line is serving sinks or urinals.

(b) *Section 712.5.* Amend by adding a new Section 712.5 to read as follows:

*Dual pump system.* All sumps shall be automatically discharged and, when in any "public" use occupancy where the sump serves more than 10 fixture units, shall be provided with dual pumps or ejectors arranged to function independently in case of overload or mechanical failure. For storm drainage sumps and pumping systems, see Section 1113.

(c) *Sections 714 and 714.1.* Amend by deleting the section title and Section 714.1 in their entirety and adding a new section title and new Section 714.1 to read as follows:

SECTION 714
ENGINEERED DRAINAGE DESIGN

*714.1. Design of drainage system.* The sizing requirements for plumbing drainage systems shall be determined by approved design methods.

(7) *Chapter 8, Indirect/Special Waste.*

(a) *Section 802.1.1.* Amend by deleting the exception to Section 802.1.1 in its entirety.

(b) *Section 802.4.* Amend by adding a sentence at the end of the paragraph of Section 802.4 to read as follows:

No standpipe shall be installed below the ground.

(8) *Chapter 9, Vents.*

(a) *Section 904.1.* Amend by deleting the section in its entirety and adding a new Section 904.1 to read as follows:

*Roof extension.* All open vent pipes that extend through a roof shall be terminated at least six inches (152 mm) above the roof, except that where a roof is to be used for any purpose other than

weather protection, the vent extensions shall be run at least seven feet (2134 mm) above the roof.

(b) *Section 912.1.* Amend by deleting the section in its entirety and adding a new Section 912.1 to read as follows:

*Type of fixtures.* A combination drain and vent system shall not serve fixtures other than floor drains, standpipes and indirect waste receptors. Combination drain and vent systems shall not receive the discharge of a food waste grinder.

(c) *Section 912.2.* Amend by deleting the section in its entirety and adding a new Section 912.2 to read as follows:

*Installation.* The only vertical pipe of a combination drain and vent system shall be the connection between the fixture drain of a standpipe and the horizontal combination drain and vent pipe. The maximum vertical distance shall be eight feet (2438 mm).

(9) *Chapter 10, Traps Interceptors and Separators.*

(a) *Section 1002.10.* Amend by deleting Section 1002.10 in its entirety.

(b) *Section 1003.3.1.* Amend by deleting the section in its entirety and adding a new Section 1003.3.1 to read as follows.

*Grease traps and grease interceptors required.* A grease trap or grease interceptor shall be required to receive the drainage from fixtures and equipment with grease-laden waste located in food preparation areas such as in restaurants, hotel kitchens, hospitals, school kitchens, bars, factory cafeterias or restaurants and clubs. A permit for installation of a grease trap or grease interceptor must be obtained pursuant to Chapter 16, Article VI of the *Code of the City of Mesquite.* All fixtures and drains within these areas with the exception of restroom drainage lines shall be piped to go through the required grease trap. Sizing of grease traps and grease interceptors shall be in accordance with the standard operating procedures as established by the Food Inspection Division, Code Compliance Department of the City.

(10) *Chapter 11, Storm Drainage.*

(a) *Section 1106.1.* Amend by deleting the section in its entirety and adding a new Section 1106.1 to read as follows:

*General.* The size of the vertical conductors and leader, building storm drains, building storm sewers and any horizontal branches of such drains or sewers shall be based on six inches per hour rainfall rate.

(b) *Section 1107.3.* Amend by deleting the section in its entirety and adding a new Section 1107.3 to read as follows:

*Sizing of secondary drains.* Secondary (emergency) roof drain systems shall be sized in accordance with Section 1106. Scuppers shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by Section 1101.7. Scuppers shall not have an opening dimension of less than four inches (102 mm). The flow through the primary system shall be considered when sizing the secondary roof drain system.

(11) *Chapter 12, Special Piping and Storage Systems.*

(a) *Section 1201.1.* Amend by deleting the section in its entirety and adding a new Section 1201.1 to read as follows:

*Scope.* The provisions of this Chapter shall govern the design and installation of piping and storage for non-flammable medical gas systems and non-medical oxygen systems as well as required inspections to the appropriate systems. All maintenance and operations of such systems shall be in accordance with the *International Building Code*.

(b) *Section 1202.1.* Amend by deleting the section in its entirety and adding a new Section 1202.1 to read as follows:

*Design and installations.* Non-flammable medical gas systems, inhalation anesthetic systems and vacuum piping systems shall be designed and installed in accordance with NFPA 99C. Non-medical oxygen systems shall be designed and installed in accordance with NFPA 50 and 51. A State of Texas licensed plumber that has a Medical Gas Installers Certification shall install medical gas piping systems. A third party certified tester shall test and certify the piping installations and supply copies of the approved test results to the City of Mesquite Building Inspection Division.

(c) *Section 1203.1.* Amend by deleting Section 1203.1 in its entirety.

SECTION 2. That all ordinances or portions thereof in conflict with the provisions of this ordinance, to the extent of such conflict, are hereby repealed. To the extent that such ordinances or portions thereof are not in conflict herewith, the same shall remain in full force and effect.

SECTION 3. That should any word, sentence, clause, paragraph or provision of this ordinance be held to be invalid or unconstitutional, the validity of the remaining provisions of this ordinance shall not be affected and shall remain in full force and effect.

SECTION 4. That any person, firm or corporation violating any of the provisions or terms of this ordinance shall be deemed to be guilty of a Class C Misdemeanor and upon conviction in the Municipal Court shall be punished by a fine not to exceed Two Thousand ($2,000.00) Dollars for each offense.

SECTION 5. That this ordinance shall take effect on April 4, 2002.

DULY PASSED AND APPROVED by the City Council of the City of Mesquite, Texas, on the 4th day of February, 2002.

Mike Anderson
Mayor

ATTEST:

Ellen Williams
City Secretary

APPROVED:

B. J. Smith
City Attorney