Introduced by: \_

Proposed Ordinance No. 85 - 4

 ORDINANCE NO. 6746

AN ORDINANCE regulating plumbing; adopting the Uniform Plumbing Code as amended; establishing plumbing pennit and inspection fees; establishing a plumbing advisory board; establishing a board of appeals; providing minimum standards for the installation of plumbing systems, adding a new Chapter to Title 16; and repealingResolution 28817, Sections 1.010 through 12.040, Resolution 32650, Sections 1.060 through 12.045, Resolution 34798, Sections 1.180 through 12.038, Ordinance 348, Sections 1 through 16, Ordinance 1220, Section 1, Ordinance 2279, Section 1, Ordinance 5228, Section 1, Ordinance 6244, Section 1, and K.C.C. 2.32.080, 16.32.010 through 16.32.350, 16.35.010 through 16.41.110, 16.44.010 through 16.38.180, 16.41.010 through 16.47.150, 16.50.010 through 16.50.110, 16.53.010 through 16.53.090, 16.56.010 through 16.50.110, 16.59.010 through 16.59.280, 16.62.010, 16.65.010 through 16.56.030.

BE IT ORDAINED BY THE COUNCIL OF KING COUNTY:

SECTION 1. Resolution 28817, Sections 1.010 through 12.040, Resolution 32650, Sections 1.060 through 12.045, Resolution 34798, Sections 1.180 through 12.038, Ordinance 348, Sections 1 through 16, Ordinance 1220, Section 1, Ordinance 2279, Section 1, Ordinance 5228, Section 1, Ordinance 6244, Section 1, and K.C.C. 2.32.080, 16.32.010 through 16.32.350, 16.35.010 through 16.35.110, 16.38.010 through 16.38.180, 16.41.010 through 16.41.110, 16.44.010 through 16.44.090, 16.47.010 through 16.47.150, 16.50.010 through 16.50.110, 16.53.010 through 16.53.090, 16.56.010 through 16.56.110, 16.59.010 through 16.59.280, 16.62.010, 16.65.010 through 16.65.030 are each hereby repealed.

NEW SECTION. SECTION 2. There is added a new chapter to K.C.C. Title 16 entitled "King County Plumbing Code," including sections 3 through 48 of this ordinance, and may be so cited, and 1s referred to herein as "this code."

NEW SECTION. SECTION 3. Purpose and policy declared. This code is enacted as an exercise of the police power of King County to protect and preserve the public peace, health, safety, and welfare. Its provisions shall be liberally construed for the accomplishment of these purposes.

It is expressly the purpose of this code to provide for and promote the health, safety and welfare of the general public, and not to create or otherwise establish or designate any particular class or group of persons who will or should be especially protected or benefited by the terms of this code.

It is the specific intent of this code to place the obligation of complying with its requirements upon the owner or operator of premises within its scope, and no provision of nor term used in this code is intended to impose any duty whatsoever upon King County or any of its officers or employees, for whom the implementation or enforcement of this code shall be discretionary and not mandatory.

Nothing contained in this code is intended to be nor shall be construed to create or form the basis for any liability on the part of King County, or its officers, employees or agents, for any injury or damage resulting from the failure of the owner or operator of premises to comply with the provisions of this code, or by reason or in consequence of any act or omission in connection with the implementation or enforcement of this code on the part of King County by its officers, employees or agents.

NEW SECTION. SECTION 4. Scope. The provisions of this code shall apply to the erection, installation, alteration, addition, repair, relocation, replacement, maintenance or use of any plumbing system except as specifically otherwise provided in this code.

NEW SECTION. SECTION 5. Adoption of Uniform Plumbing Code. The Uniform Plumbing Code, Chapters 1 through 10, with Appendices "A" through "D", 1982 Edition, IAPMO Installation Standards, 1982 Edition, IAPMO Interim Guide Criteria 4-78, 11-78, and 12-78, and Chapter 22 of the 1982 Uniform Mechanical Code all published by the International Association of Plumbing and Mechanical Officials, are hereby adopted and together with the provisions of this ordinance shall constitute the official Plumbing Code of King County. This ordinance shall have precedence over documents adopted by reference.

NEW SECTION. SECTION 6. Administrative authority. The administrative authority is the Seattle-King County director of public health or his authorized representative who shall administer and enforce the provisions of the plumbing and mechanical code (Chapter 22 of the 1982 Uniform Mechanical Code) as adopted or amended except as provided herein. The water purveyor shall administer and enforce provisions relating to the inspection and approva of water meters, and where applicable, the building supply piping. There may be a joint enforcement and administration between the director of public healt!

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and the water purveyor for installation and approval of backflow prevention devices installed in the building supply and water distributing piping in a building where cross connections exist or are likely to occur. The administrative authority may adopt such rules and regulations consistent with this code as he may deem necessary for its enforcement.

# NEW SECTION. SECTION 7.

A. Authority to abate. Any portion of a plumbing system found by the administrative authority to be insanitary as defined in this code is hereby

9 10 declared to be a nuisance.

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B. Faulty plumbing system shall be abated. Where a nuisance exists or a plumbing system is maintained in violation of this code or any notice issued

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pursuant to this section, the administrative authority shall require such nuisance or violation to be abated and shall take such steps as may be

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necessary to abate the same in the manner provided by law.

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C. Plumbing system shall comply with code. If at any time the administrative authority shall find that any plumbing system is not in

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compliance with this code, or is otherwise unlawful, or dangerous or

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insanitary, or a menace to life, health or property, he is authorized to give

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notice of the corrections to the agent, owner or occupant of personal service,

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or by mail, or by posting on the premises.

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NEW SECTION. SECTION 8. Right of entry. Upon presentation of proper credentials, the administrative authority may, with the consent of the occupant

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or with the consent of the owner of an unoccupied building or pursuant to a

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lawfully issued warrant, enter at reasonable times any building or premises to

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perform any duty imposed upon him by this code.

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NEW SECTION. SECTION 9.

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A. Existing installations. Any plumbing system lawfully installed prior to the effective date of this code may have its existing use continued and may

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be maintained or repaired if such use, maintenance or repair is in accordance with the original design and location and does not constitute a hazard to the

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public health, safety or welfare.

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B. The owner or his designated agent shall be responsible for the maintenance of any such existing plumbing system in a safe and sanitary

A. Permit fees. Every applicant for a permit to do work under this code shall pay for each permit, at the time of issuance, a fee in accordance with the following schedule, and at the rate provided for each permit classification

## SCHEDULE OF FEES

SCHEDOLE OF FEES
For issuing each plumbing permit (basic fee)\$18.00
For each plumbing fixture or trap (including water drainage
vent piping and backflow protection therefor) \$ 5.00
For each atmospheric vacuum breaker in irrigation systems,
tanks, vats, etc. or for installation on unprotected
plumbing fixtures including necessary water piping
Vacuum breaker - one to five - each device \$ 5.00
Vacuum breaker - over five - each device\$ 3.50
Pressure vacuum breaker or double check valve assembly \$25.00
Reduced pressure principle backflow prevention device - each \$25.00
FEES FOR MISCELLANEOUS INSPECTION SERVICES
Fees for inspection service outside regular working hours or for
inspection service requested but not covered by a permit will
be charged for at a rate equal to the cost of performing the
service.
Fees for permanent location inspection of factory housing or modular
unit containing plumbing - For each single family dwelling or
each modular unit containing plumbing\$12.00
Plumbing permit includes on site connections of building drain
extensions, water service and necessary gas piping connections.
Additional plumbing fixtures installed after factory installation
of plumbing for each plumbing fixture or trap\$ 5.00
Fees for reconnection and retest of plumbing systems in relocated
huildings - For oach huilding
\$12.00

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Plumbing permit includes on site connections of building drain extensions, water service and necessary gas piping connections. Additional plumbing fixtures installed after relocation of building

for each plumbing fixture or trap ...... \$ 5.00 For the purpose of this section "fixture" means and includes any appliance which is connected with a water, drain, or vent pipe, but no sillcock faucet or hose bibb shall be considered a fixture. A sanitary plumbing outlet on or to which a plumbing fixture or appliance may be set or attached shall be construed to be a fixture.

- B. Double permit fee requirements. Any person who commenced any work for which a penuit is required by this code without first having obtained such permit, shall upon subsequent application for such permit pay double the fee fixed by the above schedule of fees for such work unless it shall be proved to the satisfaction of the administrative authority that such work was urgently necessary and that it was not practical to obtain a permit prior to the commencement of the work. In all such emergency cases, a permit shall be obtained as soon as it is practical to do so, and if there be an unreasonable delay in obtaining such permit, a double fee shall be charged as provided herein.
- C. Fees for reinspection service. A reinspection fee of forty dollars (\$40.00) may be assessed for each inspection or reinspection when such portion of work which inspection is called is not complete or when corrections called for are not made. This subsection is not to be interpreted as requiring inspection fees the first time a job is rejected for failure to comply with the requirements of this code, but as controlling the practice of calling for inspection or reinspection.

Reinspection fees may be assessed when the permit is not properly posted on the work site, the work to be inspected is not under test, for failure to provide access on the date for which inspection is requested, or for failure to make required corrections. To obtain a reinspection the applicant shall file an application therefore in writing upon a form furnished for that purpose, and pay the reinspection fee in accordance with this section. In instances where reinspection fees have been assessed, no additional inspection of the work will

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 be performed until the required fees have been paid.

D. Refund of permit fees. Should the work for which a permit fee has been paid not be started, the administrative authority, upon proper application for refund and surrender of the permit for cancellation, shall issue a refund. In determining the amount of refund due, the administrative authority shall deduct the amount of the basic fee to cover the cost of administration of the permit. No refund shall be made for any expired permit.

NEW SECTION. SECTION 11. Work not requiring a pennit. A pennit is not required for the repair or replacement of a plumbing fixture; the repair or replacement of a valve or faucet in a water supply system; the clearance of stoppages in drainage piping; the stopping of leaks; or the repair or replacement of domestic hot water tanks.

NEW SECTION. SECTION 12. Application for permit. Applications for permits shall be made on forms provided by the administrative authority for such purpose and shall give a description of the work proposed to be done, the name of the contractor and permit applicant, and the location, ownership, and occupancy upon which such work is to be done. The administrative authority may require to be furnished plans, specifications or drawings and may require such other information as he shall deem necessary for the administration and enforcement of this code.

If the administrative authority determines that the plans, specifications, drawings, descriptions, and other information furnished by the applicant are in compliance with this code and that the applicant is licensed to perform the work to be permitted, he shall issue the permit applied for upon payment of the prescribed fee.

- A. Owner's permit. Nothing contained in this code shall prohibit any bona fide owner from installing plumbing or making alterations or repairs in his own residence or accessory building as permitted under the following terms and conditions:
- 1. Such owner shall apply in person, secure a permit, and pay the required fee as set forth in the schedule of fees in this code.
- 2. Such owner shall do the work in the manner required by this code subject to inspection and approval by the administrative authority.

It is unlawful for any person having an owner's permit to allow any other person, including a licensed plumber, to do any work under such owner's permit.

B. Existing permits. Any work authorized by a permit in effect on the effective date of this code shall be performed pursuant to the laws and ordinances under which such permit was issued, and any conflicting repriment of this code shall not apply to such work.

## NEW SECTION. SECTION 13.

- A. Permit requirements. Except as provided in section 11 of this code it is unlawful for any person to perform any work on any plumbing system without having obtained a permit in accordance with this code.
- B. Separate permit for each building. A separate permit shall be obtained for each building or structure and such permit shall be posted on the building or structure wherein the work under such permit is being performed, and shall not be removed until the work has been finally approved by the administrative authority.
- C. Permit violation. No person to whom a permit has been issued shall allow any other person to do or cause to be done any work under such permit except persons in the employ of such permittee.
- D. Plumbing to be installed in accordance with code. The issuance or granting of a permit or approval of plans and specifications shall not be deemed or construed to be a permit for, or an approval of, any violation of any of the provisions of this code, and no permit purporting to give authority to violate or cancel the provisions of this code shall be valid except insofar as the work or use authorized is in compliance with this code.
- E. Plumbing code shall not be violated. The issuance or granting of a permit or approval of plans and specifications shall not prevent the administrative authority from thereafter requiring the correction of errors in said plans and specifications or from preventing work being carried on under any such permit when in violation of this code or of any other ordinance or from revoking any certificate of approval issued in error.
- F. Plumbing permit shall be posted. Every plumbing permit shall be posted on the building, structure, or premises where the work permitted is

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being performed and shall not be removed until the work has been finally approved by the administrative authority.

G. Permits shall become null and void one year from issue. Every permit issued by the administrative authority under the provisions of this code shall expire by limitation and become null and void one (1) year from date of issue. Permits expired for not more than one year may be renewed for one-half (1/2)the original cost or fifty dollars (\$50.00), whichever is less. Permits expired for more than one (1) year will require the regular scheduled fees.

## NEW SECTION. SECTION 14.

- A. Inspection of work. All plumbing and drainage systems shall be inspected by the administrative authority for compliance with the requirements of this code.
- B. Notification for inspection. It shall be the duty of the person doing the work authorized by a permit to notify the administrative authority that the work is ready for inspection. Such notification may be given either orally or in writing and shall be given not less than twenty-four (24) hours before the work is to be inspected. Before such notification is given it shall be the duty of the person doing the work to make sure that work to be inspected will stand the test or tests prescribed in this code.

NEW SECTION. SECTION 15. Stop work notice. Whenever any work is being done contrary to the provisions of this code, the administrative authority may order the work stopped by giving notice in writing to the person or persons doing or causing such work to be done, and any such person or persons shall forthwith stop such work until authorized by the administrative authority to proceed therewith.

## NEW SECTION. SECTION 16.

- A. Suspension or revocation of permits. In addition to other penalties provided by law, any pemuit issued under this code may be suspended or revoked where the same was issued in error or on the basis of incorrect information supplied by the applicant, or for the violation of any of the provisions of this code or other ordinances or any rules and regulations adopted by the administrative authority.
  - B. Permittee shall be notified by certified mail of suspension or

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revocation of permit. Actions to suspend or revoke any permit shall be commenced by mailing by certified mail to the permittee at the address shown on the permit records of the administrative authority, a written notice setting forth in specific terms the basis for such suspension or revocation.

- C. Permittee shall file with administrative authority within ten (10) days. The permittee shall, within ten (10) days after the mailing of such notice, file with the administrative authority his written answer which shall admit or deny the allegations of such notice and may set forth such defenses and/or additional matter as said permittee shall deem appropriate. If the permittee desires a hearing in such action, he shall request the same in his answer.
- D. Should cause exist, administrative authority may suspend or revoke permit. Upon failure of any such permittee to file an answer as herein provided, or in the event no hearing is requested, the administrative authority shall investigate and make findings and if cause exists therefor may suspend or revoke such permit.
- E. Hearing examiner shall give notice of hearing. If a hearing is requested by the permittee, the administrative authority shall forward such request together with the notice of suspension or revocation and the permittee's answer thereto to the hearing examiner who shall give notice and conduct such hearing and thereafter recommend to the administrative authority a proposed decision in accordance with Title 23 of the King County Code.

NEW SECTION. SECTION 17. Liability claims. The administrative authority or any employee performing duties in connection with the enforcement of this code and acting in good faith and without malice in the performance of such duties shall be relieved from any personal liability for any damage to persons or property as a result of any act or omission in the discharge of such duties, and in the event of claims and/or litigation arising from any such act or omission, the prosecuting attorney shall, at the request of and on behalf of said administrative authority or employee, investigate and defend such claims and/or litigation and if the claim be deemed by the prosecuting attorney a proper one or if judgment be rendered against such administrative autbority or employee, said claim or judgment shall be paid by King County.

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NEW SECTION. SECTION 18. Plumbing advisory board.

A. There is hereby established a plumbing advisory board appointed by the administrative authority. Members of the board shall consist of the chief of environmental health, the Seattle director of construction and land use, the manager, King County building and land development division, and the Seattle superintendent of water, all ex-officio, and the eight appointive members who shall be representative of one each of the following: journeyman plumbers, plumbing contractors, building construction industry, architects, professional mechanical engineers, sanitary engineers, real estate management and the public.

- B. Members of plumbing advisory board appointed by the administrative authority. Members of the plumbing code advisory board, other than ex-officio, shall be appointed by the administrative authority. Upon naming the appointive members of the board, the administrative authority shall designate two (2) such members to a term ending December 31, 1984; three (3) such members to a term ending December 31, 1985; and three (3) such members to a term ending December 31, 1986. Thereafter such members shall be appointed to a term of three (3) years ending December 31 of the third year of said term.
- C. Plumbing advisory board shall elect chairman. The plumbing code advisory board shall elect a chairman who shall serve at the pleasure of the members. Such board may adopt rules of procedure and shall meet on call, subject to timely notice.
- D. Plumbing advisory board may examine rulings and make recommendations. The plumbing code advisory board may examine rulings, or proposed rulings, of the administrative authority related to this code, and may hold hearings and make recommendations to the administrative authority and to the executive and county council, but it shall act in an advisory capacity only.

NEW SECTION. SECTION 19. Board of appeals.

A. A board of appeals shall be established and shall consist of the five (5) members of the plumbing advisory board representing journeyman plumbers, plumbing contractors, professional mechanical engineers, sanitary engineers, and the public. The administrative authority shall serve as an ex-officio member of the board. The board of appeals shall elect a chairman and a

B. The board of appeals shall determine whether a correct interpretation of the code has been made by the administrative authority in any case which results in an appeal. The party aggrieved by the action of the administrative authority shall file a written petition for appeal to the board. Appeals shall be heard at reasonable times at the convenience of the board, but not later than thirty (30) days after receipt of such petition. The appellant shall be entitled to appear in person before the board, to be represented by an attorney, and to introduce evidence in support of such petition. The appellant shall cause to be made at his own expense any test or research required by the board for the substantiation of any claim(s) made by the appellant.

C. Decisions of the board shall be in writing; shall be distributed to the administrative authority and the appellant; and shall apply only to the case being heard. Either the appellant or the administrative authority may appeal the decision of the board to the King County hearing examiner. The board may make recommendations to the administrative authority for changes in the code where an appeal heard by the board may indicate the need for a code change.

NEW SECTION. SECTION 20. Water saver toilet tanks. ANSI
All2.19.2M-1982. 5.1.7.8 Water-conservation Water Closets. Water closets
having an average water consumption (total flush volume) not exceeding 3.5 gal.
(13.31) over the range of test pressures as specified for each closet type
(Table 4 and 7.4.2) and not exceeding 4.0 gal. (15.11) at any one test pressure
(based upon average values from the three-run test sets as determined in
7.4.6.1) are required.

NEW SECTION. SECTION 21. Section 102 of the Uniform Plumbing Code is amended by deleting definition "(c) Administrative Authority."

NEW SECTION. SECTION 22. Section 105 of the Uniform Plumbing Code is amended by deleting definition "(a) Department Having Jurisdiction."

NEW SECTION. SECTION 23. Section 105, of the Uniform Plumbing Code is amended by adding definition "(d-1) Domestic Water Heater" to read as follows:

(d-1) <u>Domestic Water Heater</u>. A domestic water heater is a tank with a self-contained heating unit which stores potable hot water for residential or

commercial use with a nominal water containing capacity of one-hundred twenty (120) gallons or less, having a heating input of two-hundred thousand (200,000) Btu's per hour or less used for hot water supply at pressure of one-hundred sixty pounds per square inch (160 psi) or less and at operating temperatures of two-hundred degrees Fahrenheidt (200°F) or less.

<u>NEW SECTION.</u> <u>SECTION 24.</u> Section 105 of the Uniform Plumbing Code is amended by adding definition "(d-2) Double Check Valve Assembly - Approved" to read as follows:

(d-2) <u>Double Check Valve Assembly - Approved</u>. A double check valve assembly is an approved unit consisting of two (2) independently acting, internally-loaded and approved check valves. The double check valve assembly shall be installed as an approved unit in an approved assembly consisting of two (2) approved control valves, and required test cocks.

NEW SECTION. SECTION 25. Section 107 of the Uniform Plumbing Code is amended by adding definition "(j) Finish Plumbing" to read as follows:

(j) <u>Finish Plumbing</u>. Finish plumbing means that part of the plumbing system installed after the rough-in plumbing has been completed. The finish plumbing would include but not be limited to: the trimming and setting of fixtures, the installing of "P" traps and the connecting of hot and cold water fixture supplies.

<u>NEW SECTION. SECTION 26.</u> Section 113 of the Uniform Plumbing Code, definition "(d) Listing Agency", is amended to read as follows:

(d) <u>Listing Agency</u>. Listing agency means an agency accepted by the administrative authority which is in the business of listing or labeling and which maintains a periodic inspection program on current production of listed models, and which makes available a published report of such listing in which specific information is included that the product has been tested to approved standards and found safe for use in a specified manner. Listing agencies approved by the administrative authority are as follows:

International Association of Plumbing and Mechanical Officials (I.A.P.M.O.) Washington State Department of Social and Health Services

National Sanitation Foundation (N.S.F.)

City of Los Angeles Testing Laboratory

American Gas Association Canadian Gas Association

Underwriter Laboratories

Listing agencies or testing laboratories are not limited to the above named agencies.

Other testing or listing agencies may be added to the approved list as the administrative authority deems necessary.

NEW SECTION. SECTION 27. Section 117 of the Uniform Plumbing Code, definition "(g) Plumbing System", is amended to read as follows:

(g) <u>Plumbing System</u>. The plumbing system means and includes all potable water supply and distribution pipes, all plumbing fixtures and traps, all drainage and vent pipe and all building drains, including their respective joints and connections, devices, receptacles and appurtenances within the property lines of the premises and shall include potable water piping, potable water treating or using equipment, lawn sprinkler systems and rainwater leaders.

<u>NEW SECTION. SECTION 28.</u> Section 117 of the Uniform Plumbing Code is amended by adding definition "(h-1) Pressure Vacuum Breaker Assembly - Approved" to read as follows:

(h-1) <u>Pressure Vacuum Breaker Assembly - Approved</u>. A pressure vacuum breaker consists of an approved check valve or valves, a vacuum relief device inlet and discharge control valves, and the necessary field testing cocks.

NEW SECTION. SECTION 29. Section 119 of the Uniform Plumbing Code is amended by adding definition "(a-1) Reduced Pressure Principle Backflow Preventor-Approved" to read as follows:

(a-1) Reduced Pressure Principle Backflow Preventor - Approved. A reduced pressure principle backflow prevention device (R.P. Device) is an approved unit consisting of two (2) independently acting, internally-loaded and approved check valves separated by a pressure differential relief valve which causes a reduced pressure zone, between the two (2) check valves.

The differential pressure relief valve shall maintain a reduced differential of not less than two pounds per square inch (2 psi) between the supply pressure and the reduced pressure zone by discharging to atmosphere.

The R.P. Device shall be installed as an approved unit in an approved assembly consisting of two approved control valves, and a pressure relief valve.

<u>NEW SECTION. SECTION 30.</u> Subsection (d) of Section 203, Use of Copper Tubing, of the Uniform Plumbing Code is amended to read as follows:

(d) Copper tube for water piping shall have a weight of not less than that of copper water tube Type L. Exception: Type M copper tubing may be used for water piping when piping is above ground in a building.

NEW SECTION. SECTION 31. Section 308, Improper Location, of the Uniform Plumbing Code is amended by adding subsection (b) to read as follows:

- (a) <u>General</u>. Piping, fixtures or equipment shall not be so located as to interfere with the normal use thereof or with the normal operation and use of windows, doors or other required facilities.
- (b) <u>Elevators</u>. Pipes or ducts conveying gases, vapors, or liquids and not used in connection with the operation of the elevator shall not be installed or replaced in any hoistway, elevator machine room or elevator machinery space.

Exceptions to subsection (b) are as follows:

- (1) Steam and hot water pipes may be installed in hoistways, machine rooms and machinery spaces for the purpose of heating these areas only, subject to the following:
  - (A) Heating pipes shall convey only low pressure steam (fifteen pounds per square inch (15 psi) or less) or hot water at pressures of one hundred sixty pounds per square inch (160 psi) or less and temperatures of two hundred fifty degrees Fahrenheit (250°F) or less.
  - (B) All risers and return pipes shall be located outside the hoistway.
  - (C) Traps and shut-off valves shall be provided in accessible locations outside these spaces.
- (2) Ducts for heating, cooling, ventilating and venting may be installed in the machine room and machinery space.

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32 33 (3) Pipes for sprinklers only may be installed in these spaces subject to the following:

- (A) All risers and returns shall be located outside these spaces.
- (4) Piping for pit and sump pumps may be installed.

NEW SECTION. SECTION 32. Section 318, Inspection and Testing, of the Uniform Plumbing Code is amended by deleting Subsection (b) Testing -Sub-Subsection (5) "Building sewer test."

NEW SECTION. SECTION 33. Subsection (a) of Section 409, Drainage Below Curb and Also Below Main Sewer Level, of the Uniform Plumbing Code is amended to read as follows:

(a) Drainage piping serving fixtures, the flood level rims of which are located below the elevation of the curb or property line, at the point where the building sewer crosses under the curb or property line, and above the crown level of the main sewer, draining by gravity into the main sewer, and shall be protected from back flow of sewage by installing, when required, an approved type back water valve, and each such backwater valve shall be installed only in that branch or section of the drainage system which receives the discharge from fixtures located below the elevation of the curb or property line.

NEW SECTION. SECTION 34. Chapter 4, Storm Drainage Systems, of the Uniform Plumbing Code is amended by adding a new section designated Section 410 - Rainwater Leaders, to read as follows:

Sec. 410 - Rainwater Leaders

- (a) Rainwater Leaders. Rainwater leaders are pipes within a building which drain storm water from roofs or other similar areas of such building. Rainwater leaders shall discharge outside such building and shall not discharge into the sanitary drainage system within a building conveying domestic sewage.
- (b) Materials. Pipe used in rainwater leaders shall be approved cast iron, or galvanized steel, lead, copper or brass, having a smooth and uniform bore. No galvanized steel pipe shall be used underground, and such pipe shall be kept at least six (6) inches above ground. Burred ends shall be reamed to the full bore of the pipe. A.B.S. or P.V.C. may be used in accordance with limitations provided in this code relating to approvals for plastic gipe and fittings.

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(c) Fittings. Fittings used in rainwater leaders shall be approved cast
iron, or malleable iron, lead, copper, or brass, or other material approved by
the administrative authority having a smooth interior way of the same diameter
as the piping served. Such fittings shall conform to the type of pipe used,
and such threaded fittings shall be of the recessed drainage type. Short sweep
fittings may be used in rainwater leaders.

- (d) <u>Roof Drains</u>. Roof drains shall be approved cast iron, or malleable iron, lead, copper, brass, or other approved materials.
- (e) <u>Prohibited Uses</u>. Rainwater leaders shall not be used as soil, waste or vent pipes, and soil, waste or vent pipes shall not be used as rainwater leaders.
- (f) <u>Traps</u>. Rainwater leaders which terminate less than three (3) feet above or ten (10) feet from, any window, door, opening, air intake, exhaust vent or vent shaft, or less than three (3) feet from line of any property which may be built upon, shall be equipped with traps, but are not required to be vented. Other rainwater leaders are not required to be trapped or vented. Cleanouts are not required in rainwater leaders.
- (g) <u>Capacity</u>. The combined capacity of rainwater leaders serving any building shall be not less than as calculated by approved engineering procedure or as set forth in Table 4-4.
  - (h) Testing. All rainwater leaders shall be tested.

### Table No. 4-4

## RAINWATER LEADERS

Roof or Other Area Served	Size of Rainwater Leader
(Square Feet)	(Inches)
1 - 1050	2
1051 - 3150	3
3151 - 6450	4
6451 - 10800	5
10801 - 18000	. 6
18001 - 35700	8

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(i) If Table 4-4 does not provide a practical solution for sizing rainwater leaders, refer to appendix D rainwater systems in this code for more comprehensive engineering design information relating to installation of rainwater systems.

NEW SECTION. SECTION 35. Section 608, Appliances, of the Uniform Plumbing Code is amended by adding subsections (d), (e), and (f) to read as follows:

- (d) Commercial dishwashers shall be connected to the building drainage system with an indirect waste pipe air-gapped to a floor sink or as defined as chapter 1 - definitions in this code.
- (e) Drainage piping for residential dishwashers required in new construction shall be installed as a part of the roughing-in plumbing system.
- (f) Approved countertop and in-sink air-gap fittings are acceptable for residential remodel dishwasher installations, when installed in accordance with the plumbing code as amended. (Refer to Subsection (e) above for new construction.)

NEW SECTION. SECTION 36. Subsection (a) of Section 611, Steam and Hot Water Drainage Condensors and Sumps of the Uniform Plumbing Code, is amended to read as follows:

(a) No steam piping shall be directly connected to any part of a plumbing or drainage system unless approved by the administrative authority, nor shall any water having a temperature above one-hundred and forty degrees Fahrenheit (1400F) be discharged under pressure directly into any part of a drainage system. Such pipes may be directly connected by discharging into an open or closed condensor, or intercepting sump of approved type, that will prevent the entrance of steam or such water under pressure into drainage system. All closed condensors and sumps shall be provided with a vent, which shall be taken off the top and extended separately, full size above the roof. All condensors and sumps shall be properly trapped at the outlet with a deep seal trap extending to within six (6) inches of the bottom of the tank. The top of the deep seal trap shall have a three-quarter (3/4) inch opening located at the highest point of the trap to serve as a syphon breaker. Outlets shall be taken

off from the side in such manner as to allow a water line to be maintained that will permanently occupy not less than one-half (1/2) the capacity of the condensor or sump. All inlets shall enter above the water line. Wearing plate or baffles shall be installed in the tank to protect the shell. The sizes of the blowoff line inlet, the water outlets, and the vent shall be as shown in table 6-1. The contents of condensors receiving steam or hot water under pressure must pass through an open sump before entering the drainage system.

NEW SECTION. SECTION 37. Chapter 6, Indirect Waste Piping, Wet Vented Systems, and Special Wastes, of the Uniform Plumbing Code is amended by adding a new section designated Section 616 - Parking Garage Drainage Systems to read as follows:

Sec. 616 - Parking Garage Drainage Systems. All floor drainage under the roof of a parking garage shall be connected to the sanitary drainage system. When the top floor of the building is used as a roof as well as a parking area, the drainage from the roof shall be connected to the storm drainage system. Drainage from conventional plumbing fixtures shall not be inter-connected with the floor drainage system. Provided, however, drainage lines from car or truck washing equipment may be connected to the floor drainage system through an approved interceptor. Floor drainage waste lines shall be a minimum of three (3) inches in size. Waste unit loadings for three-inch or larger size floor drainage piping shall be sized in accordance with table 4-3 of this code.

Floor drains or floor drain openings shall be equipped with approved strainers and need not be trapped when connected to the building drain through a properly trapped and vented interceptor. Traps shall not be used when the floor drains are located in areas exposed to freezing temperatures. The waste line from floor drains entering an interceptor shall be above the waste line discharging from the interceptor to the building drain. The sand interceptor receiving the floor drains shall have a water seal of not less than six (6) inches. Floor drain traps need not be vented individually if line venting is used through an approved indirect waste system with a properly trapped and vented interceptor. A line vent for floor drains shall terminate through the roof or to an approved location in the outside atmosphere. When using line

venting, the terminating vents, if more than one, shall be equal in cross sectional area to the size of the waste line entering the interceptor or the line vent may continue full size from the interceptor to the point of termination. All plans for parking garage floor drainage systems shall be submitted to the administrative authority prior to installation for approval.

NEW SECTION. SECTION 38. Section 803, Use of Joints, of the Uniform Plumbing Code is amended by adding subsection (g) to read as follows:

Add "(g) <u>Insulated Couplings</u> - When connecting piping to domestic water heaters of dissimilar conductive materials, an approved insulated coupling or dielectric fitting may be used to diminish the possible damage due to electrolysis."

<u>NEW SECTION. SECTION 39.</u> Section 910, Plumbing Fixtures Required, of the Uniform Plumbing Code is amended to read as follows:

Sec. 910 - <u>Plumbing Fixtures Required</u>. Each building shall be provided with sanitary facilities as prescribed by the administrative authority.

An amended list of minimum plumbing facilities for various occupancies is set forth in appendix  ${\tt C}$  of this code.

NEW SECTION. SECTION 40. Section 1003, Cross-Connection Control, of the Uniform Plumbing Code is amended by adding Subsection (q) "Approved Installation Requirements for Reduced Pressure Principle Backflow Prevention Devices and/or Double Check Valve Assemblies" to read as follows:

Backflow Prevention Devices and/or Double Check Valve Assemblies. Installation of a reduced pressure principle backflow prevention device and/or double check valve assembly may be required by the administrative authority in accordance with this code and the Washington Administrative Code (WAC) 248-54-820, 248-54-830, 248-54-840 and 248-54-850. It is unlawful to install a reduced pressure device and/or double check valve assembly without first obtaining approval to do so from the administrative authority. Upon obtaining approval, a plumbing permit shall be secured with payment of the prescribed fee. Such permit shall be conspicuously posted in the immediate area where the reduced pressure device and/or double check valve assembly is to be installed. The

reduced pressure device and/or double check valve assembly shall be subject to an initial testing procedure upon installation to insure the device is operating in an approved manner.

All reduced pressure devices and/or double check valve assemblies, including those installed prior to the adoption of this code, shall be subject to testing on an annual basis or more often as deemed necessary by the administrative authority.

Upon approval of the annual test, an operating permit will be issued to the owner or occupant of the premises whereon such reduced pressure device and/or double check valve assembly is installed. It shall be the responsibility of the owner or occupant to cause such annual tests to be made by a person qualified and approved by the administrative authority to perform such tests. Refusal by the owner or occupant to cause such tests to be made and to obtain annual approval for the continued operation of each reduced pressure device and/or double check valve assembly shall be sufficient cause for the termination of the public water service to the premise.

Reduced pressure devices and/or double check valve assemblies shall be provided with a pressure relief valve installed in accordance with applicable sections of this plumbing code pertaining to pressure relief valves.

NEW SECTION. SECTION 41. Section 1003, Cross-Connection Control, of the Uniform Plumbing code is amended by adding Subsection (r) "Heat Exchangers for Closed Systems Used for Heat Recovery or Solar Systems" to read as follows:

(r) <u>Heat Exchangers for Closed Systems Used for Heat Recovery or Solar Systems</u>. Any closed loop system using a transfer fluid or gas which may contain toxic or nontoxic substances to reduce corrosion or prevent freezing shall use a double wall heat exchanger having a provision for any leakage to be drained to the atmosphere.

NEW SECTION. SECTION 42. Subsection (a) of Section 1004, Materials, of the Uniform Plumbing Code is amended to read as follows:

(a) Water pipe and fittings shall be of brass, copper, cast iron, galvanized malleable iron, galvanized wrought iron; galvanized steel, or other approved materials. PB, PE, or PVC water pipe manufactured to recognized

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replaced by the following:

standards and CPVC water pipe and tubing may be used for cold water distribution systems outside a building. PB water pipe and tubing and CPVC water pipe and tubing may be used for hot and cold water distribution systems within a building. All materials used in the water supply system, except valves and similar devices shall be of like material, except where otherwise approved by the administrative authority.

NEW SECTION. SECTION 43. Subsections (a), (b), and (c) of Section 1007, Water Pressure, Pressure Regulators and Pressure Relief Valves, of the Uniform Plumbing Code are amended to read as follows:

- (a) <u>Inadequate Water Pressure</u>. Whenever the water pressure in the main or other source of supply will not provide water pressure of at least twenty pounds per square inch (20 psi), after allowing for friction and other pressure losses, a tank and pump or other means which will provide twenty (20) pounds pressure shall be installed.
- (b) Excessive Water Pressure. Where local water pressure is in excess of one hundred pounds per square inch (100 psi), an approved type pressure regulator shall be installed and the pressure regulator reduced to one hundred pounds per square inch (100 psi) or less. For potable water services using regulators, provision shall be made to prevent pressure on the building side of the regulator from exceeding main supply pressure. Approved regulators with integral by-passes are acceptable. Each such regulator shall be accessibly located. All pipe size determinations shall be based on eighty percent (80%) of the reduced pressure.
- (c) Any water system provided with a pressure regulating device or check valve at its source or any water system containing water heating equipment shall be provided with an approved, listed, adequately sized pressure relief valve. The pressure relief valve shall be installed on the water heating equipment (domestic hot water tank) or in the hot or cold water piping serving the heating equipment. There shall be no valves installed in the water piping between the heating equipment and the pressure relief valve serving the heating equipment.

NEW SECTION. SECTION 44. Appendix C of the Uniform Plumbing Code is

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For each urinal installed, the number of water closets specified may be reduced by one, except the number of water closets in such cases shall not be reduced to less than two-thirds (2/3) of the minimum specified.

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The figures shown are based upon one (1) fixture being the minimum required for the number of persons indicated or any fraction thereof. Conformity purely on a numerical basis may not result in an installation suited to the need of the indivudual establishment. For example, schools should be provided with toilet facilities on each floor having classrooms. The administrative authority may approve variances from this schedule when its literal application is impracticable.

In applying the schedule of facilities set forth in appendix C, consideration shall be given to the accessibility of the fixtures. Regulations promulgated under Section 504 of the United States

Regulations promulgated under Section 504 of the United States
Rehabilitation Act of 1973 and State of Washington standards designed for making occupancies and facilities accessible to the handicapped, and rules and regulations of the Washington State Building Code Advisory Council may affect certain plumbing fixtures and facilities. Check with the King County building and land development division for further information regarding these regulations and their applicability.

- Minimum plumbing facilities for buildings or occupancies not shown in this table shall be as required by the administrative authority.
- Drinking fountains shall not be installed in toilet rooms or on janitor services sinks.
- 4. Kitchen sinks---one (1) for each dwelling unit.
- 5. As required by the American Standard Safety Code for Industrial Sanitation in Manufacturing establishments (ASA Z4.1---1942).
- 6. Where there is exposure to skin contamination with poisonous, infectious, or irritating materials, provide one (1) lavatory for each five (5) persons.
- 7. Twenty-four (24) linear inches of wash sink or eighteen (18) inches of a circular basin, when provided with water outlets for such space, shall be considered equivalent to one (1) lavatory.
- 8. (a) Trough urinals: floor and wall type trough urinals are prohibited.
  - (b) Surrounding materials: Wall and floor surfaces located within one(1) foot from the front of the urinal lip, at least four (4) feet above the floor, and at least one (1) foot on each side of the urinal

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shall be constructed of non-absorbent material.

- 9. (a) Toilet facilities shall be provided in separate rooms for each sex wherever more than four (4) people are employed and such employees are not of the same sex.
  - (b) Handwashing basins convenient to employees' work areas and supplied with hot and cold water and an approved water mixing faucet shall be provided in commercial food handling establishments for the use of employees.
  - (c) Utility sinks adequate for mopping and other similar cleaning operations shall be provided in food markets, taverns and restaurants. Such sinks shall be fitted with traps of no less than one and one-half (1 1/2) inches diameter, and shall be constructed of cast iron enamel or an equivalent substance with a finish of a smooth non-porous material.
- 10. Each hand washing fixture in any place where a hand washing facility is required shall have hot and cold water with an approved mixing valve.
- 11. Includes only those food service establishments serving food or drink for consumption on the premises.

NEW SECTION. SECTION 45. IAPMO Installation Standards and Interim Guide Criteria 4-78, page 1, EXCEPTION is amended to read as follows:

EXCEPTION: Use shall be limited to water distribution systems not to exceed one hundred pounds per square inch (100 psi) (as required by Section 1007 (b) of the UPC).

NEW SECTION. SECTION 46. IAPMO Installation Standard and Interim Guide Criteria 11-78, page 1, EXCEPTION is amended to read as follows:

EXCEPTION: Use shall be limited to water distribution systems not exceeding one hundred pounds per square inch (100 psi) (as required by Section 1007 (b) of the UPC). Fusion-welded tubing and fittings are not a part of this IGC.

NEW SECTION. SECTION 47. IAPMO Installation Standard and Interim Guide Criteria 12-78, page 1, EXCEPTION is amended to read as follows:

EXCEPTION: Use shall be limited to water distribution systems not to exceed one hundred pounds per square inch (100 psi) (as required by Section 1007 (b) of the UPC).