# WASHINGTON SUBURBAN SANITARY COMMISSION

# 2009 WSSC PLUMBING & FUEL GAS CODE

**Effective Date:** June 1, 2009

## CERTIFICATION OF AUTHORITY

The General Counsel certifies that the statutory authority for the adoption of this Code is:

Annotated Code of Maryland:

Article 29:
§§ 3-301, 6-103, 8-101, 8-102, 8-103, 8-104, 9-101, 9-102, 18-101, 18-104, 18-104.2, 18-104.3

Business Occupations and Professions Article:
§§ 12-305, 12-307

Environment Article:
§9-332

Explanation of Formatting:

Printed Version (Black & White) – Additions and revisions between this version of the Code and the previous Code are shown with a thick vertical line in the right margin as shown immediately to the right.
-Deletions are shown with a horizontal arrow as shown to the right.

Electronic Version – in addition to the margin indicators present in the print version, the electronic version also features blue colored text to indicate an addition or revision.

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# CHAPTER 1

# ADMINISTRATION

## SECTION 101
## GENERAL

**101.1 Title.** These regulations may be cited as the "WSSC Plumbing and Fuel Gas Code," hereinafter referred to as "this Code."

**101.2 Purpose.** The purpose of this Code is to provide minimum requirements and standards regarding plumbing and fuel gas systems for the protection of the public health, safety and welfare. The purpose of this Code is not to create or otherwise establish or designate any particular class or group of persons who will or should be especially protected.

### 101.3 Adoption of Model Codes

#### 101.3.1 International Codes

**101.3.1.1 International Plumbing Code.** The 2006 edition of the International Plumbing Code (hereinafter "IPC"), published by the International Code Council, Inc., is hereby adopted and incorporated herein by reference, and has the same force and effect as though fully set forth in this Code, subject to the additions, deletions or other modifications thereto set forth in Chapter 3 of this Code.

**101.3.1.2 International Residential Code.** Part II-Definitions (Chapter 2), Part VI-Fuel Gas (Chapter 24), Part VII-Plumbing (Chapters 25-32) and Part IX-Referenced Standards (Chapter 43) of the 2006 edition of the International Residential Code (hereinafter "IRC"), published by the International Code Council, Inc., are hereby adopted and incorporated herein by reference, and have the same force and effect as though fully set forth in this Code, subject to the additions, deletions or other modifications thereto set forth in Chapter 4 of this Code.

**101.3.1.3 International Fuel Gas Code.** The 2006 edition of the International Fuel Gas Code (hereinafter "IFGC"), published by the International Code Council, Inc., are hereby adopted and incorporated herein by reference, and have the same force and effect as though fully set forth in this Code, subject to the additions, deletions or other modifications thereto set forth in Chapter 5 of this Code.

**101.3.2 Referenced Codes and Standards.** Other International Code volumes referenced in the IPC, IRC and IFGC, and the standards referenced therein (IPC-Chapter 13, IRC-Chapter 43 and IFGC-Chapter 8) shall be considered part of the

requirements of this Code to the prescribed extent of each such reference. Where the requirements of referenced standards or manufacturer's installation instructions do not conform to minimum provisions of this Code, the provisions of this Code shall apply.

**Exception:** When enforcement of a Code provision would violate the conditions of the listing of the equipment or appliance, the conditions of the listing and the manufacturer's installation instructions shall apply.

**101.3.3 Appendices.** Provisions of appendices within the adopted International Code volumes or within other International Code volumes referenced therein shall not apply unless specifically adopted herein.

**101.4 Scope.** The provisions of this Code shall apply to: 1) all classes of work usually performed by plumbers, gasfitters, site-utility contractors, and sewer and drain cleaners; including the installation, alteration, repair, relocation, replacement, addition to, use or maintenance of plumbing, fuel gas, and site-utility systems; and 2) industrial and special wastes, generally on private property within the Washington Suburban Sanitary District (WSSD). This Code shall also regulate sanitary and condensate vacuum collection systems.

**101.4.1 Fuel Gas Systems.** This Code shall apply to the installation of ***natural and undiluted liquefied petroleum (aka LP or propane)*** gas piping systems, ***natural and LP*** gas utilization equipment and related accessories.

**101.4.1.1 Fuel Gas Piping Systems.** This Code shall cover piping systems for ***natural*** gas with an operating pressure of 125 psig or less and ***liquefied petroleum*** gas with an operating pressure of 20 psig or less. Coverage shall extend from the point of delivery, to the outlet of the equipment shutoff valves. Piping system requirements shall include design, materials, components, fabrication, assembly, installation, testing, inspection, operation and maintenance.

**101.4.1.2 Fuel Gas Utilization Equipment.** Requirements for ***natural*** gas and ***liquefied petroleum*** gas utilization equipment and related accessories shall include installation, combustion and ventilation air, venting, and connection to piping systems.

**101.4.2 Systems and Equipment Outside of the Scope.** This code shall not apply to items listed in the 2006 International Fuel Gas Code, Section 101.2.4.

**101.5 Severability.** If any section, subsection, sentence, clause or phrase of this Code is for any reason held to be unconstitutional or invalid, such holding shall not affect the validity of the remaining portions of this Code.

# SECTION 102
# APPLICABILITY

**102.1 General.** The provisions of this Code shall apply to all matters affecting or relating to work on ***private*** property as set forth in Section 101 or as otherwise specified in law. Where in any specific case, different sections of this Code specify different materials, methods of construction or other requirements, the most restrictive section shall govern as determined by the Code Official.

**102.2 Existing Installations.** Plumbing and fuel gas systems lawfully in existence at the time of the adoption of this Code shall be permitted to have their use and maintenance continued if the use, maintenance, or repair is in accordance with the original design and requirements existing at the time of installation, ***and***, if no hazard to life, health, property, ***or*** to the Commission's systems; is created by such system.

**102.3 Maintenance**

**102.3.1 General.** All plumbing and fuel gas systems, site utility systems, industrial discharge control systems, materials and appurtenances, both existing and new, and all parts thereof, shall be maintained in proper operating condition and in a safe and sanitary condition in accordance with the original design and requirements. All devices or safeguards required by this Code shall be maintained in compliance with the code edition under which they were installed. The property owner, the owner's designated agent, occupant and/or proprietor shall be responsible for maintenance of work or systems regulated by this Code on private property. To determine compliance with this provision, the Code Official shall have the authority to require any system to be re-inspected.

**102.3.2 Commission Maintenance.** The Commission shall maintain all Commission water and sewer mains, service connections, water meters, and appurtenances.

**102.3.3 Right-of-Way Services.** All right-of-way services shall be maintained by the property owner from the building to the edge of the right-of-way or the property line, whichever is closer to the building.

**102.3.4 Commission-Ordered Repairs.** When the Code Official directs repairs to plumbing or fuel gas systems, repair efforts shall be completed within the time specified in a written notification. If deemed a health or safety hazard, or when Commission-ordered repairs do not start within the time specified, the Commission may perform maintenance or repair work on private property, and shall assess the property owner for the labor, material, and overhead costs for work performed.

**102.3.5 Accessibility to Commission Structures.** Water meters, water meter settings and vaults, valve and curb boxes, property-line cleanouts, and similar Commission structures shall be ***readily accessible*** to Commission personnel. A person shall not

block access to or deny access by WSSC personnel to any such structure or to an inside water meter or to a backflow prevention device.

**102.3.6 Sewer Stoppages**

**102.3.6.1 Property Owner's Responsibility.** The property owner shall employ, at his or her own expense, a WSSC-licensed Master Plumber or a WSSC-licensed Sewer and Drain Cleaner to clear the stoppage, from the building to the Commission's sewer main as set forth in Section 102.3.6.2. If the stoppage was caused by a defective building sewer, or by a defective connection at the joint connecting the private sewer to the WSSC service connection, the property owner shall be responsible for hiring a WSSC-licensed Master Plumber to correct the problem at the property owner's expense.

**102.3.6.2 Master Plumber's or Drain Cleaner's Responsibility.** The following requirements shall be the responsibility of the Master Plumber or the Licensed Drain Cleaner when attempting to clear a stoppage in a building sewer (Note: Through-out this section the references to a drain cleaner shall apply to both the Licensed Master Plumber or Licensed Drain Cleaner):

**102.3.6.2.1 Equipment.** Sewer cleaning equipment shall be adequate and in proper working order, to satisfactorily complete the work.

**102.3.6.2.2 System Entry.** Sewer cleaning equipment shall be introduced into the drainage system through an opening that is ***not*** served or protected by a plumbing trap.

**102.3.6.2.2.1 Property Line Clean-out.** Where a WSSC property line clean-out exist, the drain cleaner shall first attempt to locate, open, and determine through visual means if the WSSC service connection is stopped up. If confirmed, the drain cleaner shall notify the property owner and the Commissioner's Emergency call center of their findings. The call center will dispatch a WSSC crew or WSSC authorized contractor. If the visual inspection of the property line clean-out does not indicate a stoppage, the drain cleaner shall access the sewer through the most favorable clean-out or access point on-property.

**102.3.6.2.3 Extent of Cleaning Operation, Soft Stoppages.** In the case of a soft stoppage and an intact service connection, the drain cleaner shall operate the cleaning equipment until the cleaning head has extended into the Commission's sewer main, and the soft stoppage has been completely cleared. The drain cleaner shall be required to notify the Commission.

**102.3.6.2.4 Commission Notification.** If an obstruction causing a stoppage is located in the Commission's service connection, the drain cleaner shall notify the

Commission's Emergency Call Center by telephone, fax, or electronically within 72-hours. If the stoppage was ***not*** cleared the drain cleaner shall notify the Commission by telephone ***immediately***. The drain cleaner shall also inform the Commission, in his or her opinion, what the cause of the obstruction was i.e. soft stoppage, broken/misaligned piping, roots, grease, debris, etc.

**102.3.6.2.5 Equipment Problems.** If the sewer cleaning equipment becomes lodged in any portion of the sewer system, the drain cleaner shall retrieve the equipment. Under no circumstances shall the jobsite be abandoned until the drain cleaning equipment has been removed; if it cannot be removed the Commission shall be notified ***immediately***.

If the service connection is not defective, the drain cleaner shall reimburse the Commission for its expenses in retrieving the drain cleaning equipment. If the service connection is defective, and the defect caused the drain cleaning equipment to become lodged, the drain cleaner shall ***not*** be required to reimburse the Commission for its expenses in retrieving the equipment.

**102.3.6.3 Commission's Responsibility.** The Commission shall ascertain if the Commission's sewer main is clear. Stoppages in Commission sewer mains shall be cleared or otherwise corrected by the Commission. If the stoppage was reported by the drain cleaner as originating in the service connection, the Commission shall initiate the following actions:

**102.3.6.3.1 Follow-up.** If the condition reoccurs, the Commission shall follow-up to determine both the general condition and the integrity of the service connection.

**102.3.6.3.2 Defective Connection.** If the drain cleaner could not relieve a hard or soft stoppage in a defective service connection, the stoppage shall be relieved, or the condition corrected by the Commission, ***without*** back-charge to the drain cleaner.

**102.3.6.3.3 Claim.** If the Commission determines that the stoppage was caused by a defective service connection, the Commission shall instruct the property owner to submit a claim for the cost of the drain cleaner's ***initial*** activity. The property owner may be reimbursed for such costs ***at the prevailing usual and customary charges*** for such work.

**102.3.7 Water Leaks.** The Commission shall investigate and determine responsibility for leaks on water services and appurtenances. If it is found that the leak is ***not*** the Commission’s responsibility, the property owner shall be directed to have necessary repairs performed by a WSSC-licensed Master Plumber at their own expense.

**102.3.8 Sewer Leaks and Defects.** The Commission shall investigate and determine responsibility for leaks and defects on sewer services and appurtenances. If it is found

that the leak or defect is ***not*** the Commission's responsibility, the property owner shall be directed to have necessary repairs performed by a WSSC-licensed Master Plumber at their own expense. **102.3.9 Backflow Prevention Devices, Maintenance and Replacement.**

**102.3.9.1 Group R-3 Occupancies.** In Group R-3 occupancies (one- and two-family residences), the owner shall have ASSE 1012 and ASSE 1024 non-testable backflow device replaced or re-built every ***5-years***, with the starting date beginning on the date of FINAL plumbing inspection for the building. Other testable backflow devices shall be tested annually by a WSSC-registered Certified Backflow Technician, with the starting date beginning on the date of the latest test tag attached to each device.

**102.3.9.2 All Other Occupancies.** In all other occupancy Group classifications, the owner shall have non-testable backflow prevention devices replaced every ***5-years***, with the starting date beginning on the date of FINAL plumbing inspection for the building. The testable backflow ***containment*** device(s), as well as testable backflow devices used for isolation, shall be tested ***annually*** (or more frequently if determined by the Commission) by a WSSC-registered Certified Backflow Technician, with the starting date beginning on the date of the latest test tag attached to each device.

**102.3.10 Alternative Pipe Restoration Methods.**

**102.3.10.1 General.** Alternative pipe restoration methods used for water and sewer piping including cured-in-place-piping (CIPP), pipe bursting, and pipe relining systems, shall be performed using equipment and procedures recommended by the equipment manufacturer. Such restorations shall ***require*** a permit and inspection(s).

**102.3.10.2 Water Piping.** Products used in the final stage restoration process shall conform to IPC Section 605.4. Restored water piping systems shall be labeled or permanently tagged at the main service valve, riser valves, and on exposed piping at 10-foot minimum intervals. The label shall indicate that the piping has been so restored and shall list precautions regarding future maintenance, including the requirement for flameless pipe joining methods when applicable. All backflow prevention devices shall be re-tested or replaced.

**102.3.10.3 Sewer Piping.** Restored sewer piping shall be flushed with clean water and televised as a part of the inspection requirements.

**102.4 Additions, Alterations or Repairs.** Additions, alterations, renovations or repairs to any plumbing or fuel gas system shall conform to requirements set forth in this Code for a new system, without requiring the existing plumbing or fuel gas system to comply with all the requirements of this Code. Additions, alterations or repairs shall not cause an existing system to become unsafe, unsanitary or overloaded. Minor additions, alterations, renovations and repairs to existing plumbing and fuel gas systems shall be permitted in the same manner and arrangement as in the existing system, provided that such repairs or replacement are not hazardous and are approved.

**102.5 Change in Occupancy.** It shall be unlawful to make any change in the occupancy of any structure or property that will subject the structure or property to any special provision of this Code without approval of the Code Official. The Code Official shall certify that such structure meets the intent of the provisions of law governing building construction for the proposed new occupancy and that such change of occupancy does not result in any hazard to the public health, safety or welfare.

**102.6 Historic Buildings.** The provisions of this Code relating to the construction, alteration, repair, enlargement, restoration, relocation or moving of buildings or structures shall not be mandatory for existing buildings or structures identified and classified by the State or a local jurisdiction as historic buildings when such buildings or structures are judged by the Code Official to be safe and not contrary to the public interests of health, safety and welfare regarding any proposed construction, alteration, repair, enlargement, restoration, relocation or moving of buildings.

**102.7 Moved Buildings.** Subject to Section 102.2, plumbing and fuel gas systems that are a part of buildings or structures moved into or within the jurisdiction shall comply with the provisions of this Code for new installations.

**102.8 Changes to This Code.** Changes to this Code shall apply to permits issued after the effective date of the approved change by the Commission, or to work initiated after the effective date if no permit is required for the work. Such changes in the interest of public health, safety or welfare may apply retroactively if specified by the Commission at the time of adoption.

**102.9 Requirements Not Covered by Code.** Any requirements necessary for the strength, stability or proper operation of an existing or proposed plumbing or fuel gas system, or for the public safety, health and general welfare, not specifically covered by this Code shall be determined by the Code Official.

# SECTION 103
# COMMISSION FUNCTIONS

**103.1 General.** The Washington Suburban Sanitary Commission (WSSC) is authorized by ***Article 29*** of the ***Annotated Code of Maryland*** to adopt, administer and enforce regulations for the construction and installation of plumbing and fuel gas systems. The unit within the WSSC created to carry out this function shall be known as the Regulatory Services Group. All Commission employees charged with enforcement of this Code shall be known individually and collectively as Code Officials. The Commission shall designate a person who shall be known as the Chief Code Official to have administrative authority over the activities of a Code Official.

**103.2 Code Officials.** Code Officials shall be Commission employees. The Commission shall have the authority to designate related technical officers, inspectors and other employees to administer this Code.

**103.3 Inspection Staff.** Code officials ***directly*** associated with daily interpretation and enforcement of plumbing and fuel gas codes on a ***technical*** level, including administration, document review, and field inspection; shall as a minimum, be qualified as a ***Master*** licensee in the plumbing and fuel gas trades.

# SECTION 104
# DUTIES AND POWERS OF THE COMMISSION

**104.1 General.** The Commission and its Code Officials shall enforce all of the provisions of this Code, and shall act on any question relative to the installation, alteration, repair, maintenance or operation of all systems, devices and equipment governed by this Code except as otherwise specifically provided for by law.

**104.2 Rule-Making Authority.** The Commission shall have authority as necessary in the interests of public health, safety and general welfare to adopt and promulgate regulations to interpret and implement the provisions of this Code to secure the intent thereof and to designate requirements applicable because of local climatic or other conditions. Such regulations shall not have the effect of waiving structural or fire performance requirements specifically provided for in this Code, or of violating accepted engineering practice involving public safety.

**104.3 Applications and Permits.** The Commission shall receive applications and issue permits for the installation and alteration of covered work as may be required by this Code, inspect the premises for which such permits have been issued, and generally enforce compliance with the provisions of this Code.

**104.4 Inspections.** A Code Official shall make all the required inspections, or shall accept reports of inspection by approved agencies or individuals. All reports of such inspections shall be in writing and be certified by a responsible officer of such approved agency or by the responsible individual. The Commission shall retain the right at its discretion, to monitor or re-inspect any inspection reported by other approval agencies or individuals. The Commission shall be authorized to engage such expert opinion as deemed necessary to report on unusual technical issues that arise.

**104.5 Right of Entry.** Whenever it is necessary to perform an inspection to enforce the provisions of this Code, or whenever a Code Official has reasonable cause to believe that there exists in any building or upon any premises any violations of this Code, the Code Official shall have the authority to enter the building or premises at all reasonable times to inspect or to perform the duties imposed upon the Code Official by this Code. If such

building or premises is occupied, the Code Official shall present credentials to the occupant and request entry. If such building or premises is unoccupied, the Code Official shall first make a reasonable effort to locate the owner or other person having charge or control of the building or premises and request entry. If entry is refused, or if the owner or the owner's agent cannot be located, the Code Official shall have recourse to any remedy provided by law to secure entry.

When the Code Official shall have first obtained a proper inspection warrant or other remedy provided by law to secure entry, the owner, occupant, proprietor, or person having charge or control of any building or premises shall promptly permit entry by the Code Official for the purpose of inspection and examination pursuant to this Code.

**104.6 Identification.** A Code Official shall carry proper identification when inspecting structures or premises in the performance of duties under this Code.

**104.7 Notices and Orders.** A Code Official shall issue all necessary notices or orders to ensure compliance with this Code. Where deemed inadequate, a system shall be provided, altered, or repaired as directed, and in a timeframe indicated by, a Notice of Violation (NOV) served upon the property owner, occupant, proprietor, or operator.

**104.8 Commission Non-Interference.** The Commission shall have no responsibility nor shall the Commission pass judgment in any financial matters or other business-related controversy between the registered person and the public, under any circumstance.

# SECTION 105
# APPROVAL

## 105.1 Product and Material Acceptance

**105.1.1 Standards.** Except as otherwise provided for in this Code, products and materials shall conform at least to the standards cited in this Code, which shall be considered ***minimum*** standards, when used in the construction, installation, alteration, or repair of plumbing and fuel gas systems or parts of these systems. The inclusion or listing of a product or material although indicated as approved for purposes of these regulations, does ***not*** infer unqualified endorsement as to its selection or serviceability in any or every installation.

**105.1.2 Materials Handling.** Products and materials installed in plumbing and fuel gas systems shall be handled and installed as to avoid damage so that the quality of the product or material shall not be impaired.

**105.1.3 Damaged Materials.** Defective or damaged products, materials, equipment, or apparatus shall not be installed or maintained.

**105.1.4 Materials Installation.** All products and materials used shall be installed in strict accordance with the standards and listings under which the materials are accepted or approved, including the appendices of the standards, and in strict accordance with the manufacturer's instructions.

**105.1.5 Material and Equipment Reuse.** Materials, equipment and devices shall not be reused unless reconditioned, tested, placed in good and proper working condition, and approved.

**105.2 Alternative Materials, Methods and Equipment.** The provisions of this Code shall not be intended to prevent the installation of any material or to prohibit any method of construction not specifically prescribed by this Code, provided that any such alternative has been approved. An alternative material or method of construction shall be approved where the Code Official finds that the proposed design is satisfactory and complies with the intent of this Code, and that the material, method or work offered is, for the purpose intended, at least the equivalent of that prescribed in this Code in quality, strength, effectiveness, fire resistance, durability and safety.

**105.3 Required Testing.** Whenever there is insufficient evidence of compliance with the provisions of this Code, or evidence that a material or method does not conform to the requirements of this Code, or in order to substantiate claims for alternate materials or methods, the Code Official shall have the authority to require tests to be made, at no expense to the Commission, as evidence of compliance.

**105.3.1 Test Methods.** Test methods shall be as specified in this Code or by other recognized test standards. In the absence of recognized and accepted test methods, the Code Official shall approve the testing procedures.

**105.3.2 Testing Agency.** All tests shall be performed by an approved agency.

**105.3.3 Test Reports.** Reports of tests shall be retained by the Code Official.

**105.4 Alternative Engineered Design.** The design, documentation, inspection, testing and approval of an alternative engineered design plumbing or fuel gas system shall comply with Sections 105.4.1 through 105.4.6 of this Code.

**105.4.1 Design Criteria.** An alternative engineered design shall conform to the intent of the provisions of this Code, and shall provide an equivalent level of quality, strength, effectiveness, fire resistance, durability and safety. Material, equipment or components shall be designed and installed in accordance with the manufacturer's installation instructions.

**105.4.2 Submittal.** The registered design professional shall indicate on the permit application that the plumbing system is an alternative engineered design. The permit

and permanent permit records shall indicate that an alternative engineered design was part of the approved installation.

**105.4.3 Technical Data.** The registered design professional shall submit sufficient technical data to substantiate the proposed alternative engineered design and to prove that its performance meets the intent of this Code.

**105.4.4 Construction Documents.** The registered design professional shall submit to the Code Official two complete sets of signed and sealed construction documents for the alternative engineered design. The construction documents shall include floor plans and a riser diagram for the work. Where appropriate, the construction documents shall indicate the direction of flow, all pipe sizes, grade of horizontal piping, loading, and location of fixtures and appliances.

**105.4.5 Design Approval.** Where the Chief Code Official determines that the alternative engineered design conforms to the intent of this Code, the plumbing or fuel gas system shall be approved. If the alternative engineered design is not approved, the Code Official shall notify the registered design professional in writing, stating the reasons for disapproval.

**105.4.6 Inspection and Testing.** The alternative engineered design shall be tested and inspected in accordance with the requirements of Section 107 of this Code.

**105.5 Modifications (Waivers).** When practical difficulties involved in carrying out the provisions of this Code arise, the Commission shall have the authority to grant a modification for individual cases, provided that the Chief Code Official shall first find special individual reasons that make the strict letter of this Code impractical, that the modification is in conformity with the intent and purpose of this Code, and that such modification does not lessen health, life or fire safety requirements or cause damage to the Commission's systems. Records of action granting modifications shall be maintained by the Commission's Regulatory Services Group.

**105.5.1 Request.** A modification request shall be submitted on the official Modification Request form. The form shall be signed by the Owner and by the Master Plumber/Gasfitter or Engineer.

**105.5.2 Indemnification.** The ***owner*** or his or her legal representative shall sign the hold-harmless agreement section of the modification request form, indemnifying the Commission and/or its employees from and against all losses and liabilities that may result from the granting of the modification request.

**105.5.3 Future Editions.** This Code incorporates by reference the current editions of many nationally recognized codes and standards. Revised and updated editions of such codes and standards shall not automatically become part of this Code. However, the Code Official may consider such amendments to published editions of referenced codes

and standards not yet adopted by the Commission as evidence supporting an application for a modification.

# SECTION 106
# PERMITS

## 106.1 Required Permits

**106.1.1 General.** Any owner, authorized agent or contractor who desires to construct, enlarge, alter, repair, move, demolish or change the occupancy of a building or structure, or to erect, install, enlarge, alter, repair, remove, convert or replace any plumbing, site utility, or fuel gas system, the installation of which is regulated by this Code, or to cause any such work to be done, shall ***first*** make application to the Commission and obtain the required permit for the work. All work identified in this Code, except for "Exempt Work" set forth in Section 106.2, shall be installed under a Long Form or Short Form Plumbing/Gasfitting permit, or under a Site-Utility permit.

**106.1.2 Required Inspections.** It shall be the licensee's responsibility to ensure that all work is inspected and approved in accordance with Section 107 of this Code.

**106.2 Exempt Work.** The following work shall be exempt from the requirement for a permit. Exemption from the permit requirement of this Code shall not be deemed to grant authorization for any work to be done in violation of the provisions of this Code or any other laws.

**106.2.1 Repairing Leaks.** The stopping of leaks in drains, water, soil, waste or vent pipe, provided that if any concealed trap, drainpipe, water, soil, waste or vent pipe becomes defective and it becomes necessary to remove and replace the same with new material, such work shall be considered as new work and a permit shall be obtained and an inspection made as provided in this Code, subject to the provisions set forth in Section 106.2.2.

**106.2.2 Ten-Percent Rule, General.** Within the building envelope including below grade, if ***less than*** 10-percent (nominal) of the existing piping for a system, sub-system, or fixture group is replaced, a permit and inspection shall ***not*** be required. This shall not preclude the licensee from obtaining permits and inspections for such work if so desired.

**106.2.2.1 Other than Group R-3 Occupancies.** The intent of the 10-percent rule exclusions in Section 106.2.2 shall be applicable to minor repairs and replacement piping only. In buildings other than Group R-3 occupancies, a permit and inspection shall be required for more extensive work if ***more than*** 10-percent (nominal) of a ***floor level, wing, or area*** is involved, even though the floor level, wing, or area defines ***less than*** 10-percent (nominal) of the total building plumbing.

**106.2.2.2 Repairs Below Grade.** Repairs to outdoor piping below grade shall ***not*** be exempt work, and shall require a permit and inspection. Examples of repair work requiring a permit shall include, but shall not limited to: Building sewer, building water service, grinder pump replacement, and site-utility water and sewer piping.

**106.2.2.3 Repairs to Gas Piping.** Repairs to gas piping shall ***not*** be exempt work, and shall require a permit and inspection.

**106.2.3 Plumbing Maintenance.** The clearing of stoppages in fixture branches; the repairing of incidental leaks in pipes, valves or fixtures; the removal and reinstallation or replacement of existing plumbing fixtures, residential type plumbing appliances, non-testable backflow devices, and plumbing appurtenances; provided that such repairs ***do not*** involve or require the replacement of ***concealed*** piping, or the rearrangement of valves, pipes or fixtures.

**106.2.3.1 Testing and Rebuilding of *Testable* Backflow Preventers.** Testing and rebuilding of testable backflow preventers is exempt of a required permit but shall only be performed by a WSSC registered Cross Connection Technician and requires the submission of a completed WSSC backflow preventer test report to the WSSC Cross Connection Control and Backflow Prevention Office.

**106.2.3.2 Replacing and Rebuilding of *Non-testable* Backflow Preventers.** Replaced or rebuilt non-testable backflow preventers do not require submission of a form to WSSC but a completed WSSC Replace or Re-build Notification Tag must be hung on or near the device. See WSSC 302.3.3 and 402.25.1.

**106.2.4 Gas Appliance Maintenance.** Replacement, repair, or adjustment of gas controls, burners, or minor components; luminous and portable appliances; to the extent that such replacement shall not alter the condition of previous approval or render such equipment unsafe.

**106.2.5 Special Exception, Federal Facilities.** Permitting and inspection requirements for federal facilities shall be as provided in applicable law and/or pursuant to agreement with the appropriate federal agency. Such facilities may be required to install an outside water meter setting or vault, and to contain the property with backflow protection, at the same general location as the meter. Inspection fees shall only apply when the federal facility elects to have WSSC provide inspection services. System Development Charges (SDC) shall be due for each project as required of all WSSC connected customers when applicable.

**106.3 Permit Application.** Each application for a permit, with the required fee, shall be filed with the Commission on a permit application form furnished for that purpose. All permit applications including site-utility permits shall be completed at time of application,

including: property owner's/owner's agent name, address, and contact information; as well as work premise address/property description, and description of work being performed. The application shall be signed or electronically validated by the licensee. A permit application shall ***not*** be a permit, and the submission of an application shall ***not*** confer permission to proceed with the work.

**106.4 Authorized Permit Applicant.** Application for a permit shall be made by the licensee or licensee's agent to install all or part of any plumbing, fuel gas, or site utility system. The applicant shall meet all qualifications established by this Code and/or by other applicable law. The full name and address of the applicant shall be stated in the application.

**106.4.1 Purchase of Permits Security Policy.** Only the Master Plumber/Gasfitter or their authorized representatives (proxies) will be able to purchase Long Form or Short Form Permits. The identity of the licensee or proxy will be validated using the Commission's database, along with photo identification such as a driver's license.

**106.5 Construction Documents Submission.** Construction documents, engineering calculations, diagrams and other such data shall be submitted in two sets with each application for a Long Form plumbing/gasfitting permit or for a site-utility permit; or for a Short Form permit when required by the Code Official. The Commission may require construction documents, computations and specifications to be prepared and designed by a registered design professional. Construction documents shall be drawn to scale and shall be of sufficient clarity to indicate the location; nature and extent of the work proposed and show in detail that the work conforms to the provisions of this Code.

**Exception:** The Code Official shall have the authority to waive the submission of construction documents, calculations or other data if the nature of the work applied for shall be such that reviewing of construction documents shall not be necessary to determine compliance with this Code. In general, construction documents shall not be required for Group R-3 one- and two-family residences; or for commercial work ***without*** FOG abatement, ***and***, with a ***cumulative total*** of 10 or fewer items. The cumulative total of 10 or fewer items may include plumbing fixtures; and 3 or fewer gas appliances, served by a dedicated source, with an input rating of less than 200,000 Btuh each.

**Note:** The use of ***multiple*** permits under the exception cited above, on jobs with a cumulative total exceeding 10 items, shall ***not*** be acceptable.

**106.5.1 Approved Construction Documents.** When the Commission issues a permit where construction documents are required, the construction documents shall be endorsed in writing and stamped **APPROVED** by the Code Official/plans reviewer. Such approved construction documents shall not be changed, modified or altered without authorization from the Code Official. All work shall be done in accordance with the approved construction documents.

At the Commission's discretion and direction, the Code Official shall have the authority to issue a permit for the construction of a part of a plumbing, fuel gas, or site utility system before the entire construction documents for the whole system have been submitted or approved, provided adequate information and detailed statements have been filed complying with all pertinent requirements of this Code. The licensee shall proceed at his or her own risk, without assurance that the permit for the entire system shall be granted.

**106.5.2 Retention of Construction Documents.** One set of construction documents shall be retained by the Code Official until **FINAL** approval of the work covered therein. One set of approved construction documents shall be returned to the applicant, and shall be kept on the site of the building or work at all times during which the authorized work is in progress.

**106.6 Permit Issuance.** The application, construction documents and other data filed by an applicant for a permit shall be reviewed by the Code Official. If the Code Official finds that the proposed work conforms to the requirements of this Code, and that the fees published by the Commission have been paid, a permit shall be issued to the applicant.

**106.6.1 Validity.** The issuance of a permit or approval of construction documents shall ***not*** be construed to be a permit for, or an approval of, any violation of any of the provisions of this Code or of other law of the jurisdiction. No permit presuming to give authority to violate or cancel the provisions of this Code shall be valid.

The issuance of a permit based upon construction documents and other data shall ***not*** prevent the Code Official from requiring the correction of errors in construction documents and other data, or from preventing building operations being carried on when in violation of this Code or of other Commission regulations.

**106.6.2 Permit Invalidation.** Subject to applicable State law, the Commission may suspend, revoke, or invalidate a permit or approval issued under the provisions of this Code in case of any false statement or misrepresentation of fact in the application or on the construction documents upon which the permit or approval was based.

Examples of misrepresentation of fact shall include, but not be limited to, the following:

- Payment of residential fees for a property used in a commercial manner.
- Permit issued for an outbuilding or garage that is subsequently illegally converted for use as a residence.
- Permit applicant falsely representing himself or herself as owner, not the owner's agent.

**106.7 Fees.** A permit shall not be issued until all applicable fees have been paid, and an amendment to a permit shall not be released until the additional fee, if any, due to an increase of the plumbing, fuel gas, or site utility systems, has been paid.

**106.7.1 Insufficient Funds.** In cases where funds are insufficient in check and electronic fund transfers, the applicant shall pay for associated costs as a part of the required fees. The Commission reserves the right to impose a 6-month ***cash only*** status in these cases.

**106.7.2 Work Commencing Before Permit Issuance.** Any person who commences any work on a plumbing, fuel gas, or site-utility system before obtaining the necessary permits shall be subject to, ***in addition to*** the published permit fees, 100% of both the minimum permit fee and the fixture/appliance inspection fees. Systems Development Charge (SDC) fees or other impact fees shall be excluded from this penalty.

**106.7.3 Fee Schedule.** The permit fees for all plumbing, gasfitting, and site-utility work, as well as System Development Charge (SDC) fees or other impact fees, if any, shall be as indicated in separate fee schedules published by the Commission.

**106.7.4 Fee Credits.** In cases where a building is being demolished and/or renovated, an SDC credit shall be allowed for existing plumbing fixtures that will be removed. ***Prior to*** the credit being issued, a fixture credit permit shall ***first*** be obtained and the fixtures to be removed shall be verified by the Code Official.

**106.7.5 Fee Refunds.** Except as otherwise provided in Article 29, Annotated Code of Maryland, the Commission shall authorize the refunding of fees, no later than 180-days after the date of permit cancellation, expiration, or FINAL inspection, whichever is last, as follows:

**106.7.5.1 Erroneous Payment.** The full amount of any fee paid that was erroneously paid or collected.

**106.7.5.2 Permit Cancelled.** If a permit is cancelled or expires, the current minimum permit fee shall be retained to cover administrative costs. The balance including impact fees shall be refunded, provided that no work has been performed and no inspections have been made.

**106.7.6 Re-Inspection Fees.** A re-inspection fee may be assessed against the permittee for scheduled inspections not meeting the requirements of this Code. One Short Form permit shall constitute a re-inspection fee. Subsequent inspection requests shall ***not*** be scheduled until these fees have been paid. A re-inspection fee for a homeowner's permit shall be paid directly to Permit's counter and will be noted on the active permit.

**106.7.6.1 Procedures.** The licensee shall schedule the original Long Form or Short Form permit for inspection. For Short Form permits, WSSC's Inspection Aides will record the permit number of the re-inspection fee permit into the history of the original permit. The licensee shall print a copy of the Short Form permit and have it on the job for the re-inspection. The Plumbing Inspector will sign this copy of the permit which then goes to the property owner. If the licensee wishes to have a signed copy of the permit, they shall print an additional copy and have on the job with instructions for the additional signatures.

**106.8 Long Form Permit.** A Long Form permit shall be required for all new plumbing and fuel gas work requiring one or more inspections, including major alterations or additions and design retrofit work; for any plumbing work requiring the establishment of a new WSSC customer account; and for a new, or the relocation of a, testable or non-testable backflow preventer, residential or commercial.

**106.8.1 Expiration.** A Long Form permit shall expire if the work authorized by the permit is not commenced within 18-months from the date of issuance of the permit, or if the work authorized by the permit is suspended or abandoned for a period of 18-months from the last performed inspection. Before the original permitted work can be recommenced, the current minimum long form permit fee must be paid as a re-issue fee. In addition, the current amount for inspection fees and System Development Charges (SDC) shall be due for additional fixtures and the difference in SDC is due for existing permitted fixtures based on the originally permitted fee compared with the current SDC.

**106.8.2 Commission Sub-Meter Permit Application.** The applicant shall be responsible to provide accurate account information including name, address; billing account number and main water meter ID and serial number. Applicable only to non-residential properties.

**106.9 Short Form Permit.** A Short Form permit shall be allowed for the replacement, repair, or alteration of ***existing*** plumbing and fuel gas systems, fixtures, or appliances requiring only ***one*** inspection. A Short Form permit may also be used for the direct replacement of all testable backflow preventers provided the existing location and application are acceptable under this Code, assembly listings, and manufacturer's installation instructions.

**106.9.1 Limitations.** A Short Form permit for a singular inspection shall be limited to 3 items, fixtures, or appliances. Private meters and tees for future gas appliances shall be considered as items. Gas appliances shall be limited to 450,000 Btuh each. Only ***one*** address or ***one*** occupancy unit shall be listed on ***each*** permit. Only ***one*** inspection shall be performed for each permit.

**106.9.2 Re-Inspection Fee.** A Short Form shall also be used as a method of collecting payment as a "re-inspection fee" as cited in Sections 107.2.1.8 and 107.3.4. Subsequent inspection requests shall ***not*** be honored until the re-inspection fee has been paid.

**106.9.3 Activation.** A Short Form permit shall be activated through the scheduling of the inspection upon completion of the work.

**106.9.4 Expiration.** A Short Form permit shall expire if not activated 12-months from the date of purchase, without benefit of refund.

**106.10 Permit Release and Transfer**

**106.10.1 Licensee Request.** The licensee may be released from completing work that has been authorized under a permit by submitting a written request to the WSSC Permit Services Unit.

**106.10.2 Owner Request.** Transfer of a permit prompted by a property owner shall require a ***written*** request ***by the owner*** to the Commission. The request shall include the owner's name, property address, and owner's phone number. The Commission shall notify the original licensee of the transfer.

**106.10.3 Transition Inspection.** Prior to ***any*** work being performed by the permit transferee (new licensee), and ***at the transferee's discretion***, the transferee shall schedule and shall stand a transition inspection to determine limits of responsibility. When no work has been performed on the original permit beyond the last approved inspection, a transition inspection shall not be necessary.

**106.10.4 Fee Refund.** See Section 106.7.5.

**106.11 Work by Homeowners.** Homeowners may perform the following plumbing work in their own residential unit as provided in this Section.

**106.11.1 Work Not Requiring Permits.** A homeowner may perform classes of plumbing work that do not require a permit as set forth in Section 106.2.

**106.11.2 Work Allowed Under a Homeowner Permit.** A homeowner may perform most classes of work normally performed by a plumber, except those items set forth in Section 106.11.5, provided that the conditions for a homeowner permit have been satisfied in accordance with Sections 106.11.3 and 106.11.4.

**106.11.3 Conditions for a Homeowner Permit.**

**106.11.3.1 Building Type.** The premises shall be a Group R-3 occupancy (single family detached house or an attached row style house).

**106.11.3.2 Separate Services.** Building water and building sewer services shall be provided by ***separate*** Commission service connections, *i.e.* not shared with or serving any other property, or shall be provided by private well and/or septic systems.

**106.11.3.3 Ownership.** The applicant shall provide proof, such as property records, that the applicant is the bona fide owner of the premises. The applicant shall sign an affidavit indicating that they are the bona fide owner and occupant of the premises; and that the premises is ***not*** being built or remodeled for sale or for rent. The affidavit shall state that all work shall be performed by the applicant in ***strict*** compliance with this Code and approved drawings including: All inspections, tests, re-inspections when required due to failed inspections, re-inspection fees, and other administrative requirements normally required of licensed plumbers.

**106.11.4 Additional Applicant Requirements**

**106.11.4.1 Codebook.** Depending on the type of work to be performed, the applicant shall be required to obtain a copy of the WSSC Plumbing and Fuel Gas Code and the International Residential Code.

**106.11.4.2 Written Test.** The applicant shall be required to ***pass*** a written test appropriate to the proposed plumbing work. The test shall include questions about general trade knowledge of plumbing and basic code requirements. The test shall be open-book, shall have a time limit, and shall be administered by the Commission or its exam consultant. The applicant shall be permitted to re-take the written test ***one*** time, if it is failed.

**106.11.4.3 Drawings.** The applicant shall submit floor plans and/or riser diagrams for approval, as directed by the Code Official, and shall install the work in accordance with this approval.

**106.11.5 Work Not Allowed.** The following work shall ***not*** be performed by homeowners:

- Below grade piping deeper than 4 feet, including repair of water or sewer services deeper than 4 feet, or piping that crosses other utilities.
- Connection to a Commission water or sewer service connection: This work shall be performed by a WSSC-licensed Master Plumber.
- Installation and testing of ***testable*** backflow devices.
- ***Gasfitting*** installations, including the installation or replacement of a gas-fired water heater or appliance.
- Work on public property, Commission-owned structures or appurtenances.

# SECTION 107
# INSPECTIONS AND TESTING

**107.1 General.** Plumbing, fuel gas, and site-utility installations requiring a permit shall require inspection and approval by the Commission for each phase of work outlined herein, and in accordance with applicable model code requirements.

**107.2 Licensee Responsibility**

**107.2.1 General**

**107.2.1.1 Scheduling.** The licensee shall be ***responsible for*** scheduling ***all*** inspections, or ensuring that all inspections have been scheduled. Short form permits may be scheduled for inspection by the licensee, the property owner, or the owner's agent; however, this accommodation shall ***not*** relieve the licensee from the responsibility for scheduling the inspection, and ensuring inspection approval.

**107.2.1.2 Cancellations.** The licensee shall be responsible for all inspection cancellations.

**107.2.1.3 Plans on Jobsite.** On buildings requiring a plans review, a WSSC Master licensee or a WSSC Journeyman licensee shall be present at the inspection site, and shall provide the approved construction documents including modifications. The Master or Journeyman licensee shall be appropriately licensed for the scope of work being inspected; either plumbing, gasfitting, or both.

**107.2.1.4 Licensee Supervision.** All registered Master licensees of record shall be available for consultation with the Code Official and for supervision of work installed under their license. When required by the Code Official, the Master licensee shall stand the inspection.

**107.2.1.5 Gas Connection.** Fuel gas piping may be connected to the serving utility's meter rack or second stage pressure regulator, but shall ***not*** be activated until the Commission's ***fuel gas*** CLOSE-IN inspection has been approved.

**107.2.1.6 Concealment.** No piping shall be covered or concealed ***prior to*** inspection and approval by the Code Official, except as set forth in Sections 107.2.1.9 and 107.2.1.10. ***Only*** an approval sticker or tag, signed by the Code Official, shall indicate an approved installation.

**107.2.1.7 Tests.** Tests that are required on piping systems shall be made ready for inspection verification ***prior to*** the Code Official's arrival on the jobsite.

**107.2.1.8 Failed Inspections.** Installations that fail inspection shall be corrected and scheduled for re-inspection. A re-inspection consisting of one Short Form permit shall be charged, at the discretion of the code official. See Section 107.3.4.

**107.2.1.9 Self-Certification, Plumbing Work.** When authorized in advance by the Code Official, the licensee may self-inspect the work, in lieu of an inspection by the Code Official, and certify that the work meets requirements set forth in this Code. It shall be the licensee's responsibility to ensure that all self-inspected work has been so authorized. Self-inspected work shall be subject to re-inspection by the Code Official at any time.

**107.2.1.10 Self-Certification, Gasfitting Work.** Gasfitting work shall ***not*** be self-certified.

**Exception*:*** Subject to ***pre-approval*** by the Code Official, the serving gas utility may self-certify the installation of outdoor gas lights, modification of customer piping in connection with outside meter relocation, and similar outdoor work.

**107.2.1.11 Third Party Certification, Standard and Minor Site Utility Work.** Work shall be inspected and certified by a State of Maryland registered professional engineer in accordance with procedures outlined in Chapter 7.

**107.2.2 Inspection Timeframe.** It shall be the licensee's responsibility to have work inspected in a timely manner and to ensure that the work has passed inspection as follows:

**107.2.2.1 Permits, General.** Upon completion of each work phase, and prior to concealment where applicable.

**107.2.2.2 Short Form Permit.** Within 5 calendar days of installation; and prior to concealment where applicable.

**107.2.2.3 Site-Utility Permit.** Prior to the ***plumbing*** **FINAL** inspection.

**107.2.3 Jobsite Entry and Access.** The licensee shall be responsible for ensuring entry and access to the jobsite or inspection location as follows:

**107.2.3.1 Street Sign.** A sign with the street name, ***as listed on the permit***, and ***clearly visible*** from a vehicle, shall be posted at the nearest intersection.

**107.2.3.2 Lot and Block Posting.** Lot and block numbers, or street address, ***as listed on the permit***, shall be posted on every building scheduled for inspection so as to be clearly visible from a vehicle. Letters and numbers shall be a minimum of 8-inches high. On an existing building and on **FINAL** inspections, the building address, ***as***

***listed on the permit*** and ***clearly visible*** from a vehicle, shall be acceptable in lieu of lot/block posting.

**107.2.3.3 Vehicle Access.** The licensee shall provide vehicular access to within 200 feet of the inspection location.

**107.2.3.4 Foot Traffic Safety.** Foot traffic access meeting OSHA and MOSHA safety standards shall be provided from the parking area to the point of inspection.

**107.2.3.5 Ladder Safety.** Where access to the inspection site requires use of a ladder, a manufactured type of ladder in sound condition, meeting OSHA and MOSHA safety standards, shall be provided by the licensee.

**107.3 Code Official Responsibility and Inspection Criteria.**

**107.3.1 Timely Inspections.** In general, the Code Official shall provide a timely inspection following established procedures, usually ***the next working day***, on installations that have been properly permitted and scheduled in advance.

**107.3.2 Backlogged Inspections.** Inspections that cannot be completed due to the Code Official's workload or weather conditions shall be backlogged on a priority basis and shall be automatically rescheduled by the Code Official for the next available workday.

**107.3.3 Inspection Stickers.** The Code Official shall notify the licensee of inspection status through the posting at the jobsite of a signed sticker or tag, specific to the work installed, indicating passed/**APPROVED** or failed/**DISAPPROVED** inspection status.

**107.3.4 Failed Inspections.** A scheduled inspection for work that is not in compliance with this Code shall fail and shall be so designated by the posting of a ***red*** **DISAPPROVED** sticker. Reasons for failure or Code sections with which work is in non-compliance shall be listed on the sticker. Failed inspections shall be subject to a re-inspection fee. See Sections 106.7.6 and 107.2.1.8.

**107.3.5 Partial Inspections.** On larger installations, a **PARTIAL** sticker shall be posted at the jobsite indicating that part of a construction phase has passed inspection. The ***approval plans shall be made available*** at the jobsite for similar notation.

**107.3.6 Inspection Result Notification.** The Code Official shall ***not*** be responsible for contacting the licensee when an inspection has failed, and the Code Official shall ***not*** be responsible for redesigning systems or preparing checklists.

**107.3.7 Emergency Inspections.** Weekend, holiday, and after-hours emergency inspections shall be performed ***only*** after prior notification and prior approval by the Chief Code Official or his/her designee. Examples of emergencies include, but shall not be limited to: Fuel gas repairs where building occupants are without heat in

extremely cold weather, fuel gas repairs in multifamily complexes, water service repairs in freezing weather, and repairs to deeply buried piping in highly populated areas or where jobsite conditions pose an imminent threat to public safety.

**107.4 Inspections by Work Phase.** Each phase of plumbing or fuel gas installation shall require inspections as outlined below.

**107.4.1 Required Plumbing Inspections.**

**107.4.1.1 Sewer.** Building sewers shall be inspected from the point of connection to the building drain to the point of connection at the service connection, septic tank, or other point of disposal. Critical inspection factors shall include, but not be limited to: Trenching, bedding, depth, slope, appurtenances and materials. Outdoor grinder pump systems located on private property shall be considered as part of the building SEWER inspection.

**107.4.1.2 Water Service.** Building water services shall be inspected from the service valve to the point of connection at the service connection, well casing, or other source of supply. Critical inspection factors shall include, but not be limited to: Trenching, bedding, depth, separation from other utilities, appurtenances, and materials. Mechanical joint water services shall be subject to additional requirements particular to that piping; see Chapter 7.

**107.4.1.3 Groundwork.** A **GROUNDWORK** inspection shall include, but not be limited to: Drainage and vent piping below grade inside of buildings, the building drain, and below grade water distribution systems. Critical inspection factors shall include, but not be limited to: Trenching; bedding; slope; sizing; piping tie-downs, hangers, and supports; materials; sewage ejectors; capping or plugging; and required tests. NOTE: If a water distribution system is installed below grade, it shall be scheduled as a **WATER GROUNDWORK** inspection.

**107.4.1.4 Close-In.** A **CLOSE-IN** inspection shall include all rough-in work above grade. Critical inspection factors shall include, but not be limited to: Slope, piping support, sizing, materials, built-in fixtures, fixture carriers, capping or plugging, piping protection, and required tests. Where applicable, a "hung groundwork" shall be inspected as a part of the close-in inspection. On factory-built housing or in buildings with factory-built plumbing cores, the installation shall have a State of Maryland inspection sticker and the drainage and venting system shall require a peppermint-test in the presence of the Code Official.

**107.4.1.5 Final.** A **FINAL** inspection shall include all required plumbing fixtures and appliances, appurtenances, and gas appliances. Prior to scheduling a final inspection, the licensee shall be responsible for assuring successful completion of all prerequisite inspections. Critical inspection factors shall include, but not be limited to: All fixtures and appliances accurately included on the permit with associated fees paid;

curb box installation where applicable; outside or inside meter setting complete and in conformance with Commission Standard Details (see Chapter 6); property line cleanout complete and to grade in conformance with Commission Standard Details; required cleanouts accessible; hot water to fixtures; fixtures clean, undamaged, secure, and operating properly; no leaks; no water hammer; mechanical equipment properly installed; backflow devices in place; and all tests completed.

**107.4.1.6 Meter Pick-Up Authorization.** On buildings requiring an inside meter setting 1½-inch or larger, a separate inspection shall be scheduled for meter pick-up authorization. Critical inspection factors shall include, but not be limited to: Sizing in accordance with the permit and Commission right-sizing policy, freeze protection, required area and access, provisions for testing, "release" of Commission-owned systems; and adherence to Commission Standard Details.

**107.4.2 Required Fuel Gas Inspections.** All fuel gas and fuel gas-fired equipment installations shall be subject to a ***gasfitting*** **CLOSE-IN** and a ***gasfitting*** **FINAL** inspection. On limited installations, particularly those completed under a Short Form permit, both inspections shall be completed simultaneously as a ***gasfitting*** **FINAL** inspection.

**107.4.2.1 Gasfitting Close-In.** Gas piping, from the point of delivery to the equipment shutoff valve, shall be tested. Masonry chimneys and metal vents that are to be concealed shall also be a part of this inspection. Critical inspection factors for piping shall include, but not be limited to: Sizing; materials and supports; welder's certification; marking; labeling; clearances and other safety items; trenching; bedding and depth, where applicable; and use of appropriate tests and test equipment. Critical inspection factors for vents shall include, but not be limited to: Sizing; materials and supports; clearances; existing masonry vents cleaned or relined if required; and installation in accordance with the manufacturer's installation requirements.

**107.4.2.2 Gas Final.** This inspection shall focus primarily on proper installation and operation of equipment and final connections to the gas supply and venting system. Critical inspection factors shall include, but not be limited to: ***gasfitting*** **CLOSE-IN** approval; equipment installation, protection, accessibility, and clearances; combustion and make-up air; ***manufacturer's instructions on the jobsite***; and performance of a complete operational firing sequence when required.

**107.4.2.3 Temporary LP Gas Service.** Gas supply systems that are designed and installed for use with natural gas, but will be operated temporarily with liquefied petroleum (LP) gas, shall be tested and inspected in the same manner as natural gas.

**107.5 Site-Utility Systems.** Standard and minor site-utility systems shall be installed by an approved utility contractor ***or*** by a WSSC-registered Master Plumber. Inspection of these systems shall be performed by a professional engineer registered in the State of Maryland. See Chapter 7.

**107.6 Emergency Inspections.** See Section 107.3.7.

**107.7 Special Plumbing Inspections.** Special inspections of alternative engineered design plumbing systems shall be conducted in accordance with Sections 107.7.1 and 107.7.2.

**107.7.1 Periodic Inspection.** The registered design professional or designated inspector shall periodically inspect and observe the alternative engineered design to determine that the installation is in accordance with the approved construction documents. All discrepancies shall be brought to the immediate attention of the plumbing contractor for correction. Records shall be kept of all inspections.

**107.7.2 Written Report.** The registered design professional shall submit a final report in writing to the Code Official upon completion of the installation, certifying that the alternative engineered design conforms to the approved construction documents. A notice of approval for the plumbing system shall not be issued until this written report has been submitted.

**107.8 Testing.** In general, ***installations shall be tested*** as required in this Code. Plumbing and fuel gas work shall be tested as required in the respective sections of the IPC and IFGC; and for Group R-3 occupancies, in the IRC. Tests shall be made by the licensee and observed by the Code Official.

**107.8.1 New, Altered, Extended, Replaced or Repaired Systems.** New plumbing and fuel gas systems and parts of existing systems that have been altered, extended, replaced or repaired shall be tested as prescribed herein to disclose leaks and defects. See the IPC and WSSC Chapter 3, Sections 302.3.3.1 & 302.3.3.2; the IRC and WSSC Chapter 4 Sections 402.24.3, 402.25.1 & 402.25.2; and the IFGC and WSSC Chapter 5, Section 502.4.3.

**107.8.2 Apparatus and Labor for Tests.** Apparatus, equipment, instruments, material and labor required for testing an installation or part thereof shall be furnished by the licensee.

**107.8.3 Re-Inspection and Testing.** Where any work or installation does not pass an initial test or inspection, the necessary corrections shall be made in order to achieve compliance with this Code. The work or installation shall then be resubmitted for inspection and testing, and re-inspection fees paid where applicable. See Section 106.7.6.

**107.9 Coordination of Inspections.** When in the enforcement of this Code or another code or ordinance, and where the responsibility of more than one Code Official of this jurisdiction is involved, or if more than one jurisdiction is involved, it shall be the duty of the code officials involved to coordinate their inspections and administrative orders as fully as practical so that the owners and occupants of the structure shall not be subjected to

visits by numerous inspectors or multiple or conflicting orders. Whenever an inspector from any agency or department observes an apparent or actual violation of some provision of some law, ordinance or code not within the inspector's authority to enforce, the inspector shall report the findings to the code official having jurisdiction.

**107.10 Approval.** After the prescribed tests and inspections indicate that the work complies with this Code, an **APPROVAL** sticker or tag shall be issued by the Code Official.

**107.11 Temporary Connection.** The Code Official shall have the authority to authorize the temporary connection of:

- The building or system to the utility source for the purpose of testing plumbing systems; or

- An installation to the sources of energy for the purpose of testing the installation, or for use under a temporary certificate of occupancy.

# SECTION 108
# VIOLATIONS AND PENALTIES

**108.1 Unlawful Acts.** No person shall erect, construct, alter, repair, remove, demolish or utilize any plumbing, fuel gas, site-utility system, or industrial discharge control system; or cause same to be done, in conflict with or in violation of any of the provisions of this Code.

**108.2 Notice of Violation.** A Code Official shall serve a Notice of Violation (NOV) or order to the person responsible for the erection, installation, alteration, extension, repair, removal or demolition of work in violation of the provisions of this Code, or in violation of a directive or the approved construction documents thereunder, or in violation of a permit or certificate issued under the provisions of this Code. Such order shall direct the discontinuance of the illegal action or condition and the abatement of the violation within a specified timeframe.

**108.2.1 Failure to Comply.** ***Failure to comply*** with a Notice of Violation or other enforcement action ***shall be a further violation*** of this Code. This may result in the issuance of a WSSC Civil Citation, a Stop Work Order at the premises where the improper work occurred, termination of Commission services, or additional enforcement measures.

**108.2.2 Abatement of Violation.** The imposition of the penalties herein prescribed shall not preclude the Commission from instituting appropriate action to prevent unlawful construction or to restrain, correct or abate a violation, or to prevent illegal occupancy of a building, structure or premises, or to stop an illegal act, conduct,

business or utilization of the plumbing, fuel gas, or site-utility systems on or about any premises.

**108.3 Stop Work Order.** Upon notice from the Code Official, work that is performed contrary to the provisions of this Code or in a dangerous or unsafe manner shall immediately cease. Such notice shall be in writing and shall be posted at the jobsite; given to the owner of the property, to the owner's agent, or to the person performing the work. The notice shall state the conditions under which work is authorized to resume. Where an emergency exists, the Code Official shall not be required to give a written notice prior to stopping the work. Any person who shall continue any work in or about the structure after being served with a Stop Work Order, except work that the person is directed to perform to remove a violation or unsafe condition, shall be subject to license action if licensed, and/or civil citation(s).

**108.4 Civil Citations.** Pursuant to Section 18-104.2, Article 29, Annotated Code of Maryland, a Code Official shall be authorized to issue civil citations to any person violating any provision of this Code. A person committing any of the following violations of this Code shall be subject to ***immediate*** delivery of a WSSC civil citation at the discretion of the Code Official, with or without first being issued a Notice of Violation:

**108.4.1 Work Without License.** Performing plumbing, gasfitting, or sewer and drain cleaning work without a valid license where such license is required by this Code.

**108.4.2 Work Without Permit.** Performing work without a valid permit where such permit is required by this Code.

**108.4.3 Theft of Services.** Committing a theft of Commission water or sewer services as set forth in Section 110.

**108.4.4 Septic Waste Discharge.** Violating any requirement of the septic waste discharge provisions of this Code. See Chapter 8.

**108.4.5 Willful Code Violations.** Willfully or deliberately violating any provision of this Code.

**108.4.6 Health and Safety.** Violating any provision of this Code where such violation presents an imminent threat to the public health, welfare, or safety or to the Commission's systems.

**108.4.7 Negligence, Incompetence, or Misconduct.** Committing acts constituting gross negligence, incompetence or misconduct while providing plumbing, gas fitting, site-utility, or sewer and drain cleaning services, or while assisting in providing these services.

**108.4.8 Aiding or Abetting.** Aiding or abetting any person to evade or violate any provision of this Code.

**108.4.9 Deceptive Practices.** Engaging in an unfair or deceptive trade practice as defined in Section 13-301 of the Commercial Law Article, Annotated Code of Maryland, or otherwise performing work where such work was not necessary.

**108.4.10 NOV Non-Compliance.** Failing to comply with a Notice of Violation within the prescribed deadlines.

**108.5 Licensee Responsibility.** Licensed Master Plumbers, Master Gasfitters, and Sewer and Drain Cleaners shall be held responsible for the violation of any part of this Code whether the violation is committed by themselves or by their employees or agents.

**108.6 Denials, Reprimands, Suspensions, and Revocations**

**108.6.1 General.** Subject to the hearing provisions of Section 108.7 of this Code, and in any order depending upon the circumstances, the Commission may deny a license to an applicant, reprimand a licensee, or suspend or revoke a license, if the Commission determines that the applicant or licensee:

**108.6.1.1 Misrepresentation.** Fraudulently or deceptively obtained or attempted to obtain a license for the applicant or licensee, license examinee, or for another person.

**108.6.1.2 Misuse of License.** Fraudulently or deceptively used a license to obtain permits for another person, or for any other purpose.

**108.6.1.3 Gross Negligence, Incompetence, or Misconduct.** Was guilty of gross negligence, incompetence, bribery or attempted bribery of a Code Official, or misconduct while providing plumbing, gasfitting, drain and sewer cleaning services, or assisting in providing plumbing, gasfitting, or drain and sewer cleaning services. A failed routine inspection of permitted work shall ***not*** be considered as gross negligence, incompetence or misconduct.

**108.6.1.4 Deceptive Practices.** Engaged in an unfair or deceptive trade practice as defined in Section 13-301 of the Commercial Law Article, Annotated Code of Maryland, or otherwise performed work where such work was not necessary.

**108.6.1.5 Deliberate Code Violations.** Willfully or deliberately violated any provision of this Code.

**108.6.1.6 Aiding or Abetting.** Aided or abetted any person to evade or violate any provision of this Code.

**108.6.2 Denial.** The Commission shall deny a license to an applicant who provides incomplete, inaccurate, fraudulent, or false information on his or her application, or during the examination process; has been found guilty of one or more of the provisions

set forth in Section 108.6.1 as a non-licensee; or, if applying as a reciprocal licensee, has an invalidated license in another jurisdiction.

**108.6.3 Reprimand.** The Commission shall have the authority to reprimand a licensee who is guilty of one or more of the provisions set forth in Section 108.6.1, and/or has received one or more notices of violation, depending on the seriousness and nature of the Code violations. A reprimand shall not restrict the licensee from continuing to perform work, obtaining permits, or requesting inspections.

**108.6.4 License Reinstatement**

**108.6.4.1 Suspension.** Following the term of any license suspension, the license shall be reinstated by the Commission, provided that the licensee meets all of the requirements of Section 113 of this Code for the particular type of license.

**108.6.4.2 Revocation.** Following the term, if any, of any license revocation the license may be reinstated by the Commission, provided that the licensee passes the required WSSC examination and otherwise qualifies for the particular type of license in accordance with the requirements of Sections 113 and 114 of this Code.

**108.6.5 Future License Actions.** One or more reprimands, suspensions or revocations may have a bearing on future license actions, depending upon the nature and seriousness of the prior license action(s) and/or future violation(s).

## 108.7 Administrative Hearings

**108.7.1 Opportunity for Hearing by Licensee.** Subject to the provisions of Title 10, Subtitle 2, of the State Government Article, Annotated Code of Maryland, before the Commission takes any final license denial, suspension or revocation action under Section 108.6 of this Code, it shall give the applicant or licensee against whom the action is contemplated an opportunity for a hearing.

**108.7.2 Notification Procedure.** The Commission shall give notice, and the hearing shall be held in accordance with Title 10, Subtitle 2, of the State Government Article, Annotated Code of Maryland, and WSSC Standard Procedures for adjudicatory hearings. The notification procedures set forth in this Section shall apply.

**108.7.2.1 In Writing.** The applicant or licensee shall be notified of pending action in writing through certified mail, and/or certificate-of-mailing, and/or hand-delivery.

**108.7.2.2 Licensee Response Time.** To request an administrative hearing, the applicant or licensee shall respond, in writing or electronically, within 15 calendar days from the date of notification of the pending action. Failure by the applicant or licensee to maintain current address information with the Commission, or failure to collect mail shall not constitute a valid excuse for failure to meet response deadlines.

**108.7.2.3 Hearing Notification.** If an administrative hearing is requested by the applicant or licensee, the Commission shall schedule a hearing, generally to occur within 45 calendar days of receipt of the request, and shall notify the requestor in writing of the hearing date, time, and location.

**108.7.3 Failure to Appear.** If after due notice, the individual against whom the action is contemplated fails or refuses to appear, the Commission or its designee may nevertheless hear and determine the matter.

**108.7.4 Commission's Right to Proceed.** The lapse or suspension of a license by operation of law or by order of the Commission or a court, or its voluntary surrender by a licensee, shall not deprive the Commission of jurisdiction to investigate or act in disciplinary proceedings against the licensee.

**108.7.5 Delegation of Hearing Authority.** The Commission delegates its administrative hearing authority to the WSSC Plumbing and Fuel Gas Board, which shall conduct the hearing and submit proposed findings of fact and proposed conclusions of law to the Commission for final disposition.

## 108.8 Unsafe Installations

**108.8.1 Inspection Authority.** Subject to the limitations set forth in Section 102.2, existing installations regulated by this Code may be inspected at any time, and modifications may be required to return such systems into compliance with this Code.

**108.8.2 Hazardous Conditions.** Any installation regulated by this Code that is unsafe, or that constitutes a fire or health hazard, unsanitary condition, or is otherwise dangerous to human life shall hereby be declared unsafe. Any use of an installation regulated by this Code constituting a hazard to safety, health or public welfare by reason of inadequate maintenance, dilapidation, obsolescence, fire hazard, disaster, damage or abandonment shall hereby be declared an unsafe use. Unsafe equipment shall hereby be declared a public nuisance and shall be abated by repair, rehabilitation, demolition or removal.

**108.8.3 Authority to Condemn Equipment.** Whenever a Code Official determines that any installation, or portion thereof, regulated by this code has become hazardous to life, health or property or has become unsanitary, the Code Official shall order in writing that such installation either be removed or restored to a safe or sanitary condition. A time limit for compliance with such order shall be specified in the written Notice of Violation. Using or maintaining such defective installations ***after*** receiving a Notice of Violation shall be ***prohibited***.

When such an installation is to be disconnected, written notice as prescribed in Section 108.2 shall be given. In cases of immediate danger to life or property, the order to disconnect shall be effective immediately ***without*** such notice.

**108.8.4 Authority to Disconnect Service Utilities.** A Code Official shall have the authority to authorize ***disconnection*** of utility service to any building, structure or system regulated by this Code to eliminate an immediate danger to life, property, environment or the Commission's systems. Where possible, the owner and/or occupant of the building, structure or service system shall be notified of the decision to disconnect utility service prior to taking such action. If not notified prior to disconnection, the owner or occupant of the building, structure or service systems shall be notified in writing, as soon as practical thereafter.

**108.8.5 Re-Connection After Order to Disconnect.** Any connection regulated by this Code that has been disconnected or that has been ordered to be disconnected, or the use of which has been ordered to be discontinued, shall ***not*** be re-established until a Code Official authorizes the reconnection and use of such system or equipment.

When any installation is maintained in violation of this Code, and in violation of any notice issued pursuant to the provisions of this Section, a Code Official may institute any appropriate action to prevent, restrain, correct or abate the violation.

# SECTION 109
# APPEAL OF CODE OFFICIAL DECISIONS

**109.1 Application for Appeal.** Any person shall have the right to appeal a decision of the Chief Code Official to the WSSC Plumbing and Fuel Gas Board (Board) on matters relating to Code interpretation. An application for appeal shall be based on a claim that the true intent of this Code or the rules legally adopted thereunder have been incorrectly interpreted, that the provisions of this Code do not fully apply, or that an equally good or better form of construction is proposed. The application shall be filed on an official appeal form within 20 days after the decision was issued. This Section shall not apply to license action decisions.

**109.2 Notice of Meeting.** The Board shall meet, upon notice from the chairman, within 45 days of the filing of an appeal or at stated periodic meetings.

**109.3 Open Hearing.** All appeal hearings before the Board shall be open to the public. The appellant, the appellant's representative, the Code Official and any person whose interests are affected shall be given an opportunity to be heard.

**109.4 Procedure.** The Board shall adopt and make available to the public procedures under which a hearing shall be conducted. The procedures shall not require compliance with strict rules of evidence, but shall mandate that only relevant information is received.

**109.5 Board Decisions.** The Board shall affirm, modify or reverse the decision of the Chief Code Official by a majority vote or as otherwise specified in any bylaws adopted by the Board. The decision of the Board shall be final.

**109.5.1 Resolution.** The decision of the Board shall be by resolution. Official copies shall be furnished to the appellant and to the Chief Code Official.

**109.5.2 Administration.** The Chief Code Official shall take immediate action in accordance with the decision of the Board.

# SECTION 110
# THEFT OF COMMISSION SERVICES

## 110.1 Intent to Obtain Services Without Payment

**110.1.1 Tampering.** Unless otherwise allowed by law or by prior written permission of the Commission, a person shall not tamper with, install, tap, remove, displace, or make any connection with any pipe, valve, fire hydrant, meter, fitting, connection or other fixture, appurtenance, or equipment of the Commission ***with the intent*** to obtain water or sewer service without payment therefor.

**110.1.2 Evidence.** If a person tampers with, installs, taps, removes, displaces, or makes any connection with any pipe, valve, fire hydrant, meter, fitting, connection or other fixture, appurtenance, or equipment of the Commission, it shall constitute ***prima facie evidence of an intent*** to obtain water or sewer service without payment therefor.

## 110.2 Intent to Divert Services.

**110.2.1 General.** Unless otherwise allowed by law or by prior written permission of the Commission, a person may not make or cause to be made any pipe, tube, or other instrument or contrivance or connect the same or cause it to be connected with any water or sewer main, service connection, or other pipe for conducting or supplying water in such manner as to be calculated to supply water around or without passing through a meter provided by the Commission for the measuring and registering of the quantity of water and/or sewer usage.

**110.2.2 Illegal Sewer Connection or Discharge.** Water from ***any*** source that has not first been measured or registered through a Commission water meter shall ***not*** be discharged to the Commission's sanitary sewer system, ***unless specifically allowed*** by this Code. Examples of illegal sewer connections or discharges shall include, but not be limited to: Storm water or ground water from any source, air conditioning condensate, blow-down connections from chilled water systems supplied by a sub-meter, outdoor pool and deck drains, building foundation drains or foundation sump pumps. See IPC Section 314.2 and WSSC amendments.

**110.2.3 Evidence.** The existence of any pipe, tube, or other instrument or contrivance which effects the diversion of water or without the water being measured or registered by or on a meter provided by the Commission, or the use of water furnished by the Commission without it being measured or registered on a meter provided therefor by the Commission, shall constitute ***prima facie evidence of intent*** to violate and of the violation of this Section by the person or persons who would receive the direct benefits from the use of the water/sewer services without it being measured or registered on a meter.

**110.2.4 Test-Meter.** If a test-meter or check-meter installed or employed by the Commission shows that a customer is using a greater amount of water than that registered on the meter on or for the customer's premises for the purpose of registering the amount of water used by that customer, such condition shall constitute prima facie evidence that the unregistered water has been wrongfully diverted by such customer, and shall further constitute prima facie evidence of the intent to violate the provisions of this Section and of the violation of this Section.

# SECTION 111
# CONNECTION TO THE COMMISSION'S SYSTEMS AND METERING

## 111.1 General

**111.1.1 Size, Type, and Location.** The Commission shall have approval authority of the size, depth, location, and type of construction of water and sewer service connections.

**111.1.2 Non-Abutting Properties.** Connections to property not abutting directly on a Commission water or sewer main may be permitted under certain conditions.

**111.1.3 Right-of-Way Connection.** If the property to be served is to be connected to a Commission water or sewer main located in a right-of-way, on or off the owner's property, services shall be provided under the following conditions:

**111.1.3.1 Responsibility.** All necessary excavation, backfill, and restoration within right-of-ways shall be the responsibility of the Master Plumber.

**111.1.3.2 Trenching.** The main shall be exposed and the trench protected in accordance with all MOSHA requirements.

**111.1.3.3 Tapping.** Only Commission-authorized personnel shall make taps or connections into Commission water and sewer mains.

**111.1.4 Reconnection.** Reconnections to abandoned building sewers and water services shall be permitted provided they conform to applicable Code requirements.

**111.1.5 Existing Water Connection.** New buildings utilizing an existing water service connection, with either an existing outside or inside water meter setting, shall be required to ***re-establish*** a water meter setting, at the Commission's discretion, with the size, type and location of the new water meter as designated by the Commission.

**111.1.5.1** Existing water connections not being re-used shall be disconnected at the main through an abandonment permit at the expense of the property owner.

**111.1.6 Existing Sewer Connection.** New buildings utilizing an existing sewer service connection, and existing buildings having the building sewer replaced, shall be ***required*** to have a ***property line cleanout*** installed within 1-foot of the property line, or at the edge of the right-of-way in the case of right-of-way connections, ***if*** such a cleanout does not already exist. The base connection shall be a combination wye and one-eighth bend lying on its back. The cleanout cover assembly shall conform with WSSC Standard Detail S-5.1 or S-5.2.

**111.1.6.1** Existing sewer connections not being re-used shall be disconnected at the main through an abandonment permit at the expense of the property owner.

**111.1.7 Applicant Built Service Connection Permits.** Where applicant built service connection permits apply, a completed applicant built package shall be submitted and accepted by Permit Services prior to the first plumbing permit. Where applicant built permits are for abandonment of water and/or sewer service connections, the applicant built package is required at the time the applicant built package is submitted for new service.

**111.2 Separate Service Connection**

**111.2.1 General.** Separate water and sewer service connections shall be installed for each habitable building on a lot or parcel except as provided in Section 111.3.

**111.2.2 Services Through Another Property.** A building water service, building sewer, or site-utility system for a lot, building, premise, or establishment shall not be installed under, over or through any other lot, building, or premise ***except*** in an approved and recorded right-of-way or easement to the property served.

**111.3 Exceptions to Separate Connections.** Separate service connections shall not be required in the following circumstances, subject to such conditions as may be determined by the Commission:

**111.3.1 Group R-3 Buildings.** Detached buildings under common ownership located on the same lot or parcel. If the detached building is converted wholly or in part to a dwelling or place of business and subdivided under separate ownership, separate service connections shall be required.

**111.3.2 Multi-Unit Buildings.** A structure other than Group R-3 occupancy under one ownership, but divided as to provide for multiple occupancies, shall be served with a single service connection unless otherwise approved by the Commission.

**111.3.3 Other Than Group R-3 Buildings, One Owner.** Multiple buildings other than Group R-3 occupancy, under one ownership of the buildings and/or land located on a single tract of ground, which may consist of a group of lots or parcels, shall be served by a single sewer and water service connections unless otherwise approved by the Commission. Multiple buildings and/or properties under single ownership shall submit a covenant at the time of new service or significant change of use stipulating that separate connections or an approved shared site utility system agreement shall be in place before a sale/transfer of ownership can proceed.

**111.3.4 Other Than Group R-3 Buildings, Separate Owners.** ***Multiple properties*** or buildings other than Group R-3 occupancy, under ***separate ownership*** of the buildings and/or parcels and located on a single tract of land, may be served by a ***shared*** site-utility system under conditions determined by the Commission. These conditions shall include obtaining and recording the necessary covenants and easements relating to the maintenance of the shared site-utility system, following review by the Commission of such documents. Such properties shall be served by an ***outside*** water meter or, if the site-utility system has more than one service connection, an outside meter at ***each*** connection billed to a ***common*** account. The Commission shall ***not*** provide a water meter or account for each property.

**111.4 Fire Service Connections and Fire Hydrants.** Water connections for combined domestic and fire service, or for fire service only, shall be provided under such conditions as determined by the Commission.

**111.4.1 Group R-3 Single Family Occupancies.** Connection to the potable water supply shall be made in accordance with provisions set forth in Chapter 6, Installation of Commission Water Meters, Sections 603.2.2 and 604.3.2.

**111.4.2 Other than Group R-3 Occupancies**

**111.4.2.1 Systems Without Fire Hydrants.** If the water service is to serve a fire sprinkler system with ***no*** private fire hydrants, a reduced pressure detector assembly, or a double check detector assembly ***supplied by the applicant***, shall be installed.

**111.4.2.2 Systems With Fire Hydrants.** If the water service is to serve private fire hydrants and/or other fire protection systems, a Factory Mutual (FM) water meter shall be installed.

**111.4.2.2.1 Exception.** Where an inside meter is permitted by WSSC, see 701.3, a single fire hydrant may be permitted to be installed as a monitored hydrant.

**111.4.2.3 Existing Monitored Systems.** Existing properties served with monitored fire sprinkler systems and/or monitored fire hydrants shall continue to monitor those systems via a WSSC approved third party alarm monitoring company. Properties may be altered and new buildings erected utilizing monitored systems with approval from the Commission. Permission will be contingent on successful demonstration of past and present monitoring agreements; updated agreements will be required for all building fire sprinkler systems and all private fire hydrants served by the service connection(s) supplying the proposed work.

**111.4.3 Private Fire Hydrants.** Private fire hydrants shall be painted ***red***. The use of private fire hydrants shall be limited solely to fire protection. Any other use shall be prohibited.

## 111.5 Metering

**111.5.1 General.** The Commission shall determine meter size, type, and metering schemes for all properties. In general, water meters shall be right-sized based on plumbing hydraulic load, as set forth in Section 602.3. Oversized meters shall be ***prohibited***, unless an exception is approved by the Code Official.

**111.5.1.1 Existing Metering Schemes.** Existing properties may be permitted to have their existing metering schemes remain in lieu of new provisions of this Code. Properties may be altered and new buildings erected utilizing existing metering schemes with approval from the Commission.

**111.5.2 Location.** Water meters shall be set adjacent to the property line, or at the edge of a right-of-way where applicable, unless an exception is approved for location inside of a building. Water meter settings and vaults shall be constructed in accordance with WSSC Standard Details.

**111.5.3 Responsibility.** Commission water meters shall be supplied and maintained by the Commission, shall remain the property of the Commission, and shall be installed in accordance with provisions set forth in Chapter 6.

**111.5.4 Protection.** Commission water meters shall be protected from damage by freezing or physical abuse. The property owner shall be responsible for expenses related to meter repair, replacement, or loss due to neglect or damage.

**111.5.5 Tampering.** It shall be unlawful to tamper with a Commission water meter, meter seal, bypass seal, appurtenance, meter setting, curb valve, valve box, or meter vault.

**111.5.6 Exceptions.** All water provided by Commission shall be metered, except as provided in Section 111.4.2.3.

**111.5.7 Meter Settings and Installation.** The ***Commission*** shall furnish ***all*** water meters. The Commission or its designee shall install all outside meters. Outside settings for ¾-inch through 2-inch meters and outside vaults for 3-inch and larger meters shall be furnished installed by the utility contractor. The plumber shall install inside Commission meters size 1½-inch and larger. The Commission or its designee shall install inside meters size 1-inch and smaller. See Chapter 6, Installation of Commission Water Meters.

**111.5.8 Multi-Unit Buildings.** The Commission shall ***not*** provide separate water meters to units within a multi-unit building. Where required by the owner, unit water meters shall be privately installed and maintained.

**111.5.9 Commission Sub-Meter.** Except as otherwise allowed by law, where water furnished by the Commission is used for purposes where ***none*** of the water that passes through the sub-meter enters the Commission's sewerage system, the owner may request the installation of a Commission sub-meter. See Article 29, Section 6-104.b.

**111.5.10 Sewer-Only Accounts.** When a building classification other than Group R-3 using a private water supply system is connected to the Commission sewerage system, a Commission meter shall be installed on the water supply to determine the sewer use charge. Group R-3 occupancies served as above shall be billed based on a flat rate, or based on a sewer use meter, at the Commission's discretion.

**111.5.11 Hydrant Meters.** The Commission may authorize use of a fire hydrant water meter to applicants requiring water for temporary use. A WSSC small hydrant meter shall include an integral ASSE 1011 backflow prevention device. For a WSSC large hydrant meter, the applicant shall provide a high-hazard backflow prevention device assembly (ASSE 1013). The assembly must carry a satisfactory test tag current within six months. Fire hydrant use shall be restricted to temporary or seasonal applications such as, but not limited to: Tank truck filling, temporary water for construction sites, special events (e.g., charity walks, fairgrounds), and seasonal uses (e.g., irrigation). Fire hydrants shall ***not*** be used to circumvent the need to obtain service connections to supply water to full time businesses, nurseries with retail and maintenance buildings, and similar applications. Such applications shall require a ***permanent*** service connection.

**111.6 Containment.** All buildings shall have a backflow containment device installed on the ***outlet*** side of the water meter, prior to water uses within the premise, as cited in

Section 608.1.1 (IPC) as amended in Chapter 3 of this Code, and Section 2901.2 (IRC) as amended in Chapter 4 of this Code. Backflow preventers shall be maintained ***by the owner*** as cited in Section 102.3.9.

# SECTION 112
# PLUMBING AND FUEL GAS BOARD

## 112.1 Duties

**112.1.1 Code Advisory Role.** The WSSC Plumbing and Fuel Gas Board (Board) shall be responsible for reviewing and recommending to the Commission Code requirements governing plumbing, fuel gas, and site-utility installations, and industrial discharge control. Code requirements reviewed and recommended by the Board shall not become effective until they have been approved and adopted by the Commission pursuant to Article 29, Section 9-101, of the Annotated Code of Maryland.

**112.1.2 Hearings and Appeals.** The Board shall serve as a hearing authority in cases set forth in Section 108.7, Administrative Hearings; Section 109, Appeal of Code Official Decisions; and requests for exceptions to Section 114, Trade Qualifications and Exam, when referred by or denied by the Chief Code Official.

**112.1.3 Limitations.** The exercise and performance of functions and duties of the Board shall be subject to the authority of the Commission as set forth in Article 29, Annotated Code of Maryland.

**112.2 Voting Membership.** Membership on the Board shall consist of the following 7 voting members, 6 of who shall be from outside the Commission and shall be nominated by the General Manager of the Commission:

1. A WSSC-registered Master Plumber/Gasfitter representing the large commercial and/or large volume residential sector.

2. A WSSC-registered Master Plumber representing a local plumbing trade association.

3. A WSSC-registered Master Gasfitter representing a local HVAC trade association.

4. A plumbing/mechanical registered professional engineer.

5. A consumer representative from Montgomery County, with an understanding of technical issues, who shall not have any financial interest in any person regulated by the Board.

6. A consumer representative from Prince George's County, with an understanding of technical issues, who shall not have any financial interest in any person regulated by the Board.

7. The Commission's Chief Code Official who shall be a permanent voting member of the Board.

**112.3 Staff Attorney.** A Commission staff attorney, who is appointed by the General Counsel of the Commission, shall participate in all Board meetings as an advisory non-voting member.

**112.4 Chairman.** The Board shall elect a Chairman from among its membership. The Chairman shall manage Board meetings and maintain rules of order, and shall vote only in cases of a tie vote.

# SECTION 113
# LICENSES AND REGISTRATION

**113.1 Licensees.** The Commission shall license ***only individual*** Master Plumbers, Master Gasfitters, Master Plumber/Gasfitters, and Sewer and Drain Cleaners who shall then be considered as the responsible licensee of record (*i.e.* "principal" licensee), representing a particular firm or corporation that performs plumbing, gas fitting, or sewer and drain cleaning work in the WSSD. Additionally, Master Plumbers, Master Gasfitters, Master Plumber/Gasfitters, and Sewer and Drain Cleaners may be licensed as "non-principal" Master licensees or "non-principal" Sewer and Drain Cleaners. Non-principal licensees shall not be eligible for permit issuance, shall not portray themselves as the licensee of record for any firm or corporation, and shall perform work ***only*** under the direction and control of a Master licensee of record. All licensees shall be responsible for keeping address and telephone information current with the Commission. Address and phone number corrections and changes shall be transmitted in writing.

**113.2 Who Is Not Licensed.** The Commission shall ***not*** license any firm or corporation, other than indirectly through control of the licensee of record per Sections 113.3 or 113.4.

**113.3 One Licensee Per Firm.** A licensee of record shall represent ***only one*** firm or corporation; a firm or corporation shall be represented by ***only one*** licensed Master Plumber, Master Gasfitter, Master Plumber/Gasfitter, or Sewer and Drain Cleaner of record.

**113.4 Firms with Multiple Divisions.** If a firm or corporation has multiple operating branches, divisions, or geographic locations, licensee of record requirements shall be determined as follows:

**113.4.1 Single Name.** If all branches or divisions operate under a single corporate or advertised name, representation by one licensee of record shall be required.

**113.4.2 Multiple Names.** If each branch or division operates under its own advertised name, different than the corporate name of which it is a part but in respects other than just geographic location, then each such branch or division shall be required to be represented by its own licensee of record.

**113.5 Institutional Employment.** A Master Plumber, Master Gasfitter, or Master Plumber/Gasfitter may be regularly employed for public work, or by an institution, industrial establishment, or public utility, but shall not carry on the business of plumbing or gasfitting outside of that employment unless licensed as herein required.

**113.6 Authorization for Work**

**113.6.1 Master Plumber.** A Master Plumber license shall authorize the licensee to provide plumbing, and sewer and drain cleaning services.

**113.6.2 Master Gasfitter.** A Master Gasfitter license shall authorize the licensee to provide gasfitting services.

**113.6.3 Master Plumber/Gasfitter.** A Master Plumber/Gasfitter license shall authorize the licensee to provide plumbing, sewer and drain cleaning, and gasfitting services.

**113.6.4 Journeyman Plumber.** A Journeyman Plumber license shall authorize the licensee to provide plumbing and sewer and drain cleaning services under the direction and control of a WSSC-licensed Master Plumber or Master Plumber/Gasfitter.

**113.6.5 Journeyman Gasfitter.** A Journeyman Gasfitter license shall authorize the licensee to provide gasfitting services, under the direction and control of a WSSC-licensed Master Gasfitter or Master Plumber/Gasfitter.

**113.6.6 Journeyman Plumber/Gasfitter.** Journeyman Plumber/Gasfitter license shall authorize the licensee to provide plumbing and sewer and drain cleaning services, under the direction and control of a WSSC-licensed Master Plumber or Master Plumber/Gasfitter; and gasfitting services under the direction and control of a WSSC-licensed Master Gasfitter or Master Plumber/Gasfitter.

**113.6.7 Apprentice Plumber.** An Apprentice Plumber license shall authorize the licensee to ***assist*** in providing plumbing services and sewer and drain cleaning services,

under the direction and control of a WSSC-licensed Master Plumber or Master Plumber/Gasfitter on the jobsite; or under a WSSC-licensed Journeyman Plumber or Journeyman Plumber/Gasfitter on the jobsite who is under the direction and control of a WSSC-licensed Master Plumber or Master Plumber/Gasfitter.

**113.6.8 Apprentice Gasfitter.** An Apprentice Gasfitter license shall authorize the licensee to ***assist*** in providing gasfitting services, under the direction and control of a WSSC-licensed Master Gasfitter or Master Plumber/Gasfitter on the jobsite; or under a WSSC-licensed Journeyman Gasfitter or Journeyman Plumber/Gasfitter on the jobsite who is under the direction and control of a WSSC-licensed Master Gasfitter or Master Plumber/Gasfitter.

**113.6.9 Apprentice Plumber/Gasfitter.** An Apprentice Plumber/Gasfitter license shall authorize the licensee to ***assist*** in providing plumbing and sewer and drain cleaning services, and gasfitting services, under the direction and control of a WSSC-licensed Master Plumber/Gasfitter on the jobsite; or under a WSSC-licensed Journeyman Plumber/Gasfitter on the jobsite who is under the direction and control of a WSSC-licensed Master Plumber/Gasfitter.

**113.6.10 Non-Licensed Worker.** A non-licensed worker such as a "helper" or "laborer" shall ***not*** provide or assist in providing plumbing or gasfitting work. A non-licensed person shall only perform classes of work that support plumbing and gasfitting work. Examples include, but shall not be limited to: Excavating, backfilling, cutting and drilling of the structure, carrying materials and equipment, cleaning up, painting, patching, and similar classes of support work.

**113.6.11 Sewer and Drain Cleaner.** The cleaning of drainage systems regulated by the Commission shall be performed ***only*** by a WSSC-licensed Sewer and Drain Cleaner; or by individuals who are under the direction and control of a WSSC-licensed Master Plumber or Master Plumber/Gasfitter, or of a WSSC-licensed Sewer and Drain Cleaner. Additional work shall be regulated and restricted as follows:

**113.6.11.1 Fixture Removal Access.** The Sewer and Drain Cleaner license shall allow the licensee to remove and reset a plumbing fixture for access to the drainage system only when engaged in sewer and drain cleaning activity.

**113.6.11.2 Plumbing Prohibited.** A WSSC-licensed Sewer and Drain Cleaner shall be ***prohibited*** from installing, extending, or altering any plumbing; and shall be ***prohibited*** from engaging in the plumbing or gas fitting business.

**113.6.11.3 Master Plumber.** A WSSC-licensed Master Plumber or Master Plumber/Gasfitter shall not be required to hold a Sewer and Drain Cleaner's license in order to engage in the sewer and drain cleaning business.

**113.6.11.4 Institutional Employees.** A person regularly employed by any person, firm or corporation, municipal or private, or by a municipal, state, or federal government agency within the WSSD, and who in the course of such employment performs incidental sewer and drain cleaning work, shall not be required to become licensed as a WSSC-licensed Sewer and Drain Cleaner for these exclusive employment conditions.

**113.6.12 Minor Work Not Requiring a Licensee.** An individual shall not be required to be a licensee to perform minor plumbing and gas appliance maintenance services. Minor plumbing and gas appliance maintenance services shall be defined as ***Exempt Work***, as cited Section 106.2.3, Plumbing Maintenance, and Section 106.2.4 Gas Appliance Maintenance.

## 113.7 Backflow Technician

**113.7.1 Eligible Persons.** ***Only*** a WSSC-licensed Master Plumber, Master Plumber/Gasfitter, Journeyman Plumber, or Journeyman Plumber/Gasfitter shall be eligible for licensing as a WSSC Backflow Prevention Technician.

**113.7.2 Training.** All Backflow Technician applicants shall pass a State-approved 32-hour Cross-Connection/Backflow Prevention training program, or pass a 32-hour Cross-Connection/Backflow Prevention training program from another jurisdiction or state that is acceptable to the Commission.

**113.7.3 Certified Technician.** Only those individuals licensed with the Commission as a Backflow Technician shall be authorized to certify the installation and testing of mechanical cross-connection control devices.

**113.7.4 Re-Certification Limit.** A Backflow Technician license shall be valid for a period of 3-years. Individuals shall be required to complete a State-approved 8-hour re-certification program. Individuals who allow their certification to lapse shall be required to complete a State-approved 32-hour Cross-Connection/Backflow Prevention training program.

## 113.8 Insurance Requirements and Warranty.

### 113.8.1 Coverage Parameters

**113.8.1.1 Proof of Coverage.** Prior to registration as the Master licensee of record, or Sewer and Drain Cleaner licensee of record, for a firm or corporation, the licensee shall provide evidence to the Commission that minimum insurance coverage has been acquired to cover general liability exposure. This evidence shall be submitted in the form of a Certificate of Insurance, with WSSC listed as the certificate holder.

**113.8.1.2 Person Representing a Public Agency or Public Service Corporation.** In cases where a licensee is representing a public agency or public service corporation, the licensee shall provide evidence of insurance coverage or financial responsibility and statements of self-insurance on each required coverage.

**113.8.1.3 Minimum Coverage.** The minimum insurance requirement shall be a Commercial General Liability policy with a combined aggregate limit for bodily injury and property damage of $300,000.

### 113.8.2 Premium Obligations

**113.8.2.1 Insurance Company.** The insurance company issuing policies of insurance shall be licensed for business in the State of Maryland.

**113.8.2.2 Licensee Responsibility.** The licensee of record shall be responsible for submitting an updated certificate of insurance prior to the policy expiration date. Failure to do so shall result in lapse of registration.

**113.8.3 Insurance Cancellations.** A minimum of 30 days written notification to WSSC shall be given by the insurer of any alteration, change, or cancellation affecting any certificates or policies of insurance as required under this Code. Notification shall be sent via registered or certified mail, or shall be hand-carried to the Commission.

**113.8.4 Insurance Conditions**

**113.8.4.1 Scope.** All aforementioned policies and certificates of insurance shall be obtained ***prior to*** the issuance of a WSSC license or permit.

**113.8.4.2 Purpose.** Insurance requirements set forth herein shall satisfy part of the requirements for the issuance of a license to the licensee of record for a firm or corporation.

**113.8.4.3 Protection.** Insurance requirements shall not be construed by anyone to indicate that such requirements are sufficient or adequate under all circumstances.

**113.8.5 Warranty.** On all work requiring a permit, the licensee shall warrant the work as cited below. Contracts between a licensee, individual, or company, and the owner, owner's agent, or proprietor, shall define responsibilities between these parties and shall ***not*** involve the Commission.

**113.8.5.1 Sewer and Water Service.** The building sewer and the building water service shall be warranted for 3-years from date of FINAL inspection.

**113.8.5.2 All Other Work.** All other work shall be warranted for 1-year from date of FINAL inspection.

**113.9 Registration Procedure**

**113.9.1 Registration.** Applicants shall register at the Commission after trade and examination qualifications are satisfied per Sections 114 and 115, as applicable. Required work experience as a Journeyman begins at the time of registration.

**113.9.2 License Issuance.** A license shall be issued upon payment of registration fees, approval, submission of necessary documents, and insurance requirements, as applicable.

**113.9.3 Referral Evidence.** For all prospective licensees, referral and character evidence furnished by the applicant upon application for registration shall be obtained

from a minimum of 3 persons. References listed on the application shall be employers or persons acquainted with the applicant's trade qualifications and character.

**113.9.4 Four-Year Registration, Master License by WSSC Exam.** Master license applicants passing the WSSC exam shall renew their license every 4-years.

**113.9.5 Two-Year Registration, Journeyman License.** Journeyman license applicants shall renew their license every 2-years.

**113.9.6 One-Year Registration, Apprentice License.** Apprentice applicants shall renew their license annually. At the time of registration or renewal, an Apprentice shall provide proof of legal working age, and evidence that the applicant is currently employed by a WSSC licensee of record.

**113.9.7 Two-Year Registration, Master License by Reciprocation.** Master Plumbers, Master Gasfitters, and Master Plumber/Gasfitters registering under the reciprocity provisions of Section 115 shall be required to renew their license every 2-years.

**113.9.8 Two-Year Registration, Sewer and Drain Cleaner License.** Sewer and Drain cleaners shall renew their license every 2-years.

**113.10 Registration Card.** Licensees shall be ***required*** to carry their registration card when performing plumbing, gas fitting, or sewer and drain cleaning work. The registration card and, if requested by the Code Official, a picture identification card, shall be presented upon request to the Code Official. If a WSSC registration card is lost or destroyed, the licensee shall apply for a new registration card within 5 calendar days.

**113.11 Change of Business or Licensee Status.** If a licensee of record changes their business affiliation, goes out of business, or is deceased, or if the firm or corporation for which they are the licensee of record changes its name, the respective registration as licensee of record shall immediately become null and void. The licensee (or, if deceased, the firm or corporation) shall notify the Commission of the change in writing within 5 business days of the change.

**113.12 Lapse of Registration.** Lapse of registration shall render a WSSC license invalid. No work regulated by this Code shall proceed until registration is current.

**113.12.1 Plumber or Gasfitter.** If a licensee fails to renew their license within 4-years after the license expires, or if a licensee applicant who has passed the Commission exam fails to apply for registration within 4-years of the date of qualification, the licensee or applicant shall be required to re-qualify in accordance with the provisions set forth in Sections 113 and 114 of this Code. Otherwise, only the appropriate registration fee shall be required if all other requirements of this Code are shown to be satisfied.

**113.12.2 Sewer and Drain Cleaner.** If the licensee fails to renew their license within 2 years after the license expires, the licensee shall be required to re-qualify in accordance with the provisions set forth in Sections 113 and 114 of this Code. Otherwise, only the appropriate registration fee shall be required if all other requirements of this Code are shown to be satisfied.

**113.13 License Display.** Each Master or Sewer and Drain Cleaner licensee-of-record shall display the license number conspicuously in the principal place(s) of business, on each vehicle used at the jobsite for providing services, and in each business advertisement in the name of the business or licensee of record per Sections 113.3 and 113.4.

# SECTION 114
# TRADE QUALIFICATIONS AND EXAM

**114.1 Apprentice.** Prior to registration as a WSSC-licensed Apprentice Plumber, Gasfitter, or Plumber/Gasfitter, applicants shall furnish satisfactory proof (W-2 forms, pay stubs, etc.) of working in the plumbing trade, gas fitting trade, or both, under the direction and control of a WSSC-licensed Master Plumber, Master Gasfitter, or a Master Plumber/Gasfitter as appropriate. No exam shall be required.

**114.1.1 References.** For all prospective licensees, referral and character evidence furnished by the applicant upon application for registration shall be obtained from a minimum of 3 persons. References listed on the application shall be employers or persons acquainted with the applicant's trade qualifications and character.

**114.2 Journeyman Plumber.** In order to qualify for the Journeyman Plumber exam, applicants shall meet the following requirements:

**114.2.1 Work Experience.** Applicants shall furnish satisfactory proof (W-2 forms, pay stubs, etc.) of work experience in the plumbing trade as an apprentice (or equivalent work experience) under the direction and control of a WSSC-licensed Master Plumber or Master Plumber/Gasfitter for a minimum of 7500-hours and 4-years of work experience in the trades.

**114.2.2 Formal Training.** Apprentices in the plumbing trade who graduate from approved plumbing training courses, conducted under the auspices of an approved trade association, utility, or educational institution, shall gain additional credit toward the working hours requirement. Up to 750-hours spent by the applicant in attending such courses shall count as ***double*** when applied toward the total required hours.

**114.2.3 Backflow Certification.** As a prerequisite for taking the Journeyman Plumbing exam, applicants shall have passed a 32-hour State-approved Backflow Prevention Certification Program, or passed a Backflow Prevention Certification Program from

another jurisdiction or state that is acceptable to the Commission, within 3-years prior to application.

**114.2.4 Exam.** See Section 114.7.

**114.2.5 References.** For all prospective licensees, referral and character evidence furnished by the applicant upon application for registration shall be obtained from a minimum of 3 persons. References listed on the application shall be employers or persons acquainted with the applicant's trade qualifications and character.

**114.3 Master Plumber.** In order to qualify for the Master Plumber exam, applicants shall meet the following requirements:

**114.3.1 Work Experience.** Applicants shall furnish satisfactory proof (W-2 forms, pay stubs, etc.) of work experience in the plumbing trade as a registered Journeyman Plumber under the direction and control of a WSSC-licensed Master Plumber or Master Plumber/Gasfitter for a minimum of 3750-hours and 2-years of work experience in the trades.

**114.3.2 Backflow Certification.** As a prerequisite for taking the Master Plumbing exam, applicants shall have passed a 32-hour State-approved Backflow Prevention Certification Program, or passed a Backflow Prevention Certification Program from another jurisdiction or state that is acceptable to the Commission, within 3-years prior to application.

**114.3.3 Exam.** See Section 114.7.

**114.3.4 References.** For all prospective licensees, referral and character evidence furnished by the applicant upon application for registration shall be obtained from a minimum of 3 persons. References listed on the application shall be employers or persons acquainted with the applicant's trade qualifications and character.

**114.4 Journeyman Gasfitter.** In order to qualify for the Journeyman Gasfitter exam, applicants shall meet the following requirements:

**114.4.1 Work Experience.** Applicants shall furnish satisfactory proof (W-2 forms, pay stubs, etc.) of work experience in the gasfitting trade as an apprentice (or equivalent work experience) under the direction and control of a WSSC-licensed Master Gasfitter or Master Plumber/Gasfitter for a minimum of 3750-hours and 2-years of work experience in the trades.

**114.4.2 Formal Training.** Apprentices in the gasfitting trade who graduate from approved gasfitting training courses, conducted under the auspices of an approved trade association, utility, or educational institution, shall gain additional credit toward the

working hours requirement. Up to 375-hours spent by the applicant in attending such courses shall count as ***double*** when applied toward the total required hours.

**114.4.3 Exam.** See Section 114.7.

**114.4.4 References.** For all prospective licensees, referral and character evidence furnished by the applicant upon application for registration shall be obtained from a minimum of 3 persons. References listed on the application shall be employers or persons acquainted with the applicant's trade qualifications and character.

**114.5 Master Gasfitter.** In order to qualify for the Master Gasfitter examination, applicants shall meet the following requirements:

**114.5.1 Work Experience.** Applicants shall furnish satisfactory proof (W-2 forms, pay stubs, etc.) of work experience in the gasfitting trade as a registered Journeyman Gasfitter under the direction and control of a WSSC-licensed Master Gasfitter or Master Plumber/Gasfitter for a minimum of 3750-hours and 2-years of work experience in the trades.

**114.5.2 Exam.** See Section 114.7.

**114.5.3 References.** For all prospective licensees, referral and character evidence furnished by the applicant upon application for registration shall be obtained from a minimum of 3 persons. References listed on the application shall be employers or persons acquainted with the applicant's trade qualifications and character.

**114.6 Sewer and Drain Cleaner.**

**114.6.1 Work Experience.** Applicants shall furnish satisfactory proof (W-2 forms, pay stubs, etc.) of work experience in the sewer and drain cleaning business under the direction and control of a WSSC-licensed Sewer and Drain Cleaner, Master Plumber, or Master Plumber/Gasfitter for a minimum of 3750-hours and 2-years of work experience in the trades. Proof of work experience shall be supported by written statements from one or more employers of the applicant.

**114.6.2 Journeyman Plumber.** A WSSC-licensed Journeyman Plumber or Journeyman Plumber/Gasfitter shall be considered a qualified applicant in lieu of the work experience required in Section 114.6.1.

**114.6.3 References.** For all prospective licensees, referral and character evidence furnished by the applicant upon application for registration shall be obtained from a minimum of 3 persons. References listed on the application shall be employers or persons acquainted with the applicant's trade qualifications and character.

**114.7 Exam.**

**114.7.1 Type of Exam.** Applicants at both the Journeyman and Master levels shall be required to pass a multiple-choice, open-book exam on knowledge of this Code, particular to the trade being examined. At the Journeyman level, questions outside of this Code that relate to general knowledge of hands-on trade practice shall also be included. At the Master level, questions outside of this Code that relate to safety regulations, mathematics, common principles of physics, construction drawings and riser diagrams, building structural integrity, pipe sizing, standard details and specifications, materials standards, and general knowledge of hands-on trade practice shall also be included.

**114.7.2 Fee.** Fees for the exam are applied according to the schedule of Fees and charges approved by the Commission at time of exam application. Failure to pay required fees shall render an application invalid.

**114.7.3 Passing Score.** A passing score of no less than 75% shall constitute successful completion of the exam.

**114.7.4 Re-Exam.** Applicants shall be permitted to re-take the exam every 30 days until a passing score has been obtained.

# SECTION 115
# RECIPROCITY OF LICENSES

**115.1 Master Plumber or Master Gasfitter, *Within* State of Maryland, Jurisdictions *With* Reciprocity.** The Commission shall reciprocate at the Master licensee level with a jurisdiction where the applicant has passed a plumbing exam and/or gasfitting exam, acceptable to the Code Official. Applicants shall qualify for registration as a WSSC-licensed Master Plumber or Master Gasfitter upon satisfaction of or pursuant to the following conditions:

**115.1.1 Current License.** Present a current Master Plumber or Master Gasfitter license issued by the reciprocating jurisdiction or licensing agency.

**115.1.2 Good Standing.** Present a letter of good standing from the reciprocating jurisdiction or licensing agency.

**115.1.3 Backflow Certification.** Master Plumber applicants shall have passed a 32-hour State-approved Backflow Prevention Certification Program, or passed a Backflow Prevention Certification Program from another jurisdiction or state that is acceptable to the Commission, within 3-years prior to application.

**115.1.4 Exam Verification.** Master Gasfitter applicants shall present a validated WSSC exam verification form, from the reciprocating jurisdiction or licensing agency, verifying that the applicant has passed a separate Master Gasfitter exam.

**115.1.5 License and Registration.** Satisfy the requirements set forth in Section 113.

**115.1.6 License Invalidation.** A WSSC license issued pursuant to the provisions set forth herein shall become null and void if the applicant's license from the jurisdiction or licensing agency from which it was reciprocated becomes revoked, suspended, lapsed, or otherwise invalidated.

**115.2 Master Plumber or Master Gasfitter, *Within* State of Maryland, Jurisdictions *Without* Reciprocity.** Applicants shall qualify for the exam as a WSSC-licensed Master Plumber or Master Gasfitter upon satisfaction of the following conditions:

**115.2.1 Current License.** Present a current Master Plumber or Master Gasfitter license issued by the jurisdiction or licensing agency.

**115.2.2 Good Standing.** Present a letter of good standing from the jurisdiction or licensing agency.

**115.2.3 Backflow Certification.** Master Plumber applicants shall have passed a 32-hour State-approved Backflow Prevention Certification Program, or passed a Backflow Prevention Certification Program from another jurisdiction or state that is acceptable to the Commission, within 3-years prior to application.

**115.2.4 License and Registration.** Satisfy the requirements set forth in Section 113.

**115.2.5 References.** For all prospective licensees, referral and character evidence furnished by the applicant upon application for registration shall be obtained from a minimum of 3 persons. References listed on the application shall be employers or persons acquainted with the applicant's trade qualifications and character.

**115.3 Master Plumber or Master Gasfitter, *Outside* State of Maryland.** Applicants from any other state, territory, or the District of Columbia, shall qualify for the WSSC exam in accordance with the requirements set forth in Section 115.2 unless a reciprocal agreement has been reached between the Commission and the other jurisdiction.

**115.4 Journeyman Plumber or Journeyman Gasfitter, *Within* State of Maryland, Jurisdictions *With* Reciprocity.** The Commission shall reciprocate at the Journeyman licensee level with a jurisdiction where the applicant has passed a plumbing exam and/or gas fitting exam, acceptable to the Code Official. Applicants shall qualify for registration as a WSSC-licensed Journeyman Plumber or Journeyman Gasfitter upon satisfaction of or pursuant to the following conditions:

**115.4.1 Current License.** Present a current Journeyman Plumber or Journeyman Gasfitter license issued by the reciprocating jurisdiction or licensing agency.

**115.4.2 Good Standing.** Present a letter of good standing from the reciprocating jurisdiction or licensing agency.

**115.4.3 Backflow Certification.** Journeyman Plumber applicants shall have passed a 32-hour State-approved Backflow Prevention Certification Program, or passed a Backflow Prevention Certification Program from another jurisdiction or state that is acceptable to the Commission, within 3 years prior to application.

**115.4.4 Exam Verification.** Journeyman Gasfitter applicants shall present a validated WSSC exam verification form, from the reciprocating jurisdiction or licensing agency, verifying that the applicant has passed a separate Journeyman Gasfitter exam.

**115.4.5 License and Registration.** Satisfy the requirements set forth in Section 113.

**115.4.6 License Invalidation.** A WSSC license issued pursuant to the provisions set forth herein shall become null and void if the applicant's license from the jurisdiction or licensing agency from which it was reciprocated becomes revoked, suspended, lapsed, or otherwise invalidated.

**115.5 Journeyman Plumber or Journeyman Gasfitter, *Within* State of Maryland, Jurisdictions W*ithout* Reciprocity.** Applicants shall qualify for the exam as a WSSC-licensed Journeyman Plumber or Journeyman Gasfitter upon satisfaction of the following conditions:

**115.5.1 Current License.** Present a current Journeyman Plumber or Journeyman Gasfitter license issued by the jurisdiction or licensing agency.

**115.5.2 Good Standing.** Present a letter of good standing from the jurisdiction or licensing agency.

**115.5.3 Backflow Certification.** Journeyman Plumber applicants shall have passed a 32-hour State-approved Backflow Prevention Certification Program, or passed a Backflow Prevention Certification Program from another jurisdiction or state that is acceptable to the Commission, within 3 years prior to application.

**115.5.4 License and Registration.** Satisfy the requirements set forth in Section 113.

**115.5.5 References.** For all prospective licensees, referral and character evidence furnished by the applicant upon application for registration shall be obtained from a minimum of 3 persons. References listed on the application shall be employers or persons acquainted with the applicant's trade qualifications and character.

**115.6 Journeyman Plumber or Journeyman Gasfitter, *Outside* State of Maryland.** Applicants from any other state, territory, or the District of Columbia, shall qualify for the WSSC exam in accordance with the requirements set forth in Section 115.5 unless a reciprocal agreement has been reached between the Commission and the other jurisdiction.

# CHAPTER 2

# DEFINITIONS

## SECTION 201
## GENERAL

**201.1 Definitions, Generally.** In addition to the definitions set forth in the model codes adopted and incorporated by reference in this Code (*see* §101.3) and the definitions set forth in Article 29, Annotated Code of Maryland, the definitions set forth below in §202 apply to the provisions of this Code.

**201.1.1 Ordinary Words.** Ordinary words not otherwise defined in this Code are used in accordance with their established dictionary meanings to further the purpose of this Code.

**201.2 Industrial and Special Waste.** In addition to the definitions set forth in this Chapter 2 of this Code, the definitions set forth in §801.2 specifically apply to the provisions of Chapter 8 (Industrial and Special Waste) of this Code.

## SECTION 202
## ADDITIONAL DEFINITIONS

**APPLICANT BUILT SERVICE CONNECTION PERMIT.** An applicant built permit is for service connection that will be constructed and financed by the owner and/or their designees. The Commission will inspect, approve and then accept all ownership and maintenance responsibilities thereafter.

**CHIEF CODE OFFICIAL.** The supervisor or higher level authority, of the "code official."

**CLASS 1 FIRE-PROTECTION SYSTEM.** Direct connections from public water mains only; no pumps, tanks, or reservoirs; no physical connection from other water supplies; no antifreeze or other additives of any kind; all sprinkler drains discharging to atmosphere, dry wells, or other safe outlets.

**COMMISSION.** The Washington Suburban Sanitary Commission or its duly authorized agents acting within the scope of duties entrusted to them.

**DRAIN CLEANER.** A WSSC-licensed Sewer and Drain Cleaner, Master Plumber, or person in their employment, performing drain cleaning operations.

**FLOW-BASED GREASE INTERCEPTOR.** Grease interceptor design based on flow rate with a specific requirement for upstream sink tail piece flow restriction (for indirectly connected fixtures) and a flow control device. Solids screens or strainers with a maximum screen size of 1/8" perforations must be provided to capture the solids discharge from dish/pot washing sinks and floor sinks to avoid overloading the grease interceptor with solids. Sizing is based on the reasonable maximum flow anticipated from the fixtures connected to the grease interceptor based on the WSSC Tail Piece Flow Rate Table (new) for indirect connections, and IPC Chapter 10/ASME A112.14.3 for direct connections. Minimum size = 7 gallons per minute. Flow-based grease interceptors shall conform to ASME A112.14.3 or ASME A112.14.4 at the calculated flow rate. The following flow-based grease interceptors are differentiated based on whether or not there are mechanical grease removal features:

**FOG.** An acronym for fats, oils, and grease.

**GREASE ABATEMENT SYSTEM.** Any grease interceptor, grease trap, grease recovery device, or any treatment system designed to remove Fats, Oils and Grease (FOG) from FSE wastewater, with two general subcategories; see Volume Based Grease Interceptor and Flow Based Grease Interceptor.

**GREASE INTERCEPTOR.** A passive interceptor with a static liquid capacity of 300 gallons or more; referred to hereafter in Code as a Volume Based Grease Interceptor. In general, grease interceptors are constructed from precast concrete, have manhole access, and are designed for outdoor installation. However, grease interceptors may be constructed from other materials such as but not limited to composites and metal, and under some applications are installed indoors.

**GREASE RECOVERY DEVICE (GRD).** A specialized type of grease trap equipped with electro-mechanical components intended to extract FOG; referred to hereafter in Code as a Mechanical Flow Based Grease Interceptor.

**GREASE TRAP.** A passive interceptor, or a passive interceptor equipped with non-mechanical components, intended for indoor installation; referred to hereafter in Code as a Passive Flow Based Grease Interceptor. In general, grease traps are constructed from cast iron, stainless steel, aluminum, or a composite material, and are available in sizes that range from 10 gpm to several hundred gpm based on manufacturer's ratings.

**GROUP R-3 OCCUPANCIES.** In general, 1- and 2-family detached houses and attached row-style houses. Specifically per the International Building Code (IBC): Residential occupancies where the occupants are primarily permanent in nature and not classified as R-1, R-2, R-4 or I-1, I-2, I-3, or I-4,, and where buildings do not contain more than two dwelling units as applicable in Section 101.2 (IBC), or adult and child care facilities that provide accommodations for five or fewer persons of any age for less than 24 hours. Adult and child care facilities that are within a single-family home are permitted to comply with the *International Residential Code* in accordance with Section 101.2 (IBC).

**HARD STOPPAGE.** A clog or obstruction in a building sewer or drain that cannot be readily relieved by a Drain Cleaner, utilizing proper-sized and type rotating drain cleaning equipment. Examples of a hard stoppage include but are not limited to: Root intrusions, broken or misaligned pipe, a solidified mass that cannot be dislodged, and permanent objects in the pipe.

**MAY.** A word indicating optional practice at the discretion of the installer, as opposed to required practice as indicated by the word "shall," or the phrase "shall be permitted to be." See also "Shall".

**MECHANICAL FLOW-BASED GREASE INTERCEPTOR.** Grease interceptor design with mechanical grease removal features. Typically - installed indoors under a sink. Cleaned and maintained by the FSE, pumping contractors, or specialty maintenance contractors. Sometimes - referred to as a grease removal (or recovery) device.

**MISCONDUCT.** Use of abusive language, threats, mischievous or criminal acts, directed toward the public while providing services, or toward a code official while performing their official duties. See Sections 108.4.7 and108.6.1.3.

**PASSIVE FLOW-BASED GREASE INTERCEPTOR.** Grease interceptor design with no mechanical grease removal features. Typically - installed indoors under a sink or outdoors in-ground. Cleaned by the FSE or pumping contractors. Sometimes referred to as a hydro-mechanical grease interceptor (when designed and installed with a flow control device with air intake) or a grease trap (when designed and installed with a flow control device without air intake).

**PERMITTEE.** The person responsible as indicated on a permit.

**PERSON.** Any individual; partnership; co-partnership; firm; company; corporation; association; joint stock company; trust; estate; Federal, State, and local governmental entity; society; group; or any other legal entity; or their legal representatives, agents, assigns or governmental entities.

**POINT OF DELIVERY.** For natural gas systems, the point of delivery is the outlet of the service meter assembly or the outlet of the service regulator or service shutoff valve where a meter is not provided. Where a valve is provided at the outlet of the service meter assembly, such valve shall be considered to be downstream of the point of delivery. For undiluted liquefied petroleum (aka LP or propane) gas systems, the point of delivery shall be considered the outlet of the second-stage pressure regulator that provides utilization pressure, exclusive of line gas regulators, in the system. ***For purposes of gas pipe sizing*** from a service regulator or from a line regulator, the first 2-feet (nominal) of piping may be sized the same as the service regulator/meter assembly connection, or the line pressure regulator outlet.

**REPRIMAND.** A formal written notification to a licensee, that the licensee has committed one or more serious code violations, but less serious than that which would warrant a recommendation for suspension or revocation of their license. See Section 108.6.

**REVOCATION.** A formal written notification to a licensee, that the licensee has committed one or more serious code violations, that warrants termination of their license for an extended period of time, generally in "years." See Section 108.6.

**RIGHT-OF-WAY SERVICE CONNECTION.** A tap or tee that is constructed by the Commission or its designee, into a Commission water or sewer main located in a right-of-way on private property, serving only the property in which the Commission water or sewer main is located.

**SERVICE CONNECTION.** In general, a lateral service pipe that is constructed by the Commission or its designee, from a Commission water or sewer main to a property line. See also "Right-of-Way Service Connection."

**SHALL.** A word indicating required practice, as opposed to an optional practice at the discretion of the installer, indicated by the word "may. See also **May.**

**SOAP TEST.** As prescribed in this code, any liquid producing visible bubbles or changing appearance, when applied to a leaking pipe. Specialized leak detection equipment shall also qualify as a soap test.

**SOFT STOPPAGE.** A clog or obstruction in a building sewer or drain caused by an over-accumulation of normal sewage solids, that can be readily relieved by a Drain Cleaner, utilizing proper-sized and type rotating drain cleaning equipment.

**SUSPENSION.** A formal written notification to a licensee, that the licensee has committed one or more serious code violations, that warrants termination of their license for a specified period of time, but less serious than that which would warrant a revocation of their license. See Section 108.6.

**SYSTEMS DEVELOPMENT CHARGE (SDC).** An impact fee established by Section 6-113, Article 29, Annotated Code of Maryland, to recover cost of growth related facilities within the WSSD.

**VOLUME-BASED GREASE INTERCEPTOR.** Grease interceptor design based on volume and retention time with no specific requirement for upstream sink tail piece flow restrictions or a flow control device. Sizing is based on the number of drainage fixture units connected to the grease interceptor based on the 2006 Uniform Plumbing Code (UPC) Table 10-3. Minimum size = 300 gallons. Typically - installed outdoors and underground. Typically - cleaned by pumping contractors. Sometimes - referred to as a gravity grease interceptor or outdoor grease interceptor.

**WSSC.** The Washington Suburban Sanitary Commission.

**WSSD.** The Washington Suburban Sanitary District. Generally, the entirety of Montgomery and Prince George's Counties, Maryland, less certain incorporated city limits and federal properties.

# CHAPTER 3

# ADOPTION OF INTERNATIONAL PLUMBING CODE

## SECTION 301
## GENERAL

**301.1 Adoption.** The 2006 edition of the **International Plumbing Code** (hereinafter "**IPC**"), published by the International Code Council, Inc., is hereby adopted and incorporated herein by reference, and has the same force and effect as though fully set forth in this Code, subject to the additions, deletions or other modifications set forth in this Chapter as amendments thereto.

**301.2 Applicability.** The IPC applies to all occupancies other than Group R-3 Occupancies (see definition), and their accessory structures.

**301.3 Availability for Review.** At least 1 copy of the aforesaid IPC shall be filed in the Office of the Secretary of the WSSC and made available for public use and inspection.

## SECTION 302
## AMENDMENTS TO THE INTERNATIONAL PLUMBING CODE

**302.1 Amendment of IPC CHAPTER 1, ADMINISTRATION.** IPC Chapter 1, Administration, is hereby **DELETED** in its entirety.

302.2 Reserved

**302.3 Amendment of IPC CHAPTER 3, GENERAL REGULATIONS**

**302.3.1 IPC Section 305.6, Freezing,** is hereby **AMENDED** by **ADDING** provisions thereto, specifying certain freeze protection for piping, all to read as follows:

(IPC as amended)
**305.6 Freezing.** Water, soil and waste pipes shall not be installed outside of a building, in attic or crawl spaces, concealed in outside walls, or in any other place subjected to

freezing temperatures unless adequate provision is made to protect such pipes from freezing by insulation, heat or both. Water piping installed in exterior walls, ceilings, and unprotected floor spaces shall be protected by a minimum R-24 insulation on the "cold" side of the piping, with ***no*** insulation on the "warm" side of the piping. Exterior water supply system piping shall be installed not less than 6 inches below the frost line and not less than 12 inches below grade. In Prince George's County and Montgomery County, exterior water supply system piping shall be installed not less than 30-inches below final grade.

**302.3.2 IPC Section 305.6.1, Sewer Depth,** is hereby **AMENDED** by **COMPLETING** minimum cover depth dimensions for building sewers, all to read as follows:

(IPC as amended)
**305.6.1 Sewer Depth.** Building sewers that connect to private sewage disposal systems shall be a minimum of 18 inches below finished grade at the point of septic tank connection. Building sewers shall be a minimum of 24 inches below grade.

**302.3.3 IPC Section 312.5, Water Supply System Test**, is hereby AMENDED by ADDING provisions to recognize safe air testing practices for rigid plastic piping systems in winter months, all to read as follows:

(IPC as amended)
**312.5 Water supply system test.** Upon completion of a section of or the entire water supply system, the system, or portion completed shall be tested and proved tight under a water pressure not less than the working pressure of the system; or, for piping systems other than plastic, by an air test of not less than 50 psi (344kPa). This pressure shall be held for at least 15 minutes. The water utilized for tests shall be obtained from a potable source of supply. The required tests shall be performed in accordance with this section and Section 107. Subject to 105.1.4, testing for plastic piping systems shall follow a two step process in winter months:
(1) The system shall be air tested with 5 psi prior to wall close-in by the plumbing contractor using a safe and reliable method, see manufacture's recommendations and requirements. DO NOT leave air pressure charged on an unmanned project and NO other work may be performed on premises during an air test.
(2) Then after permanent heat is available and prior to final inspection the plumbing contractor shall fill the CPVC or PVC system with water equal to system working pressure. The water test shall be held for 24 hours without loss.

**302.3.4 IPC Section 312.6, Gravity Sewer Test,** is hereby AMENDED by ADDING provisions to allow air as a test medium, all to read as follows:

(IPC as amended)
**312.6 Gravity sewer test.** Gravity sewer tests shall consist of plugging the end of the sewer at the point of connection with the public sewer, filling the building sewer with water or air, testing with 5 psi of air or not less than a 10-foot (3048mm) head of water and maintaining such pressure for 15 minutes.

**302.3.5 IPC Section 312.9.2, Testing,** is hereby **AMENDED** by **ADDING** the requirement for tagging testable backflow preventers after testing, as follows:

(IPC as amended)
**312.9.2 Testing.** Reduced pressure principle backflow preventer assemblies, double check-valve assemblies, pressure vacuum breaker assemblies, reduced pressure detector fire protection backflow prevention assemblies, double check detector fire protection backflow prevention assemblies, hose connection backflow preventers, and spill-proof vacuum breakers 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 one of the following standards:

ASSE 1013, ASSE 1015, ASSE 1020, ASSE 1047, ASSE 1048, ASSE 1052, ASSE 1056, CAN/CSA B64.10

Tests shall be performed by a Certified Backflow Prevention Mechanic. A ***dated test tag*** indicating test results shall be attached to each testable backflow prevention device. ASSE 1012 and ASSE 1024 devices shall be tagged and shall include: Installation date, and the words, "FOR OPTIMAL PERFORMANCE AND SAFETY THIS DEVICE SHALL BE REPLACED OR RE-BUILT EVERY 5 YEARS." [Test tags available from WSSC]

**302.3.6 IPC Section 314.1, Fuel-Burning Appliances,** is hereby **AMENDED** by **ADDING** certain provisions thereto, specifying conditions under which condensate may be discharged to the Commission's sanitary sewer system, all to read as follows:

(IPC as amended)
**314.1 Fuel-Burning Appliances.** Liquid combustion by-products of condensing appliances shall be collected and discharged to an approved plumbing fixture or disposal area in accordance with the manufacturer's installation instructions, and shall be appropriately neutralized. See Section 804.1. Condensate piping shall be of approved corrosion-resistant material and shall not be smaller than the drain connection on the appliance. Such piping shall maintain a minimum horizontal slope in the direction of discharge of not less than one-eighth unit vertical in 12 units horizontal (1-percent slope).

**302.3.7 IPC Section 314.2.1, Condensate Disposal,** is hereby **AMENDED** by **ADDING** certain provisions thereto, specifying conditions under which condensate may be discharged to the Commission's sanitary sewer system, all to read as follows:

(IPC as amended)
**314.2.1 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 into a street, alley or other areas so as to cause a nuisance. The ***only*** such discharges allowed into the Commission's sanitary sewer systems shall be from ***replacement*** equipment serving Group R-3 occupancies constructed prior to 1965.

302.4 Reserved

## 302.5 Amendment of IPC CHAPTER 5, WATER HEATERS

**302.5.1 IPC Section 504.7, Required Pan,** is hereby **AMENDED** to **CLARIFY** where water heater safe pans shall and shall not be required, to avoid conflict with subsequent IPC prescriptive language that is not enforceable in a practical manner, all to read as follows:

(IPC as amended)
**504.7 Required Pan.** Where water heaters or hot water storage tanks are installed in locations where leakage of the tanks or connections will cause damage, the tank or water heater shall be installed in a galvanized steel pan having a minimum thickness of 24 gauge, or other pans approved for such use. This requirement shall apply **only** to water heaters located **above** habitable space or the lowest habitable level. Pans shall **not** be required in basements or for slab-on-grade constructions, whether finished or unfinished.

## 302.6 Amendment of IPC CHAPTER 6, WATER SUPPLY AND DISTRIBUTION

**302.6.1 IPC Table 605.3 Water Service Pipe, and Table 605.4 Water Distribution Pipe,** is hereby **AMENDED** to **DELETE** ***polybutylene pipe and tubing*** as an approved material.

**302.6.2 IPC Section 608.1, Protection of Potable Water Supply, General,** is hereby **AMENDED** by **ADDING** new Sections 608.1.1 and 608.1.2, to require containment for all

new and design-retrofit buildings, as required by WSSC under provisions of the Safe Drinking Water Act.

(IPC as amended)
**608.1.1 Containment.** On all new and design-retrofit water service connections, cross-connection control shall be by containment of the premises and by isolation for individual outlet protection. Containment protection shall be accomplished through installation of a backflow protection device, consistent with the degree of hazard posed by the premises.

**608.1.2 Installation.** In buildings with an ***outside*** water meter, the device shall be installed ***between*** the building service valve and the first plumbing outlet or plumbing branch connection. In buildings with an ***inside*** water meter the device shall be installed immediately on the outlet side of the meter ***before*** the first plumbing outlet or plumbing branch connection. Also see Section 607.3.2, Thermal Expansion.

## 302.7 Amendment of IPC CHAPTER 7, SANITARY DRAINAGE

**302.7.1 IPC Section 708.3, Cleanouts, Where Required,** is hereby **AMENDED** by **ADDING** as new sections 708.3.7 and 708.3.7.1, requirements for a property line cleanout, all to read as follows:

(IPC as amended)
**708.3.7 Property Line.** WSSC sewer service connections with a vertical riser, shall be connected to by the plumber in accordance with WSSC Standard Details S-5.0. The cleanout cover assembly shall be installed by the plumber in accordance with WSSC Standard Detail S-5.1 or S-5.2.

**708.3.7.1 Replacement Sewers.** When an ***existing*** sewer service connection is being re-connected to, ***or***, when an ***existing*** building sewer is being replaced, a property line cleanout shall be established by the plumber. The base connection shall be a combination wye and one-eighth bend lying on its back, connected immediately to the WSSC service connection located at the property line or edge of right-of-way. The cleanout cover assembly shall conform with WSSC Standard Detail S-5.1 or S-5.2. See Section 111.1.6.

302.8 Reserved

## 302.9 Amendment of IPC CHAPTER 9, VENTS

**302.9.1 IPC Section 904.1, Roof Extension,** is hereby **AMENDED** by **COMPLETING** minimum vent extension dimension above a roof, all to read as follows:

(IPC as amended)
**Section 904.1, Roof Extension.** All open vent pipes which extend through a roof shall be terminated at least 12 inches above the roof or 6 inches above the anticipated snow accumulation, except that where a roof is to be used for any purpose other than weather protection, the vent extensions shall be run at least 7 feet above the roof.

**302.9.2 IPC 905.4 Vertical Rise of Vent,** is hereby AMENDED to allow for and provide installation provisions for vents routed horizontally below flood rim of fixtures served.

(IPC as amended)
**905.4 Vertical Rise of Vent.** Horizontal dry vents below flood level rim. Dry vents may be routed horizontally below the flood level rim of the fixtures being served provided all of the following conditions are met:
(1) the connection to the drain is in accordance with section 905.3;
(2) an accessible clean-out shall be provided, and labeled, to service the horizontal run of vent;
(3) the horizontal run of the vent shall slope at 2% minimum toward the drain
(4) each vent shall be routed to a minimum of 6 inches above the highest flood rim before interconnecting with other vents or terminating outdoors;
(5) where such vents terminate independently to the outdoors or where such vents are the "bottom" or beginning of a vent header or stack that terminates to the outdoors, the vent terminal shall be protected with a vandal proof termination fitting or a "return bend".

## 302.10 Amendment of IPC CHAPTER 10, TRAPS, INTERCEPTORS, AND SEPARATORS

**302.10.1 IPC Section 1003, Interceptors, Traps, and Separators**, is hereby DELETED in its entirety. It is replaced with new Section 1003, all to read as follows:

### SECTION 1003
### INTERCEPTORS AND SEPARATORS

**1003.1 Grease Abatement Systems - General.**
Grease abatement systems shall be provided to prevent the discharge of Fats, Oil, Grease, and other substances harmful or hazardous to the building drainage system, the public sewer, the private sewage disposal system or the sewage treatment plant or processes.

**1003.1.1 Applicability.** The regulations in this Section shall apply to establishments where food is served to or provided for the public, with or without charge, including, but not limited to restaurants, cafeterias, hotel kitchens, church kitchens, school kitchens, hospital cafeterias, bars, or any other commercial operation that has the potential to discharge grease laden wastewater; hereafter referred to as Food Service Establishments (FSE).

**1003.1.2 Definitions**

**1003.1.2.1** Grease Abatement System:
Any grease interceptor, grease trap, grease recovery device, or any treatment system designed to remove Fats, Oils and Grease (FOG) from FSE wastewater, with two general subcategories as follows:

**1003.1.2.2** Volume-Based Grease Interceptor:
Grease interceptor design based on volume and retention time with no specific requirement for upstream sink tail piece flow restrictions or a flow control device. Sizing is based on the number of drainage fixture units connected to the grease interceptor based on the 2006 Uniform Plumbing Code (UPC) Table 10-3. Minimum size = 300 gallons. Typically - installed outdoors and underground. Typically - cleaned by pumping contractors. Sometimes - referred to as a gravity grease interceptor or outdoor grease interceptor.

**1003.1.2.3** Flow-Based Grease Interceptor:
Grease interceptor design based on flow rate with a specific requirement for upstream sink tail piece flow restriction (for indirectly connected fixtures) and a flow control device. Solids screens or strainers with a maximum screen size of 1/8” perforations must be provided to capture the solids discharge from dish/pot washing sinks and floor sinks to avoid overloading the grease interceptor with solids. Sizing is based on

the reasonable maximum flow anticipated from the fixtures connected to the grease interceptor based on the WSSC Tail Piece Flow Rate Table (new) for indirect connections, and IPC Chapter 10/ASME A112.14.3 for direct connections. Minimum size = 7 gallons per minute. Flow-based grease interceptors shall conform to ASME A112.14.3 or ASME A112.14.4 at the calculated flow rate. The following flow-based grease interceptors are differentiated based on whether or not there are mechanical grease removal features:

**1003.1.2.3.1.** Passive Flow Based Grease Interceptor:
Grease interceptor design with no mechanical grease removal features. Typically - installed indoors under a sink or outdoors in-ground. Cleaned by the FSE or pumping contractors. Sometimes referred to as a hydro-mechanical grease interceptor (when designed and installed with a flow control device with air intake) or a grease trap (when designed and installed with a flow control device without air intake).

**1003.1.2.3.2.** Mechanical Flow Based Grease Interceptor:
Grease interceptor design with mechanical grease removal features. Typically - installed indoors under a sink. Cleaned and maintained by the FSE, pumping contractors, or specialty maintenance contractors. Sometimes - referred to as a grease removal (or recovery) device.

**1003.2 Where Required.**

**1003.2.1** A grease abatement system shall be required to receive the drainage from fixtures and equipment with potential grease-laden waste. Fixtures and equipment shall include, but not be limited to: pot sinks; pre-rinse sinks; soup kettles or similar devices; fresh meat cutting and prepping; wok stations; floor drains; floor sinks; automatic hood wash units; and dishwashers.
**1003.2.2** Flow Based Grease Interceptors shall receive waste only from fixtures and equipment that allow fats, oils or grease to be discharged.
**1003.2.3** Volume Based Grease Interceptors shall receive the discharge of the entire kitchen and shall be sized accordingly. Exception: waste from sinks or fixtures with permitted food waste disposers shall discharge directly to the sanitary drainage system.
**1003.2.4** Property owners of commercial properties, or their official designee(s), shall be responsible for the installation and maintenance of grease abatement systems serving multiple Food Service Establishments that are located on a single parcel.

**1003.3 Where Not Required - Conditional Variance (Existing FSEs Only).**

**1003.3.1** At the request of the FSE, the Commission may grant a conditional variance of the grease abatement system requirements if, in the judgment of the Commission, there is limited potential for FOG in the discharge when considering, including but not limited to, the frequency of operation, the miscibility of the discharge, the volume of flow and the potential for fats, oils and grease discharge based upon the menu.
**1003.3.2** The conditional variance can be revoked due to an actual blockage or sanitary sewer overflow attributed to the FSEs FOG discharge.

**1003.3.3** This conditional variance applies to the requirement to install a grease abatement system only. FSEs granted this variance may still be required to obtain a wastewater discharge permit and will be subject to regular inspections.

**1003.4 Prohibited Connections**

**1003.4.1** Waste from bathrooms or similar fixtures conveying human waste shall connect directly to the building sanitary drain, and shall not connect through any grease abatement system.

**1003.4.2** Where fixtures not generally subject to grease such as fruit and vegetable washing sinks, connect to the regular building drain, a permanent engraved sign shall be posted at such sinks indicating their limited use. (Example: "VEGETABLE WASHING ONLY" or "NO GREASE").

**1003.4.3** Food Waste Disposers. Food Waste Disposers shall not be installed on any fixture that requires grease abatement.

**1003.4.4 Pumps.** All grease abatement systems shall receive only stabilized flow from gravity-flow grease waste collection systems and shall not receive pressurized discharge such as from sewage pumps or lift stations. Where pumping is required, grease must be separated prior to the lift station.

**1003.5 Flow Based Grease Interceptors**

**1003.5.1 General**

**1003.5.1.1** The location, size and piping details shall require plan approval prior to installation.

**1003.5.1.2** Flow-based grease interceptors shall conform to ASME A112.14.3 and/or ASME A112.14.4 and shall be installed in accordance with manufacturer's specifications.

**1003.5.1.3** The manufacturer required flow control device shall be installed, sized to match the interceptors flow rate, and shall be readily accessible for inspection, cleaning and maintenance. The flow-control device shall be vented and terminate not less than 6 inches (152 mm) above the flood rim level or be installed in accordance with the manufacturer's instructions.

**1003.5.1.4** Solids screens or strainers with a maximum of 1/8" perforations shall be provided to capture the solids discharge from dish/pot washing sinks and floor sinks to minimize the solids loading on flow-based grease interceptors.

**1003.5.2 Location And Installation**

**1003.5.2.1** Flow-based grease interceptors shall be installed below grade, direct buried, where listed for such application or within a vault; or indoors within a conditioned space; or in accordance with manufacturer's requirements. Mechanical flow-based interceptors shall not be installed in a vault.

**1003.5.2.2** Flow-based grease interceptors shall be readily accessible for daily maintenance, servicing and inspection.

**1003.5.2.4** Headroom above flow-based grease interceptors as well as solid sediment strainers shall be sufficient to fully open lid and easily remove internal components.

**1003.5.2.5** The flow control device shall be accessible for maintenance.

**1003.5.3 Sizing**

**1003.5.3.1** Directly Connected Fixtures:
For sinks, fixtures and drains directly connected to a flow-based grease interceptor (no requirement for an air gap), flow-based grease interceptor sizing shall be determined pursuant to IPC 1003.3.4, and shall conform to ASME A112.14.3.

**1003.5.3.2** Indirectly Connected Fixtures:
For sinks, fixtures and drains indirectly connected to a flow-based grease interceptor (air gap required), a restricted flow tail piece is required and the flow-based grease interceptor shall be sized utilizing Table 1003.a and Table 1003.b.

**1003.5.3.3** For a single indirectly connected fixture served by a flow-based grease interceptor, the full tail piece flow rate from Table 1003.a shall be used.

**1003.5.3.4** For multiple indirectly connected fixtures served by a single flow-based grease interceptor, fixtures with the highest flow rates shall be considered first, with the full tail piece flow rates for the two highest flow fixtures/drains, 1/2 of the tail piece flow rates for the next two highest flowing fixture/drains, and 1/4 of the tail piece flow rates for each subsequent fixtures/drains shall be used (see Table 1003.b below).

**1003.5.3.5** Flow-based grease interceptors serving both indirectly and directly connected sinks, fixtures and/or drains shall be sized based on a proper combination of the methods listed above.

Table 1003.a
Flow Rates for Various Drain Tail Piece Sizes

| Tail Piece Diameter | Flow Rate |
|---|---|
| 1/2” | 7 gpm |
| 3/4” | 12 gpm |
| 1” | 20 gpm |
| 1-1/4” | 30 gpm |
| 1-1/2” | 40 gpm |
| 2” | 65 gpm |

Table 1003.b
Multiple Indirect Connection Flow Factor Table

| | |
|---|---|
| Fixture/Drain #1 | Full Tail Piece Flow Rate |
| Fixture/Drain #2 | Full Tail Piece Flow Rate |
| Fixture/Drain #3 | 1/2 Tail Piece Flow Rate |
| Fixture/Drain #4 | 1/2 Tail Piece Flow Rate |
| All additional Fixtures/Drains | 1/4 Tail Piece Flow Rate |

Note: Each tub/basin of multi-compartment sinks shall be counted as individual fixtures.

## 1003.6 Volume Based Grease Interceptors

### 1003.6.1 General

**1003.6.1.1** Volume-Based Grease interceptors shall be designed and installed in accordance with current Commission details.

**1003.6.1.2** The location, size and piping details shall require plan approval prior to installation.

**1003.6.1.3** Precast Concrete interceptors shall conform to the structural requirements contained in ASTM 1613 Standard Specification for Precast Concrete Interceptor Tanks

### 1003.6.2. Location

**1003.6.2.1** In general, volume-based grease interceptors shall be located below grade outdoors or indoors; or above grade indoors where listed for such applications and within a conditioned space.

**1003.6.2.2** Volume-based grease interceptors shall be readily accessible for daily maintenance, servicing and inspection.

**1003.6.2.3** Manholes and cleanouts shall be readily accessible for convenient inspection and maintenance.

**1003.6.2.4** No structures shall be placed directly upon or over the Interceptor.

**1003.6.2.5** Where an outdoor location is not possible or is impractical, volume-based interceptors may be installed indoors within twenty (20) feet of an accessible service entrance, unless otherwise approved.

### 1003.6.3 Sizing

The volume of the interceptor shall be determined by using table 1003.c below. If the drainage fixture units (DFUs) are not known, the interceptor shall be sized based on the maximum DFUs allowed for the pipe size connected to the inlet of the interceptor.

Table 1003.c
Volume-Based Grease Interceptor Sizing
(from 2006 Uniform Plumbing Code Table 10-3*)

| DFUs (1) | Interceptor Volume |
|---|---|
| 8 | 500 gallons |
| 21 | 750 gallons |
| 35 | 1,000 gallons |
| 90 | 1,250 gallons |
| 172 | 1,500 gallons |
| 216 | 2,000 gallons |
| 307 | 2,500 gallons |
| 342 | 3,000 gallons |
| 428 | 4,000 gallons |
| 576 | 5,000 gallons |
| 720 | 7,500 gallons |
| 2112 | 10,000 gallons |
| 2640 | 15,000 gallons |

*Reprinted with the permission of the International Association of Plumbing and Mechanical Officials.

Notes to Table:
1. The maximum allowable DFUs plumbed to the kitchen drain lines that will be connected to the grease interceptor.
2. 300 Gallon Interceptor equals 5 DFUs.
3. 1600 Gallon Interceptor equals 181 DFUs.

**1003.7 Scale Trap** Seafood prep sinks shall discharge through a local scale separator prior to entering any portion of the drainage system or grease abatement system.

**1003.8 Oil & Sand Separators Required**

**1003.8.1 General**
All oil and sand interceptor details shall be approved in writing prior to installation and shall meet industrial waste discharge limitations per Section 804.

**1003.8.2 Size**
Interceptor size shall be determined by application as follows:

Small Interceptor - 64 cu. ft.
Large Interceptor - 216 cu. ft.

**1003.8.3 Parking Garages**
Parking garages not open to the outdoors and protected from surface and storm water run-off may have inside floor and trough drains connected to the Commission sanitary sewer through an interceptor. Parking garages without wash down facilities may be served by a small interceptor; those with wash down facilities shall be served by a large interceptor.

**1003.8.4 Vehicle Washing Establishments**
All vehicle washing facilities shall have required drains connected to the sanitary drainage system through a large interceptor.

**1003.8.5 Vehicle Service Stations**
Vehicle service stations, maintenance and service garages, etc., shall have all required inside floor and trough drains connected to the sanitary drainage system through an interceptor.

a. Up to four (4) bays may be served by a small interceptor.
Up to sixteen (16) bays may be served by a large interceptor.

b. No more than one (1) business shall be served by an interceptor.

c. Facilities providing vehicle lubrication service shall be supplemented by a manufactured oil separator with a used oil holding tank.

**1003.9 Laundries.**

Laundry facilities not installed within an individual dwelling unit or intended for individual family use shall be equipped with an interceptor with a wire basket or similar device, removable for cleaning, that prevents passage into the drainage system of solids 0.5 in (12.7 mm) or larger in size, string, rags, buttons or other materials detrimental to the public sewage system.

**1003.10 Bottling Establishments.**

Bottling plants shall discharge process wastes into an interceptor that will provide for the separation of broken glass or other solids before discharging waste into the drainage system.

**1003.11 Slaughterhouses.**

Slaughtering room and dressing room drains shall be equipped with approved separators. The separator shall prevent the discharge into the drainage system of feathers, entrails, and other materials that cause clogging.

**1003.12 Venting of interceptors and separators.**

Interceptors and separators shall be designed so as not to become air bound where tight covers are utilized. Each interceptor or separator shall be vented where subject to a loss of trap seal.

**1003.13 Access and maintenance of interceptors and separators.**

Access shall be provided to each interceptor and separator for service and maintenance. Interceptors and separators shall be maintained by periodic removal of accumulated grease, scum, oil, or other floating substances and solids deposited in the interceptor or separator.

## 302.11 Amendment of IPC CHAPTER 11, STORM DRAINAGE

**302.11.1 IPC Section 1101, General,** is hereby **AMENDED** by **ADDING** new Section 1101.9 specifying design by a professional engineer, to read as follows:

(IPC as amended)

**1101.10 Design.** Storm drainage systems shall be designed by a Registered Professional Engineer and documents for review shall be stamped accordingly.

**302.11.2 IPC Sections 1103 (Storm) Traps, through Section 1113, Sumps and Pumping Systems,** shall be **DELETED** in their entirety, as these provisions shall be enforced by the County building official.

**302.12 Amendment of IPC CHAPTER 12, SPECIAL PIPING AND STORAGE SYSTEMS.** IPC Chapter 12, Special Piping and Storage Systems, is hereby **DELETED** in its entirety.

302.13 Reserved

# CHAPTER 4

# ADOPTION OF INTERNATIONAL RESIDENTIAL CODE

## SECTION 401
## GENERAL

**401.1 Adoption. Part II-Definitions** (Chapter 2), **Part VI-Fuel Gas** (Chapter 24), **Part VII-Plumbing** (Chapters 25-32) and **Part IX-Referenced Standards** (Chapter 43) of the 2006 edition of the **International Residential Code** (hereinafter "**IRC**"), published by the International Code Council, Inc., are hereby adopted and incorporated herein by reference, and have the same force and effect as though fully set forth in this Code, subject to the additions, deletions or other modifications thereto set forth in this Chapter as amendments thereto.

**401.2 Applicability.** The IRC applies only to Group R-3 Occupancies (see definition), and their accessory structures.

**401.3 Availability for Review.** At least 1 copy of the aforesaid IRC shall be filed in the Office of the Secretary of the WSSC and made available for public use and inspection.

## SECTION 402
## AMENDMENTS TO THE INTERNATIONAL RESIDENTIAL CODE

402.1 Unused. IRC Chapter 1 is not being adopted.

402.2 Reserved

402.3 – 402.23 Unused. IRC Chapters 3 - 23 are not being adopted.

**IRC Part VI-Fuel Gas**

**402.24 Amendments of IRC CHAPTER 24 (FUEL GAS)**

**402.24.1 IRC Section G2411, Electrical Bonding,** is hereby AMENDED by ADDING specific bonding requirements for Corrugated Stainless Steel Tubing (CSST), all to read as follows:

(IRC as amended)
**G2411 Gas pipe bonding.** Each above-ground portion of a gas piping system that is likely to become energized shall be electrically continuous and bonded to an effective ground-fault current path. Gas piping shall be considered to be bonded where is connected to appliances that are connected to the equipment grounding conductor of the circuit supplying that appliance. CSST piping shall be bonded following specific requirements set forth in the manufacturer's installation instructions.

**402.24.2 IRC Section G2417.1.2, Repairs and Additions,** is hereby **AMENDED** by referring to and **ADDING** thereto new Section G2417.1.2.1, all to read as follows:

(IRC as amended)
**G2417.1.2 (IFGC 406.1.2) Repairs and Additions.** In the event repairs or additions are made after the pressure test, the affected piping shall be tested.

Minor repairs and additions are not required to be pressure tested provided that the work is inspected and connections are tested with a non-corrosive leak-detecting fluid or other approved leak-detecting methods, as cited in Section G2417.1.2.1.

**G2417.1.2.1 Twelve Joint Rule.** Where an existing gas piping system is altered, repaired, or extended, a soap test shall be permitted in lieu of a pressure test, under the following conditions:

- A maximum of 12 joints in the new and disturbed piping are allowed, excluding the equipment connector.
- The new piping and any disturbed piping shall not be concealed.
- The developed length of the new piping shall not exceed 15-feet.
- It shall be the licensee's responsibility to perform the required soap test prior to inspection, and to ensure that the piping does not leak.

## IRC Part VII-Plumbing

### 402.25 Amendment of IRC CHAPTER 25, PLUMBING ADMINISTRATION

**402.25.1 IRC Section P2503.4 Building Sewer Testing,** is hereby AMENDED by ADDING provisions to allow air as a test medium, all to read as follows:

(IRC as amended)
**P2503.4 Building sewer test.** The building sewer shall be tested by insertion of a test plug at the point of connection with the public sewer and filling the building sewer with water or air, testing with 5 psi of air or not less than a 10-foot (3048mm) head of water and be able to maintain such pressure for 15 minutes.

**402.25.2 IRC Section P2503.6, Water-supply System Testing,** is hereby amended by adding provisions to recognize safe air testing practices for rigid plastic piping systems in winter months, all to read as follows:

(IRC as amended)
**P2503.6 Water-supply system testing.** Upon completion of a section of or the entire water supply system, the system, or portion completed shall be tested and proved tight under a water pressure not less than the working pressure of the system; or, for piping systems other than plastic, by an air test of not less than 50 psi (344kPa). This pressure shall be held for at least 15 minutes. The water utilized for tests shall be obtained from a potable source of supply. Subject to 105.1.4, testing for plastic piping systems shall follow a two step process in winter months:
(1) The system shall be air tested with 5 psi prior to wall close-in by the plumbing contractor using a safe and reliable method, see manufacture's recommendations and requirements. DO NOT leave air pressure charged on an unmanned project and NO other work may be performed on premises during an air test.
(2) Then after permanent heat is available and prior to final inspection the plumbing contractor shall fill the CPVC or PVC system with water equal to system working pressure. The water test shall be held for 24 hours without loss.

**402.25.3 IRC Section P2503.7.2, Testing**, is hereby **AMENDED** by **ADDING** the requirement for tagging testable backflow preventers after testing, all to read as follows:

(IRC as amended)
**P2503.7.2 Testing.** Reduced pressure principle backflow preventer assemblies, double check-valve assemblies, pressure vacuum breaker 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. Tests shall be performed by a Certified Backflow Prevention Mechanic. A dated ***test tag*** indicating test results shall be ***attached*** to each testable backflow prevention device. ASSE 1012 and ASSE 1024 devices shall be tagged and shall include: Installation date, and the words, "FOR OPTIMAL PERFORMANCE AND SAFETY THIS DEVICE SHALL BE REPLACED OR RE-BUILT EVERY 5 YEARS." [Test tags available from WSSC]

## 402.26 Amendment of IRC CHAPTER 26, GENERAL PLUMBING REQUIREMENTS

**402.26.1 IRC Section P2603.6, Freezing,** is hereby **AMENDED** by **ADDING** certain provisions thereto, specifying certain freeze protection for piping, all to read as follows:

(IRC as amended)

**P2603.6 Freezing.** In localities having a winter design temperature of $32^{O}$F ($0^{O}$C) or lower as shown in Table R301.2(1) of this code, a water, soil or waste pipe shall not be installed outside of a building, in exterior walls, in attics or crawl spaces, or in any other place subjected to freezing temperature unless adequate provision is made to protect it from freezing by insulation or heat or both. Water piping and fixture traps installed in exterior walls, ceilings, attics, unprotected floor spaces, and similar unprotected spaces, shall be protected by a minimum R-24 insulation on the "cold" side of the piping, with ***no*** insulation on the "warm" side of the piping. Water service pipe shall be installed not less than 6 inches (152 mm) below the frost line. In Prince George's County and Montgomery County, exterior water supply system piping shall be installed not less than 30-inches below final grade.

**402.26.2 IRC Section P2603.6.1, Sewer Depth,** is hereby **AMENDED** by **COMPLETING** minimum cover depth dimensions for building sewers, all to read as follows:

(IRC as amended)

**P2603.6.1 Sewer Depth.** Building sewers that connect to private sewage disposal systems shall be a minimum of 18 inches below finished grade at the point of septic tank connection. Building sewers shall be a minimum of 24 inches below grade.

**402.26.3 IRC Section P2609.1, Condensate Disposal,** is hereby **AMENDED** by **ADDING** as a new Section, specified conditions under which condensate may be discharged to the Commission's sanitary sewer system, all to read as follows:

(IRC as amended)

# SECTION P2609
# CONDENSATE DISPOSAL

**P2609.1 Fuel–Burning Appliances.** Liquid combustion by-products from condensing appliances shall be collected and discharged to an approved plumbing fixture or disposal area in accordance with the manufacturer's installation instructions, and shall be ***appropriately neutralized***. See Table 804.1.9. Condensate piping shall be of approved corrosion-resistant material and shall not be smaller than the drain connection on the

appliance. Such piping shall maintain a minimum horizontal slope in the direction of discharge of not less than 1/8th-inch per foot (1–percent slope).

**P2609.2 Air-Conditioning 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 into a street, alley or other areas so as to cause a nuisance. The ***only*** such discharges allowed into the Commission's sanitary sewer systems shall be from ***replacement*** equipment serving Group R-3 occupancies constructed prior to 1965.

402.27 Reserved

## 402.28 Amendment of IRC CHAPTER 28, WATER HEATERS

**402.28.1 IRC Section 2801.5, Required Pan,** is hereby **AMENDED** to **CLARIFY** where water heater safe pans shall be installed and to avoid conflict with subsequent prescriptive language that is not enforceable in a practical manner, all to read as follows:

(IRC as amended)

**2801.5 Required Pan.** Where water heaters or hot water storage tanks are installed in locations where leakage of the tanks or connections will cause damage, the tank or water heater shall be installed in a galvanized steel pan having a minimum thickness of 24 gauge, or other pans approved for such use. Listed pans shall comply with CSA LC3. This requirement shall only apply to water heaters located above habitable space or the lowest habitable level. Pans shall ***not*** be required is basements or slab-on-grade constructions, whether finished or unfinished.

## 402.29 Amendment of IRC CHAPTER 29, WATER SUPPLY AND DISTRIBUTION

**402.29.1 IRC Section 2901.1, Potable Water Required,** is hereby **AMENDED** by **ADDING** new Sections 2901.2 and 2901.2.1, to require containment and method of installation for all new and design-retrofit Group R-3 residential occupancies, as required by WSSC under provisions of the Safe Drinking Water Act.

(IRC as amended)

**P2901.2 Containment.** On all new and design-retrofit water service connections, cross-connection control shall be by ***containment*** of the premises and by individual outlet protection. The containment protection shall be an ASSE 1024 dual check valve device.

**P2901.2.1 Installation.** In buildings with an ***outside*** water meter, the device shall be installed between the building service valve and the first plumbing outlet or plumbing branch connection. In buildings with an ***inside*** water meter the device shall be installed immediately on the outlet side of the meter ***before*** the first plumbing outlet or

plumbing branch connection. Where a residential fire sprinkler system is installed, the device shall be installed immediately ***after*** the fire sprinkler system connection tee. Also see Section 2903.4, Thermal Expansion.

**402.29.2 IRC Table 2904.4.1, Water Service Pipe and Table 2904.5 Water Distribution Pipe,** is hereby **AMENDED** to **DELETE** ***polybutylene pipe and tubing*** as an approved material.

**402.29.3 IRC Section P2902.5.4, Connections to Automatic Fire Sprinkler Systems,** is hereby AMENDED to allow a non-testable backflow preventer of equal protection in lieu of a testable backflow preventer typically specified in commercial applications:

(IRC as amended)
**P2902.5.4 Connections to automatic fire sprinkler systems.** The potable water supply to automatic fire sprinkler systems shall be protected against backflow by a minimum of a dual check valve; ASSE 1024, CSA B64.6. Chemical additives are prohibited in residential fire sprinkler systems.

## 402.30 Amendment of IRC CHAPTER 30, SANITARY DRAINAGE

**402.30.1 IRC Section P3005.2, Drainage Pipe Cleanouts,** is hereby **AMENDED** by **ADDING** as new sections, P3005.2.12 and P3005.2.12.1, specifying requirements for property line cleanouts, all to read as follows:

(IRC as amended)
**P3005.2.12 Property Line.** WSSC sewer service connections with a vertical riser, shall be connected to by the plumber in accordance with WSSC Standard DetailS-5.0. The cleanout cover assembly shall be installed by the plumber in accordance with WSSC Standard Detail S-5.1 or S-5.2. See Section 111.1.6 for existing service connections and replacement building sewers.

**P3005.2.12.1 Replacement Sewers.** For ***existing*** sewer service connections being re-connected to ***and*** replacement building sewers, a property line cleanout shall be established by the plumber. The base connection shall be a combination wye and one-eighth bend lying on its back, connected immediately to the WSSC service connection located at the property line or edge of right-of-way. The cleanout cover assembly shall conform with WSSC Standard Detail S-5.1 or S-5.2. See Section 111.1.6.

## 402.31 Amendment of IRC CHAPTER 31, VENTS

**402.31.1 IRC Section P3104.4 Vertical Rise of Vent,** is hereby AMENDED to allow for and provide installation provisions for vents routed horizontally below flood rim of fixtures served as follows:

(IRC as amended)

**P3104.4 Vertical Rise of Vent.** Horizontal dry vents below flood level rim. Dry vents may be routed horizontally below the flood level rim of the fixtures being served provided all of the following conditions are met:
(1) the connection to the drain is in accordance with section 905.3;
(2) an accessible clean-out shall be provided and labeled to service the horizontal run of vent;
(3) the horizontal run of the vent shall slope at 2% minimum toward the drain;
(4) the vent shall be routed to a minimum of 6 inches above the highest flood rim before interconnecting with other vents or terminating outdoors;
(5) where such vents terminate independently to the outdoors or where such vents are the "bottom" or beginning of a vent manifold terminating to the outdoors, the vent terminal shall be protected with a vandal proof termination fitting or a "return bend".

402.32 Reserved

402.33 – 402.42 Unused. IRC Chapters 33 - 42 are not being adopted.

402.43 Reserved

# CHAPTER 5

# ADOPTION OF INTERNATIONAL FUEL GAS CODE

## SECTION 501
## GENERAL

**501.1 Adoption.** The 2006 edition of the **International Fuel Gas Code** (hereinafter "**IFGC**"), published by the International Code Council, Inc., is hereby adopted and incorporated herein by reference, and has the same force and effect as though fully set forth in this Code, subject to the additions, deletions or other modifications set forth in this Chapter as amendments thereto.

**501.2 Applicability.** The IFGC applies to all occupancies other than Group R-3 Occupancies (see definition), and their accessory structures.

**501.3 Availability for Review.** At least 1 copy of the aforesaid IFGC shall be filed in the Office of the Secretary of the WSSC and made available for public use and inspection.

## SECTION 502
## AMENDMENTS TO THE INTERNATIONAL FUEL GAS CODE

**502.1 Amendment of IFGC CHAPTER 1, ADMINISTRATION.** IFGC Chapter 1, Administration, is hereby **DELETED** in its entirety. See WSSC 101.4.2 for a reference to IFGC 101.2.4 Systems and equipment outside the scope.

502.2 Reserved

**502.3 Amendment of IFGC CHAPTER 3, GENERAL REGULATIONS.**

**502.3.1 IFGC Section 310.1, Electrical Bonding**, is hereby AMENDED by ADDING specific bonding requirements for Corrugated Stainless Steel Tubing (CSST), all to read as follows:

(IFGC as amended)

**310.1 Gas pipe bonding.** Each above-ground portion of a gas piping system that is likely to become energized shall be electrically continuous and bonded to an effective ground-fault current path. Gas piping shall be considered to be bonded where it is connected to appliances that are connected to the equipment grounding conductor of the circuit supplying that appliance. CSST piping shall be bonded following specific requirements set forth in the manufacturer's installation instructions.

## 502.4 Amendments of IFGC CHAPTER 4, GAS PIPING INSTALLATIONS

**502.4.1 IFGC Section 406.1.2, Repairs and Additions,** is hereby **AMENDED** by referring to and **ADDING** thereto new Section 406.1.2.1, all to read as follows:

(IFGC as amended)
**406.1.2 (IRC G2417.1.2) Repairs and Additions.** In the event repairs or additions are made after the pressure test, the affected piping shall be tested.

Minor repairs and additions are not required to be pressure tested provided that the work is inspected and connections are tested with a non-corrosive leak-detecting fluid or other approved leak-detecting methods, as cited in Section 406.1.2.1.

**406.1.2.1 Twelve Joint Rule.** Where an existing gas piping system is altered, repaired, or extended, a soap test shall be permitted in lieu of a pressure test, under the following conditions:

- A maximum of 12 joints in the new and disturbed piping are allowed, excluding the equipment connector.
- The new piping and any disturbed piping shall not be concealed.
- The developed length of the new piping shall not exceed 15-feet.
- It shall be the licensee's responsibility to perform the required soap test prior to inspection, and to ensure that the piping does not leak.

**502.4.2 IFGC Section 412, Liquefied Petroleum Gas Motor Vehicle Fuel-Dispensing Stations,** is hereby **DELETED** in its entirety.

**502.4.3 IFGC Section 413, Compressed Natural Gas Motor Vehicle Fuel-Dispensing Stations,** is hereby **DELETED** in its entirety.

502.5 Reserved

502.6 Reserved

**502.7 Amendment of IFGC Chapter 7, GASEOUS HYDROGEN SYSTEMS.** IFGC Chapter 7, Gaseous Hydrogen Systems, is hereby **DELETED** in its entirety.

502.8 Reserved

# CHAPTER 6

# WSSC WATER METERS

## SECTION 601
## GENERAL

**601.1 Scope.** This chapter shall outline all details relating to the installation of Commission water meters. Work normally installed by plumbers that relates to Commission meters and as outlined in this chapter, shall be WSSC Plumbing and Fuel Gas Code requirements, and shall be enforced in conjunction with requirements specified in related sections of this code. In unusual circumstances, the Commission retains the right to deviate from these provisions. See Chapter 1, Administration, Section 111, Connection to the Commission's Systems and Metering, for administrative provisions relating to water service connections and Commission water meters.

**601.2 General Requirements.**

**601.2.1 Standard Details.** Commission water meters shall be installed in accordance with WSSC Standard Details.

**601.2.2 Jumpers Prohibited.** The installation of a straight pipe or jumper in lieu of a water meter shall be ***prohibited***.

**601.2.3 Accessibility.** Water meters shall be ***readily accessible*** for maintenance, replacement, and reading.

## SECTION 602
## WATER METER SELECTION

**602.1 Application.** The size and type of Commission water meters, both for new and design retrofit applications, shall be based on application and plumbing hydraulic load, in accordance with Table 602.1.

**602.2 Location.** The Commission shall determine the location, outside or inside of buildings, for all Commission water meters. See Section 111.5.

**602.3 Size.** The ***minimum*** size water meter required to meet plumbing hydraulic demand and minimum pressure requirements for proper operation of domestic plumbing fixtures and appliances shall be installed, regardless of water service connection size, building water service size, or building piping size. Plumbing hydraulic demand shall be estimated utilizing design criteria from IPC Section 604 and Appendix E; and IRC Section 2903.

## Table 602.1
## WSSC METER APPLICATION CHART
(90% Maximum Flow Rate)

All Flow Characteristics [1,2,8]

| | |
|---|---|
| 27 gpm = ¾″ PD [3,4] | 90 gpm = 1½″ PD |
| 45 gpm = 1″ PD [4] | 145 gpm = 2″ PD |
| | 288 gpm = 3″ CMP |

Variable Flow [5,6,8]

| | |
|---|---|
| 450 gpm = 4″ CMP | 1440 gpm = 8″ CMP |
| 900 gpm = 6″ CMP | |

Constant Flow [2,6,7,8]

| | |
|---|---|
| | 315 gpm = 3″ TRB II |
| 540 gpm = 4″ TRB I | 567 gpm = 4″ TRB II |
| 1125 gpm = 6″ TRB I | 1260 gpm = 6″ TRB II |
| 1620 gpm = 8″ TRB I | 2160 gpm = 8″ TRB II |
| 2610 gpm = 10″ TRB I | 3420 gpm = 10″ TRB II |
| 3870 gpm = 12″ TRB I | 4500 gpm = 12″ TRB II |

Abbreviations: PD = Positive Displacement; CMP = Compound; TRB = Turbine (Class I & II)

1) All meters, size ¾" through 2" shall be Positive Displacement (PD) type.

2) Where large irrigation or similar demands will drive the size of an outside meter past the acceptable range of domestic flow needs, a separate "water-only" meter shall be installed parallel to the main meter as a "double" setting.

3) Minimum inside ***or*** outside meter size other than replacements, shall be ¾-inch.

4) Group R-3 Occupancies with 6 or more water closets shall have a 3/4" ***or*** 1" meter based on ***plumbing*** hydraulic demand. Maximum meter size in Group R-3 Occupancies shall be 1-inch.

5) Buildings/Complexes with variable flow and less than 3,000 WSFU's shall be metered with a Compound Meter (CMP).

6) For Metered Fire or Metered Combination Fire/Domestic Service:
   a) Size primary meter to match the Combined Flow Demand provided by applicant, typically shown on the Hydraulic Information Sheet (HIS).

   b) Size secondary meter (by-pass) on domestic hydraulic demand *only*.

7) Constant flow applications and those exceeding 3000 WSFU's shall be metered with a Turbine Meter (TRB).

8) A larger meter shall be considered *only* on a case-by-case basis.

**602.4 Commission Sub-Meters.** Commission sub-meters shall meet the following requirements: Water passing through a Commission sub-meter shall ***not*** discharge into the sanitary sewage system, except as otherwise allowed by law.

- A Commission sub-meter shall be installed on the ***outlet*** side of the master meter.
- Where required, a Commission sub-meter remote reader wire shall be installed, and shall be tagged on both the outside and inside cable ends.
- The backflow prevention device shall be installed on the ***outlet*** side of the sub-meter.
- A Commission sub-meter shall not be connected to any portion of a fire sprinkler system.

# SECTION 603
# OUTSIDE WATER METERS

**603.1 Installation Responsibility.** Outside meters, settings, and vaults shall be furnished and installed by the Commission or its designee. See Section 111.5.6, Meter Settings and Installation.

**603.2 Building Service Valves.**

**603.2.1 First Valve (Service Valve).** A full-flow building water service valve shall be installed within 3-feet of where the building water service enters the building.

**603.2.2 Second Valve (Domestic Isolation).** When a NPFA 13D or 13R fire sprinkler system is specified, a second full-flow valve shall be installed to provide domestic isolation and to provide an uninterrupted fire sprinkler supply. Irrigation supplies, hose bibbs, and pressure reducing valves, shall be installed ***after*** the fire sprinkler supply tee; and may be installed ahead of the domestic isolation valve.

**603.2.3 Parallel Systems.** When a NPFA 13 fire sprinkler system is specified, a minimum of a double check valve assembly (ASSE 1015) shall be installed to protect the domestic water from the fire sprinkler system. The supply for the fire sprinkler system may tee off before or after the first valve. When ahead of the first valve, a second domestic isolation valve is recommended but not required. Irrigation supplies, hose bibs, and pressure reducing valves, shall be installed after the first valve and after fire sprinkler tee, as applicable. Process water/non-potable systems may be established in parallel to the domestic water branch; each branch shall contain an ASSE 1013 RP backflow preventer.

**603.3 Outside Meters Size ¾-Inch Through 2-Inch**

**603.3.1 Location.** In general, meter settings size ¾-inch through 2-inch, shall be located in the public right-of-way in accordance with Commission Standard Details.

**603.3.2 Water Service Connection.** The Commission's water service connection responsibility shall terminate at the property line; or, in the case of a WSSC right-of-way connection, at the edge of the right-of-way. The "pigtail" piping leaving the water meter, shall extend between 2-feet and 3-feet onto private property in accordance with Commission Standard Details.

**603.3.3 Activities by Plumbers.**

**603.3.3.1 Point of Connection.** Plumbers shall connect to the Commission water service connection "pigtail" on private property, ***at or within 3-feet of*** the property line.

**603.3.3.2 Limited Access.** Plumbers shall not enter meter settings except for operating the angle valve as part of construction-related activities, or for assessing a problem, which if detected, shall be reported to the Commission.

**603.3.3.3 Prohibited Activity.** Commission service connections, meter settings, or any portion thereof, shall not be removed, altered, or replaced except as directed by the code official or as cited in this Code.

**603.3.3.4 Verification Required.** The plumber shall verify that the correct size and type meter as shown on the plumbing permit has been installed; that the meter setting is the correct size and type for the meter, and is complete and to grade; prior to FINAL plumbing inspection. See Section 107.4.1.5.

**603.3.3.5 Minor Adjustments.** Minor adjustments to the meter setting, frame and cover, may be corrected by the plumber, prior to **FINAL** inspection. Major damages or meter setting deficiencies shall be reported to the Commission.

**603.4 Outside Meters Size 3-Inch and Larger**

**603.4.1 Meter Vault Location.** Where an outside water meter vault is specified by the Commission, the Commission or its designee shall construct the vault ***on private property***, adjacent to public property, in a right-of-way provided by the property owner to the Commission.

# SECTION 604
# INSIDE WATER METERS

**604.1 Freeze Protection.** Water meters installed inside of buildings shall be located in an area capable of maintaining a minimum temperature of 50 degrees Fahrenheit, as follows:

**604.1.1 Critical Dates.** The meter room or area shall be heated from November 1 through March 31.

**604.1.2 Insulation.** A meter room or area with outdoor exposure shall be thermally protected in accordance with International Building Code requirements. Meter rooms or areas with no direct exposure to the outdoors, shall ***not*** require extra thermal protection.

**604.1.3 Heat Source.** Where a heat source is required, it shall be thermostatically controlled within the meter room or area. As an alternative, heat may be provided indirectly with prior approval by the code official.

**604.2 Lighting.** Adequate permanent electric lighting shall be provided.

**604.3 Building Service Valves**

**604.3.1 First Valve (Service/Meter Isolation Valve).** A full-flow building water service valve shall be installed within 3-feet of where the building water service enters the building, as close as practical to the meter, and shall be in the same room as the water meter.

**604.3.2 Second Valve (Domestic Isolation).** When a NPFA 13D fire sprinkler system is specified, a second full-flow valve shall be installed to provide domestic isolation and to provide an uninterrupted fire sprinkler supply. Irrigation supplies, hose bibbs, and pressure reducing valves, shall be installed after the fire sprinkler supply tee, and may be installed ahead of the domestic isolation valve.

**604.3.3 Parallel Systems.** When a NPFA 13 or 13R fire sprinkler system is specified, a minimum of a double check detector assembly (ASSE 1048) shall be installed to protect the domestic water from the fire sprinkler system as well as meter the fire sprinkler water. The supply for the fire sprinkler system shall tee off before the domestic meter assembly. Downstream of the domestic meter assembly, process water/non-potable systems may be established in parallel to the domestic water branch; each branch shall contain an ASSE 1013 RP backflow preventer.

**604.3.4 Meter Isolation and Bypass.** Valves on larger meters, meter isolation and bypass valves shall be in the same room as the meter, and as close as practical to the meter.

**604.4 Inside Meters Size ¾-Inch Through 2-Inch**

**604.4.1 Water Service Connection.** In general, water service connections, size 1-inch through 2-inch, shall be located in the public right-of-way in accordance with Commission Standard Details. The Commission water service connection shall terminate with a curb valve at the property line; ***or***, from the edge of the right-of-way, whichever is closer to the main.

### 604.4.2 Activities by Plumbers

**604.4.2.1 General.** Plumbers shall connect to the Commission's curb valve. Commission service connections or any portion thereof, shall not be removed, altered, or replaced unless directed by a code official.

**604.4.2.2 Curb Valve Depth.** The ***maximum*** depth from finished grade to the curb valve shall be 60-inches; ***minimum*** depth shall be 42-inches.

**604.4.2.3 Valve Box Required.** A pre-manufactured cast ***metal*** valve/curb box shall be furnished and installed by the plumber at the property line, and shall consist of the valve box, adjustable top section, and lid. An extension stem and guide shall be installed on a curb stop valve 1" and smaller. 1-1/2" and 2" curb valves shall not be outfitted with an extension stem and guide.

**604.4.2.4 Valve Box Support.** The valve box assembly shall be installed on a firm foundation. It shall be installed on undisturbed earth, compacted or granular fill, or structural wood bridging supported by undisturbed earth, as approved by the code official. In vehicular traffic areas, a formed concrete pad 24-inches square or round, by 4 inches thick shall be provided to support the valve box. The concrete pad may be below finished paving.

**605.4.2.5 NFPA 13D Residential Fire Sprinkler Connection.** On residential buildings equipped with a NFPA 13D residential fire sprinkler system, the tee feeding the residential fire sprinkler system shall be located on the ***outlet*** side of the meter. No valve shall be installed on the tee branch supplying the fire sprinkler system.

**604.4.2.6 Final Plumbing Inspection.** The plumber shall verify that the top of the curb box is complete, operational, and flush with the permanent grade; and that the correct size and type of meter as shown on the plumbing permit has been installed; prior to **FINAL** inspection. See Section 107.4.1.5.

**604.4.2.7 Remote Reader.** Provisions for a WSSC remote reader shall be provided as follows:

**604.4.2.7.1 Conduit and Cable Exit.** 18 to 48 inches above grade; do not locate in a fenced or rear yard; preferred along the front wall or sides near front corners.

**604.4.2.7.2 Conduit.** Conduit shall be 1/2" minimum I.D. and shall have no fittings greater than 45 degrees; fittings may not be insert type.

**604.4.2.7.3 Conductor cable.** Conductor cable shall be supplied be the Commission; 2 feet of excess cable shall be left at each end; multiple cables may share a conduit, proper identification is required.

# CHAPTER 7

# SITE-UTILITY SYSTEMS

## SECTION 701
## GENERAL

**701.1 Scope.** This chapter shall govern the administration, design, construction, and inspection for a system of privately owned water and/or sewer mains located on private property.

**701.2 Qualification.** Water service piping 4-inches in diameter or larger, sewer piping 6-inches in diameter or larger, and any non-residential pressure sewer system, shall be designed and submitted through the site-utility (on-site) system process described herein.

**701.2.1 Smaller Diameter Systems.** Water service piping 3-inches in diameter or smaller, and sewer piping 4-inches in diameter or smaller shall not be governed by this Chapter as a site-utility system design, except as cited in Section 701.2.2. A WSSC plumbing permit shall govern the review, installation and inspection of such smaller systems.

**701.2.2 Mixed Systems.** When ***either*** the building water service or the building sewer qualify as a site-utility system based on pipe size as cited in Section 701.2, and ***either*** the building water or sewer are smaller in diameter as cited in Section 701.2.1, the ***entire*** system shall be designed, approved, and constructed as a site-utility system in accordance with requirements cited in this Chapter.

**701.2.3 Minor Site-Utility Systems** (Formerly Waived On-Site Systems)**.** At the discretion of the code official, site-utility system designs of less complexity and/or length shall be waived from going through the detailed site-utility document review process as outlined in this chapter, and shall be designated as a "minor" site-utility system as opposed to a "standard" site-utility system. The following requirements shall be met in order for a system to qualify as a minor site-utility system:

- Copies of the site plan shall be submitted in accordance with established submittal requirements, including the WSSC submittal checklist.
- The developed piping length to the building, measured from property line or edge of right-of-way, for both water and sewer shall not exceed 80-feet each.
- Installation and testing shall conform with requirements cited in Section 705; and shall be performed and inspected under a WSSC Plumbing permit.

**701.3 Outside Meter Requirement.** In general, all site-utility systems, both standard and minor, greater than 80-feet in developed length, shall be served by an outside meter. Subject to approval by the site-utility code official, systems less than 80-feet in developed length may be served by an inside meter. See Chapter 6, Installation of Commission Meters, for requirements relating to meter vaults and meter settings.

# SECTION 702
# DESIGN

**702.1 Design Engineer.** A State of Maryland Registered Professional Engineer (engineer) shall be responsible for the design of a site-utility system, and shall review plans and other documents ***prior to*** their submission to the Commission. Final documents submitted for Commission approval shall have each sheet stamped, signed and dated by the engineer. The engineer shall not be required to, or shall not be prohibited from being, the engineer designated to oversee the installation process.

**702.2 Design Basis.** The design engineer shall base the design on sound engineering protocols in conjunction with the following available guidelines:

- WSSC Site-Utility Design Checklist
- This Code
- WSSC Pipeline Design Manual
- WSSC Standard Details
- WSSC General Conditions and Standard Specifications

**702.3 Documentation**

**702.3.1 Owner's Declaration.** The owner shall designate in writing, a State of Maryland Registered Professional Engineer for general oversight of the installation process, both for standard site-utility systems and minor site-utility systems. The letter shall state the engineer's responsibilities as follows:

- Verification that materials meet WSSC standards
- Oversight of all aspects of installation
- Witness and report all testing
- Produce required as-built plans

- Provide overall final certification letter

**702.3.2 Construction Plans.** Construction drawings or plans shall be formatted in accordance with the current WSSC Site-Utility Water and Sewer System Design Checklist. Plan size shall be 24 x 36 inches.

**702.3.3 Other Required Documents.** In addition to construction documents, release of the site-utility permit shall be contingent on submission of other required documents including but not be limited to the following:

- Private easements
- Required covenants
- Shared water/sewer agreements
- Recordation where applicable
- Supervised sprinkler agreement where applicable

**702.4 Design Coordination with the Building Water Distribution and the Building Drain.**

**702.4.1 Water.** The site-utility water service shall terminate within 5-feet of building wall/foundation. This termination point may either be 5' outside of the foundation or at the "first flange" no greater than 5 ' inside of the building.

**702.4.2 Sewer.** The site-utility sewer shall terminate within 5-feet outside of the building wall/foundation.

# SECTION 703
# PERMITS

**703.1 Site-Utility Permit.** The owner or the owner's designee shall secure a WSSC site-utility permit, or minor site-utility permit, ***prior to*** construction of the site-utility system.

**703.2 Service Connection Permit.** When a site-utility system is contingent upon a new service connection, the service connection permit shall be secured ***prior to*** the site-utility permit.

# SECTION 704
# INSTALLATION

**704.1 Qualified Contractor.** All work shall be installed by a utility contractor (contractor) approved by the Commission, ***or***, by a WSSC-licensed Master Plumber (contractor).

**704.2 Oversight.** The engineer shall provide complete oversight of the installation process, both for standard site-utility systems and minor site-utility systems.

**704.3 Materials.** The engineer shall validate that all materials comply with Commission standards and this Code.

**704.4 Supervision.** The engineer shall provide general supervision of the pipeline installation as well as related appurtenances. Key components of inspection shall include but not limited to the following:

- Alignment and sizing in accordance with approved construction documents
- Bedding and slope of pipeline
- Backfill with care and with suitable fill material

**704.5 Deviation.** Minor changes to alignment and elevation shall be permissible as a result of unforeseen field conditions as follows:

- The engineer shall report and record such changes as part of the required as-built drawings.
- When such changes effect system integrity, conflict with the design and/or intent of the approved drawings, or lack compliance with design standards or Code, the engineer shall obtain approval from the site-utility code official prior to installation.

# SECTION 705
# WATER QUALITY AND TESTING

**705.1 Equipment.** The contractor shall furnish and operate all testing equipment.

**705.2 Coordination.** The contractor shall coordinate and schedule all testing, and ensure that the engineer is present during testing.

**705.3 Water Quality**

**705.3.1 Chlorination.** Water system piping exceeding 50-feet in developed length shall be chlorinated during installation. After installation, the system shall be flushed to lower chlorine residual, prior to water sampling. Water system piping 50-feet or less in developed length shall be thoroughly flushed upon connection to the Commission's system; chlorinating and sampling shall ***not*** be required on these systems.

**705.3.2 Water Samples.** Where piping has been chlorinated, water samples shall be taken from the end of the longest run within the system and from laterals exceeding 50-feet in developed length.

**705.3.3 Accredited Laboratory.** Water quality testing shall be performed and reported by a State of Maryland accredited laboratory.

**705.3.4 Reports.** Water quality test reports shall contain the following information:

- WSSC site-utility or minor site utility permit number
- Acceptable chlorine residual
- Absence of bacteria
- Statement: ***"THIS SAMPLE MEETS FEDERAL STANDARDS FOR DRINKING WATER AND IS SAFE FOR HUMAN CONSUMPTION"***

**705.4 Water Main Testing.** All standard site-utility water systems and minor site-utility water systems shall be hydrostatically tested. The minimum test pressure shall be 200 psig,

unless a greater pressure is designated on the approved construction documents, for a duration of 2-hours.

**705.5 Gravity Sewer Testing**

**705.5.1 Pressure Test.** All site-utility and minor site-utility sewer systems greater than 50-feet in developed length shall be pressure tested with air at 4 psig for a duration of 5-minutes, and shall show no sign of leakage.

**705.5.2 Mandrel Test.** All site-utility and minor site-utility sewer systems 6-inches and larger and that incorporate 1 or more manholes, shall have a mandrel pulled through each segment greater than 50-feet in developed length to disclose any defect, distortion or misalignment of the pipe.

**705.6 Pressure Sewer.** All pressure sewer piping shall be hydrostatically tested. The minimum test pressure shall be 100 psig for a duration of 2-hours.

**705.7 Engineer's Responsibility**

**705.7.1 Validation.** The engineer shall validate that all testing protocols comply with this Code and the General Site-Utility Water and Sewer Notes shown on the approved construction documents.

**705.7.2 Witness Tests.** The engineer shall witness all requisite tests. Test that fail shall have piping corrected and re-tested until the test is satisfactory.

**705.7.3 Reporting.** The engineer shall report test results to the site-utility code official.

# SECTION 706
# HOOK-UP AND ACTIVATION

**706.1 Connection to Commission Mains.** The contractor shall connect the site-utility system to the Commissions system under the following conditions:

- The Commission's system and service connection shall have been ***released*** for hook-up.
- The engineer shall have witnessed the installation and testing of the site-utility system, and shall have completed and submitted ***all*** required reports.
- The engineer shall witness the final connection to the Commission's system.

**706.2 Connection to Building Piping.** ***Only*** a WSSC-licensed master plumber shall connect the building water and drainage systems to the site-utility systems. A site-utility

contractor shall ***not*** connect to the building plumbing systems. ***Prior to connection***, the site-utility system shall be ***released*** as FINALED by the site-utility code official.

**706.2.1 Water.** The plumber shall connect the water distribution system to the termination of the site-utility water service. See the approved Site Utility plan for the termination point either 5 feet outside or at the "first flange" within 5 feet ***inside*** the building.

**706.2.2 Sewer.** The plumber shall connect the building drain to the site-utility sewer within 5-feet ***outside*** of the building wall/foundation.

# SECTION 707
# AS-BUILT DRAWINGS AND FINAL APPROVALS

**707.1 General.** Final approval of the site-utility system permit shall be contingent upon complete documentation by the engineer and full release of the Commission’s systems.

**707.2 As-Built Drawings.** The engineer shall provide 2 copies of the as-built drawings to the site-utility code official. As-built drawings shall include all deviations from the original approved plan for ***both*** the plan view and the profiles. Required notes shall include elevations of and shall indicate ties for all bends, valves, cleanouts, appurtenances, and similar buried items.

**707.3 Engineer's Certification.** The engineer shall provide a FINAL overall certification letter addressing the following:

- Materials installed comply with Commission Standards and this code.
- The engineer provided general oversight for the installation of all pipelines, structures, and appurtenances.
- The engineer witnessed and properly reported all requisite tests.
- The site-utility system is in overall compliance with the as-built plan, Commission standards and this code.

**707.4 Commission Systems Release.** FINAL APPROVAL of the site-utility system shall be contingent upon ***full release*** of the Commission service connection(s). ***Substantial completion*** of the applicable WSSC permit shall be required ***prior to*** the site-utility permit being closed. In general, service connections shall be part of a Service Connection Permit (SCP), System Extension Permit (SEP), or Relocations and Major Systems (RMS) contract.

# CHAPTER 8
# INDUSTRIAL AND SPECIAL WASTE

## SECTION 801
## APPLICABILITY

**801.1 Scope.** This chapter shall authorize the regulation of Industrial Users discharging to the Commission wastewater system through the issuance of permits to certain non-domestic users and through enforcement of general requirements for other users; shall authorize monitoring and enforcement activities; shall detail user reporting requirements; and shall provide for the setting of fees for the equitable distribution of costs resulting from the program established herein. These requirements shall apply to all ***persons*** (see definition) within the WSSD and to persons outside the WSSD who are, users of the Commission sewer and wastewater treatment systems by agreement, permit or other means. Persons who apply for or receive service from the Commission shall be deemed to have consented to inspections and shall comply with Commission regulations.

**801.2 Definitions.** In addition to the definitions generally applicable to the provisions of this Code [See Chapter 2], the following definitions are specifically applicable to the provisions of this Chapter 8, Industrial and Special Waste.

**801.2.1 Administrator.** The Administrator of the U.S. Environmental Protection Agency.

**801.2.2 Authorized Representative**

**801.2.2.1 Corporation.** If the Industrial User is a corporation, authorized representative shall mean:

- The president, secretary, treasurer, or a vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation; or

- The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capitol investment recommendations, and initiate and direct other comprehensive measures to assure long-term environmental compliance with environmental laws and regulations, can ensure that the necessary systems are established or actions taken to gather complete and accurate information for control mechanism requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

**801.2.2.2 Partnership or Proprietorship.** If the Industrial User is a partnership, or sole proprietorship, an authorized representative shall mean a general partner or proprietor, respectively.

**801.2.2.3 Government.** If the Industrial User is a Federal, State or local governmental facility, an authorized representative shall mean a director or highest official appointed or designated to oversee the operation and performance of the activities of the government facility, or his/her designee.

**801.2.2.4 Designee.** The individuals described in paragraph 801.2.2 may designate another authorized representative if the authorization is in writing; the authorization specifies the individual or position responsible for the overall operation of the facility from which the discharge originates or having overall responsibility for environmental matters for the company; and the written authorization is submitted to the Commission.

**801.2.2.5 New Authorization.** If authorization in paragraph 801.2.2.4 is no longer accurate because a different individual or position has responsibility, a new authorization satisfying the requirements of paragraphs 801.2.2.1 and 801.2.2.4 of this section must be submitted to the Commission prior to or together with any reports to be signed by an authorized representative.

**801.2.3 Best Management Practices (BMPs).** Methods, activities, prohibitions of practices, maintenance procedures, and other management practices designed to reduce the quantity of pollutants discharged to a pretreatment system or to the POTW. BMP's also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw materials storage.

**801.2.4 Biochemical Oxygen Demand (BOD).** The measure of oxygen utilized in the biochemical oxidation of organic matter in 5 days at 20 degrees Celsius expressed in milligrams per liter (mg/l).

**801.2.5 Bypass.** The intentional diversion of wastestreams from any portion of an Industrial User's treatment facility.

**801.2.6 Categorical Pretreatment Standard (Categorical Standard).** Any regulation containing pollutant discharge limits promulgated by EPA in accordance with Sections 307(b) and (c) of the Act which apply to a specific category of users and which appear in 40 CFR Chapter I, Sub-Chapter N, Parts 405-471.

**801.2.7 Code of Federal Regulations (CFR).** A codification of the general and permanent rules published in the Federal Register by the Executive Department and agencies of the Federal government.

**801.2.8 Chronic Violation.** Violations of wastewater discharge limits in which 66 percent or more of all of the measurements taken for the same pollutant parameter during a 6-month period exceed (by any magnitude) a numeric Pretreatment Standard or Requirement , including instantaneous limits, as defined by 40 CFR 403.3(l).

**801.2.9 Discharge Authorization.** A permit issued by the Commission authorizing the discharge of industrial wastes into the wastewater treatment system subject to specific discharge standards, reporting requirements and other restrictions.

**801.2.10 Domestic Wastes.** The waterborne wastes derived from ordinary living processes.

**801.2.11 Effluent.** The flow of liquid out of a fixture, pipe, process, or system.

**801.2.12 Environmental Protection Agency (EPA).** The U.S. Environmental Protection Agency or, where appropriate, the Regional Water Management Division Director, or other duly authorized official of said agency.

**801.2.13 Existing Source.** Any source of discharge, the construction of which commenced prior to the publication by EPA of proposed categorical pretreatment standards, which will be applicable to such source if the standard is thereafter promulgated in accordance with Section 307 of the Act.

**801.2.14 Garbage.** The solid animal and vegetable waste resulting domestic or commercial handling, storage, dispensing, preparation, cooking and serving of foods.

**801.2.15 Grab Sample.** A sample taken from a wastestream without regard to the flow in the wastestream and over a time not to exceed 15 minutes. Grab samples shall be used for pH, cyanide, total phenols, oil and grease, sulfide, and volatile organic compounds. Using protocols (including appropriate preservation) specified in 40 CFR Part 136 and appropriate EPA guidance, multiple grab samples collected during a 24-hour period may be composited prior to the analysis as follows: For cyanide, total phenols, and sulfides the samples may be composited in the laboratory or in the field; for volatile organics and oil & grease the samples may be composited in the laboratory.

**801.2.16 Ground Water.** Subsurface water occupying the zone of saturation, either confined or free.

**801.2.16.1 Confined Ground Water.** A body of ground water covered with a material impervious enough to sever free hydraulic connection with overlying ground water.

**801.2.16.2 Free Ground Water.** Ground water in the zone of saturation extending down to the first impervious barrier.

**801.2.17 Indirect Discharge.** The introduction of pollutants into a POTW from any non-domestic source regulated under section 307(b), (c) or (d) of the Clean Water Act.

**801.2.18 Industrial User.** Any place of business, endeavor, arts, trade or commerce, whether public or private, commercial or charitable, that uses water in a product, process, or any manner that generates wastewater which is a source of indirect discharge.

**801.2.19 Industrial Wastes.** Liquid or liquid borne wastes resulting from the processes employed in industrial and commercial establishments.

**801.2.20 Influent.** The flow of a liquid into a fixture, pipe, process, or system.

**801.2.21 Interference.** A discharge which, alone or in conjunction with a discharge or discharges from other sources, both:

- Inhibits or disrupts the POTW, its treatment processes or operations, or its sludge processes, use, or disposal; and

- Is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation) or of the prevention of sewage sludge use or disposal in compliance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 405 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA), and including State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of the SWDA), the Clean Air Act, the Toxic Substances Control Act, and the Marine Protection, Research and Sanctuaries Act.

**801.2.22 Lower Explosive Limit (LEL).** The minimum concentration of a particular combustible gas that can be ignited in air.

**801.2.23 Industrial Waste Monitoring Point.** A Commission approved access opening to the building drainage system for the purpose of obtaining samples of the industrial user's waste discharges. Limits imposed on permitted industries apply at this point.

**801.2.24 New Source.** A New Source shall be defined as:

**801.2.24.1 Any Premises.** Any building, structure, facility, or installation from which there is, or may be, a discharge of pollutants; the construction of which commenced after the publication of proposed pretreatment standards under Section 307(c) of the Clean Water Act which will be applicable to such source if such standards are thereafter promulgated in accordance with that section, provided that:

(1) The building, structure, facility or installation is constructed at a site at which no other source is located; or

(2) The building, structure, facility or installation totally replaces the process or production equipment that causes the discharge of pollutants at an existing source; or

(3) The production or wastewater generating processes if the building, structure, facility or installation is substantially independent of an existing source at the same site. In determining whether these are substantially independent, factors such as the extent to which the new facility is integrated with the existing plant, and the extent to which the new facility is engaged in the same general type of activity as the existing source should be considered.

**801.2.24.2 Construction Site.** Construction on a site at which an existing source is located results in a modification rather than a new source if the construction does not create a new building, structure, facility or installation meeting the criteria of paragraphs 801.2.23.1.(2.) and 801.2.23.(3.) of this Section but otherwise alters, replaces, or adds to existing process or production equipment.

**801.2.24.3 New Source.** Construction of a new source as defined under this paragraph has commenced if the owner or operator has:

(1) Begun, or caused to begin as part of a continuous on-site construction program as follows:

(a) Any placement, assembly, or installation of facilities or equipment; or

(b) Significant site preparation work including clearing, excavation, or removal of existing buildings, structures, or facilities which is necessary for the placement, assembly, or installation of new source facilities or equipment; or

(2) Entered into a binding contractual obligation for the purchase of facilities or equipment which are intended to be used in its operation within a reasonable time. Options to purchase or contracts which can be terminated or modified without substantial loss, and contracts for feasibility, engineering, and design studies do not constitute a contractual obligation under this paragraph.

**801.2.25 Non-Contact Cooling Water.** Water used for cooling which does not come into direct contact with any raw material, intermediate product, waste product, or finished product.

**801.2.26 Non-Domestic Waste.** The liquid wastes from industrial or commercial processes, trade or business; distinct from domestic wastes.

**801.2.27 NPDES Permit.** A National Pollutant Discharge Elimination System Permit. NPDES Permits authorize the operation of WSSC wastewater treatment plants. NPDES Permits for WSSC plants shall be issued by the State of Maryland.

**801.2.28 Owner.** A proprietor, person, or entity who owns or has exclusive rights of possession.

**801.2.29 Person.** Any individual; partnership; co-partnership; firm; company; corporation; association; joint stock company; trust; estate; Federal, State, and local governmental entity; society; group or any other legal entity; or their legal representatives, agents, or assigns or governmental entities.

**801.2.30 Pass Through.** A discharge which exits the POTW into waters of the United States in quantities or concentrations which, alone or in conjunction with a discharge or discharges from other sources, is a cause of a violation of any requirement of the POTW's NPDES permit (including an increase in the magnitude or duration of a violation).

**801.2.31 pH.** A measure of acidity, or alkalinity of a liquid. It is represented on a scale of 0 to 14 with 7 representing a neutral state; 0 representing the most acidic; and 14 representing the most alkaline.

**801.2.32 Pollutant.** Any dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, chemical wastes, biological wastes, radioactive wastes, heat, rocks, sand and other industrial, municipal, commercial and agricultural waste or any other contaminant.

**801.2.33 Pollution.** The addition of sewage, industrial wastes, or other harmful or objectionable material to water. Sources of pollution can be privies, septic tanks, subsurface irrigation fields, seepage pits, sink drains, barnyard wastes, etc.

**801.2.34 POTW.** A Publicly-Owned Treatment Works of the Commission, which includes any device and system used in storage, treatment, recycling, and reclamation of municipal sewage or industrial waste of a liquid nature. Also included are sewers, pipes, and other conveyances only if they convey wastewater to a POTW Treatment Plant. The term also means the municipality as defined in section 502(4) of the Clean Water Act, which has jurisdiction over the indirect discharges to and the discharges from such a treatment works.

**801.2.35 POTW Treatment Plant.** That portion of the POTW which is designed to provide treatment (including recycling and reclamation) of municipal sewage.

**801.2.36 Pretreatment.** The reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater prior to or in lieu of discharging or otherwise introducing such pollutants into a POTW. The reduction or alteration may be obtained by physical, chemical, or biological processes,

process changes, or by other means, except as prohibited by 40 CFR 403.6(d) of the General Pretreatment Regulations.

**801.2.37 Prohibited Discharges.** Absolute ban against the discharge of certain substance; these prohibitions appear in Section 804 of this code.

**801.2.38 Properly Shredded Garbage.** Garbage that has been shredded such that all particles will be freely carried under flow conditions normally occurring in the wastewater sewers with no particles greater than ½-inch in any dimension.

**801.2.39 RCRA.** Resource Conservation Recovery Act.

**801.2.40 Severe Property Damage.** Substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

**801.2.41 Significant Industrial User.** An Industrial User meeting one or all of the criteria as defined in 40 CFR 403.3, the criteria being:

(1) All Industrial Users subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N; and

(2) Any other Industrial User that discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, non-contact cooling and boiler blow-down wastewater); or

(3) Any Industrial User which contributes process wastes stream which makes up 5-percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant; or

(4) Any Industrial User designated by the Commission as defined in 40 CFR 403.12(a) on the basis that the Industrial User has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement (in accordance with 40 CFR 403.8(f)(6)).

**NOTE:** Upon a finding that an Industrial User, meeting the above criteria of this definition, has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the Commission may at any time, on its own initiative or in response to a petition received from an Industrial User, and in accordance with 40 CFR 403.8(f)(6), determine that such Industrial User is not a Significant Industrial User.

**801.2.42 SlugDischarge.** A slug discharge is any discharge of a non-routine, episodic nature, including but not limited to an accidental spill or a non-customary batch

discharge, which has a reasonable potential to cause Interference or Pass Through, or in any other way violate the Commission's regulations, local limits or Permit conditions.

**801.2.43 Special Wastes.** Wastes that require special treatment before entry into the normal plumbing system.

**801.2.44 Storm Water.** Any flow of water occurring during or following any form of natural precipitation, and resulting from such precipitation, including snowmelt.

**801.2.45 Technical Review Criteria (TRC).** Violations of wastewater discharge limits in which 33-percent or more of all the measurements taken for the same pollutant parameter taken during a 6-month period equal or exceed the product of the numeric Pretreatment Standard or Requirement including instantaneous limits, as defined by 40 CFR 403.3(l) multiplied by the applicable TRC (TRC=1.4 for BOD, TSS, fats, oil and grease; and TRC=1.2 for all other pollutants except pH).

**801.2.46 Toxic Substances.** Substances that, when inhaled or ingested, can cause death or disease.

**801.2.47 Total Toxic Organic (TTO).** A list of organic compounds specifically developed for regulation by the Commission.

**801.2.48 Upset.** An exceptional incident in which there is unintentional and temporary noncompliance with categorical pretreatment standards because of factors beyond the reasonable control of the Industrial User. An Upset does not include non-compliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

**801.2.49 Wastewater.** Liquid and water-carried industrial waste and sewage from residential dwellings, commercial buildings, industrial and manufacturing facilities, and institutions, whether treated or untreated which are discharged to the POTW.

# SECTION 802
# GENERAL PROVISIONS

**802.1 Objectives.** This Industrial and Special Waste chapter shall detail uniform requirements for Industrial Users discharging into the wastewater collection and treatment systems of the Commission and shall enable the Commission to comply with all applicable state and Federal laws required by the Clean Water Act of 1977 and the General Pretreatment Regulations of 1981, as amended. The objectives of this Chapter shall be:

**802.1.1 Prevent Interference with Operations.** To prevent the introduction of pollutants into the Commission wastewater system that will interfere with the operation of the system or contaminate the resulting sludge.

**802.1.2 Prevent Inadequate Treatment.** To prevent the introduction of pollutants into the Commission wastewater system that will pass through the system, inadequately treated, into receiving waters or otherwise be incompatible with the system.

**802.1.3 Reclaim Wastes.** To improve the opportunity to recycle and reclaim municipal and industrial wastewater and sludge.

**802.1.4 Endangerment.** To prevent the introduction of pollutants into the collection system which endanger workers or interfere with the operation of the collection system or treatment plants.

**802.1.5 Fees.** To provide for the levying and collection of fees for the equitable distribution of the cost of the operation, maintenance and improvement of the Commission's Industrial Discharge Control Program.

# SECTION 803 GENERAL DISCHARGE REQUIREMENTS

**803.1 All Industrial Users.** All Industrial Users discharging non-domestic wastes into the Commission's sanitary sewers from a building drain or sewer or any other method shall meet the standards and requirements of this chapter. The Commission shall reserve the right, as it may deem proper, to require pretreatment of industrial wastes, or any other special kinds of wastes, before such wastes are discharged to the sanitary sewer.

**803.2 Federal and Other Standards.** All Industrial Users shall comply with the Federal general pretreatment regulations in 40 CFR Part 403 and the applicable national categorical pretreatment standards set out in 40 CFR Subchapter N Parts 401 through 471 as amended, and all other applicable Federal, State, or local discharge limitations, requirements or standards. Limitations imposed on users at the point of application shall be the most stringent limitations applicable. These may be Federal, State, or local requirements or standards. In the event that an Industrial User discharges to any outside jurisdiction, the Commission shall enforce discharge limitations, requirements, or standards at least as stringent as those established in the outside jurisdiction.

**803.3 Discharge Limits.** The Commission may impose mass discharge limits in lieu of, or in conjunction with, concentration discharge limits.

**803.4 Categorical Standards.** The national categorical pretreatment standards found in 40 CFR Chapter I, Subchapter N, Parts 401-471 shall hereby be incorporated.

**803.5 State Standards.** The State pretreatment standards found in COMAR Title 26 shall hereby be incorporated.

**803.6 Special Agreements.** No provision contained in these Regulations shall be deemed to prevent any special agreement or arrangement between the Commission and any person, whereby wastewater of unusual strength or characteristic may be accepted by the Commission for treatment, that will not violate or cause the Commission and/or the user to violate, Federal or State pretreatment requirements or standards; and which shall not be harmful to the system. Under no circumstances shall Federal or State pretreatment standards or requirements be waived.

# SECTION 804
# PROHIBITED DISCHARGES

**804.1 Prohibited Discharge to Sanitary Sewer.** No person shall discharge the following, or cause the following to be discharged, directly or indirectly, into the Commission's sanitary sewer:

**804.1.1 Temperature.** Any liquids or vapors having a temperature greater than 140 degrees Fahrenheit (60°C). In no case shall discharged waste raise the temperature at the treatment works influent greater than104 degrees Fahrenheit (40°C).

**804.1.2 Fire or Explosion Hazard.** Any liquids, solids or gases that by reason of their nature or quantity are, or may be, either alone or by interaction with other substances sufficient to cause a fire or explosion hazard in the POTW or its processes, including, but not limited to, waste streams with a closed cup flash point of less than 140-degrees Fahrenheit (60°C) using the test methods specified in 40 CFR 261.21. At no time shall an Industrial User discharge any substance which results in a reading of greater than 5-percent of the Lower Explosive Limit (LEL) for that substance using a methane calibrated combustible meter, at the point of discharge to a fixture or at any point in the system. Prohibited materials include but shall not be limited to; gasoline, kerosene, naphtha, ethers, alcohols, ketones, aldehydes, peroxides, chlorates, perchlorates, bromates, carbides, hydrides and sulfides and any other substances determined to be a fire and/or explosion hazard.

**804.1.3 Public Nuisance or Hazard.** Any malodorous or toxic gases, vapors, fumes, or other substances that, either singly or by interaction with other wastes, shall be capable of creating a public nuisance, a hazard to human health or the environment, or the prevention of entry by Commission personnel into sewers for maintenance and repair.

**804.1.4 Interference and Pass-Through.** Any liquids, solids, or gases not amenable to treatment or reduction by the sewage treatment processes employed, or amenable to treatment only to such a degree that the wastewater treatment plant violates its NPDES permit; or any substance which may interfere with or pass-through the POTW into the receiving waters untreated or without adequate treatment.

**804.1.5 Excess Coloration.** Any liquids, solids, or gases that, singly or by interaction with other material, cause excessive coloration which may pass through the POTW to the receiving waters or any substance with excessive color such that the color is not removed in the wastewater treatment plant, including but not limited to, dye wastes.

**804.1.6 Obstruction to Flow.** Any lint, ashes, cinders, sand, mud, straw, shavings, metals, glass, bones, wood, plastics, stone dusts, rags, paunch manure, butcher's offal, or any solids, liquids or other substances capable of causing obstruction to the flow in sewers or other interference with the proper operation of the wastewater system.

**804.1.7 Concentrated Releases.** Any slug load, release rate of pollutants, concentration of pollutants, including oxygen demanding pollutants either singly or by interaction with other pollutants or waste streams, which shall cause interference with any wastewater treatment process, constitute a hazard to humans or animals, contaminate sludge, pass-through the POTW to receiving waters, or could result in a violation of the POTW's NPDES permit.

**804.1.8 Excess Daily Flow.** An average daily flow greater than 2-percent of the average daily sewage flow at the wastewater treatment plant receiving the industrial waste unless otherwise permitted in writing.

**804.1.9 Discharge Limitations.** Any water or wastewater containing substances in excess of the limitations contained in Table 804.1.9. These limits shall be subject to revision and may be modified to represent concentration or mass based standards.

**804.1.10 Radioactive Wastes.** Any radioactive wastes or isotopes of such half-life or concentration as to exceed limits established by applicable local, State, or Federal regulations. Reports of discharges to the Commission's system shall reflect actual discharge concentrations rather than any time or dilution adjustments.

**804.1.11 Pathogenic Wastes.** Any, substance containing viable pathogenic or parasitic organisms that could pose a health hazard to the public or interfere with the proper operation of the wastewater collection or treatment systems

**804.1.12 Storm or Ground Water.** Any storm water, surface water, ground water, roof runoff, subsurface drainage.

**804.1.13 Viscous Substances.** Any substances that could solidify or become viscous at temperatures between 40-degrees Fahrenheit (4ºC) and 140-degrees Fahrenheit (60ºC); or at any other temperature that could cause obstruction and/or interference with the conveyance system or the POTW processes.

**804.1.14 Dilution Prohibition.** Any water added to a discharge as a partial or complete substitute for proper treatment to achieve compliance with applicable discharge limitations for any wastewater constituent.

**804.1.15 Hauled Pollutants.** Any trucked or hauled pollutants, except at discharge points designated by the Commission in conformance with the provisions cited in Section 814.

**804.1.16 Oils.** Any wastes containing petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that could cause interference or pass-through.

**804.1.17 Glycol.** Any glycol compound or derivative added to or contained in internal combustion engine cooling systems or liquid conveyance systems for the purposes of altering liquid freezing and/or boiling points.

**804.1.18 Pretreatment Residue.** Sludges, screenings or other residues from pretreatment systems or industrial processes.

**804.1.19 Corrosive Substances.** Substances causing corrosive damage, harm or endangerment to the collection system, pumps, personnel.

**804.1.20 Mercury.** Except as otherwise provided in this section, any substance containing mercury in amounts greater than 1 ug/l. Dental practices may follow Commission approved Best Management Practices (BMPs) for dental waste dischargers, in lieu of the numerical discharge limitation for substances containing mercury.

**804.1.21 Perchloroethylene.** Any discharge of perchloroethylene or perchloroethylene-containing products from a water separator (used for the purpose of recovering perchloroethylene) or from any dry cleaning process.

**Table 804.1.9**

| Discharge Limitations[1,2] | |
|---|---|
| **Pollutant** | **Limit[3]** |
| ***Inorganics (Total)*** | ***Concentration (mg/l)*** |
| Cadmium | 1.3 |
| Chromium | 7.0 |
| Copper | 4.5 |
| Cyanide | 1.3 |
| Lead | 0.7 |
| Nickel | 4.1 |
| Silver | 1.2 |
| Zinc | 4.2 |
| ***Organics (Total)*** | |
| Total Toxic Organics[4] | 2.13 |
| ***Conventionals*** | ***Concentration (mg/l) (except as indicated)*** |
| Dissolved Solids | 1,500 |
| Suspended Solids | 400 |
| Total Solids | 1,900 |
| BOD (5-day, 20°C) | 300 |
| COD | 500 |
| Fats, Oil and Grease[5] | 100 |
| pH[6] | 6.0 - 10.0 units |
| Temperature | 140°F |

1. Limits expressed in this table represent absolute maximum limitations and shall not be exceeded at any time. This list shall not be construed as a complete list of restricted materials. Restrictions may also be placed on other materials when the concentration of these materials is sufficient to adversely affect any portion of the collection or treatment system.

2. To determine compliance with numerical permit limitations, unless otherwise specified in the permit, the analytical methods shall include: a) any approved method with a Method Detection Level (MDL) adequate to detect concentrations of at least one-tenth the level of the permit limitation, or b) if there is no approved method sensitive to at least one-tenth of the permit limitation, then the most sensitive method approved in 40 CFR Part 136 or other method approved by EPA for wastewater is required.

3. Maximum for any sample obtained during a calendar day.

4. Total Toxic Organics shall consist of the summation of toxic organics with values greater than ten (10) micrograms per liter. Toxic organics shall consist of the Commission designated list of organic compounds.

5. Fats, wax, grease, or oils of animal or vegetable origin, whether emulsified or not. Any discharge capable of causing an obstruction and/or interference with the plumbing system, conveyance system, or the POTW processes shall be prohibited regardless of limit.

6. In the event an Industrial User monitors their pH continuously, a pH violation shall be construed as any excursion less than 6 or greater than 10 for more than 15 minutes at any one time, or more than 30 minutes in aggregate, for any calendar day. The pH shall not be less than 5 for any period of time.

# SECTION 805
# STORAGE OF PROHIBITED, TOXIC, OR HAZARDOUS SUBSTANCES

**805.1 General.** Storage of any materials that could enter the Commission's sanitary sewers via discharge, accidental spill, or leakage; or that could create a hazard or in any other way have a deleterious effect on the conveyance systems or treatment processes; or that could constitute a hazard to any individuals; shall be subject to review by the Commission. The Commission shall require reasonable safeguards to prevent the discharge, spill, or leakage of such materials into the sanitary sewage system. When deemed necessary, the owner shall install and maintain, at their expense, suitable control structures or devices that may include but shall not be limited to, dikes, dams, or sumps to prevent sudden or accidental waste discharges to the sanitary sewage system.

# SECTION 806
# DISCHARGE AUTHORIZATION PERMITS

**806.1 Applicability.** The Discharge Authorization Permit (DAP) grants permission to the Industrial User to discharge industrial waste into the sewer system. All Industrial Users, that are or that have the potential to be Significant, shall apply to the Commission for a Discharge Authorization Permit. The Commission may require other Industrial Users, as it deems necessary, to submit a Discharge Authorization Permit Application and obtain a permit. Discharge Authorization Permit Applications shall be signed by an authorized representative of the Industrial User. No Significant Industrial User or other Industrial User designated by the Commission, shall discharge to the Commission's sanitary sewer system without first obtaining a Discharge Authorization Permit.

**806.1.1 Application Review.** The Commission shall review the application submitted by the Industrial User and may require additional information. Within 90-days of receiving a complete application, the Commission shall make the determination that a Discharge Authorization Permit may be warranted. The Commission shall issue a permit if it is determined that pretreatment facilities are adequate for efficient treatment of discharged waste and that the discharged waste complies with the discharge limitations of these regulations or with the National Pretreatment Standards, whichever is applicable.

**806.1.2 Duration.** The Discharge Authorization Permit shall be issued for a specified time period not to exceed 5-years. This permission shall be conditional on compliance with Discharge Authorization Permit requirements and this code.

**806.1.3 Terms and Conditions**. Permitted Industrial Users shall comply with the terms, conditions and limitations of a Discharge Authorization Permit. It shall be a

violation of this code for any person to violate any term, condition or limitation set forth in any Discharge Authorization Permit. Failure to comply may result in civil or criminal liability under applicable State or Federal law and may be grounds to impose penalties, as outlined in the Commission's Enforcement Response Plan.

**806.2 Discharge Authorization Permit Requirements.** The Discharge Authorization Permit contains requirements necessary for the Commission to assess and ensure compliance with these Regulations. Permitted Industrial Users shall take all reasonable steps to correct any adverse impact resulting from noncompliance with the Discharge Authorization Permit, including accelerated additional monitoring as necessary to determine the nature and impact of the non-compliant discharge. The Discharge Authorization Permit shall at a minimum contain the following:

(1) Effective and expiration dates.

(2) Statement of non-transferability as specified in Section 806.6.

(3) Effluent limitations, including best management practices, based on applicable general pretreatment standards, categorical pretreatment standards, local limits, and/or State and local law.

(4) Self-monitoring, sampling, reporting, notification, and record keeping requirements, including an identification of the pollutants to be monitored, sampling location, sampling frequency, and sample type, based on applicable general pretreatment standards, categorical pretreatment standards, local limits, and/or State and local law.

(5) Statement of applicable civil and criminal penalties for violation of pretreatment standards and requirements, and any applicable compliance schedule. Such schedules may not extend the compliance date beyond applicable federal deadlines.

(6) Requirement to control slug discharges, if determined by the Commission to be necessary.

(7) The Discharge Authorization Permit may contain other conditions as deemed appropriate by the Commission to ensure compliance with all applicable pretreatment standards and requirements.

**806.3 Discharge Authorization Permit Modifications.** The Commission may modify the Discharge Authorization Permit for good cause including, but not limited to, the following:

(1) To incorporate any new or revised Federal, State, or local pretreatment standards or requirements.

(2) To address significant alterations or additions to the user's operation, processes, or wastewater volume or character since the time of Discharge Authorization Permit issuance.

(3) A change in the POTW that requires either a temporary or permanent reduction or elimination of the authorized discharge.

(4) Information indicating that the permitted discharge poses a threat to the Commission's treatment plants, collection system personnel, or the receiving waters.

(5) Violation of any terms or conditions of the Discharge Authorization Permit.

(6) Misrepresentations or failure to fully disclose all relevant facts in the Discharge Authorization Permit application or in any required reporting.

(7) Revision of or a grant of variance from categorical pretreatment standards pursuant to 40 CFR 403.13.

(8) To correct typographical or other errors in the Discharge Authorization Permit.

(9) To reflect a transfer of the facility ownership or operation to a new owner or operator.

**806.4 Discharge Authorization Permit Suspension/Termination.** The Commission may terminate or suspend a Discharge Authorization Permit for good cause including, but not limited to, the following:

(1) Failure to notify the Commission in advance of significant changes to industry processes, pretreatment modifications, or wastewater characteristics.

(2) Misrepresentation or failure to fully disclose all relevant facts in the Discharge Authorization Permit application.

(3) Falsifying self-monitoring reports.

(4) Tampering with monitoring equipment.

(5) Refusing to allow Commission personnel timely access to the facility premises and records.

(6) Failure to comply with Discharge Authorization conditions, requirements or effluent limitations.

(7) Failure to pay fines, permit renewal fees, or annual discharge fee.

(8) Failure to meet compliance schedules.

(9) Failure to complete a wastewater survey or the Discharge Authorization Permit application.

(10) Failure to provide advance notice of the transfer of business ownership of a permitted facility.

(11) Violation of any pretreatment standard or requirement, or any terms of the Discharge Authorization Permit or these regulations.

**806.4.1 Suspension or Termination.** Upon notification of suspension or termination of a Discharge Authorization Permit by the Commission, the Industrial User shall cease all discharges of wastes regulated by the Discharge Authorization Permit.

**806.4.2 Reinstatement.** The Commission shall not reinstate or reissue a suspended or terminated Discharge Authorization Permit until the Industrial User:

(1) Completes a new Discharge Authorization Permit application and pays the associated fees.

(2) Requests in writing that the existing Discharge Authorization Permit be reinstated or reissued.

(3) Identifies the steps taken to correct the violation(s) which led to the suspension or termination of the existing Discharge Authorization Permit.

(4) Upon reviewing all of the required information provided, WSSC shall decide whether the Industrial User's request shall be approved.

## 806.5 Requests for Reconsideration

**806.5.1 Time Limit.** Requests for reconsideration of any limitation, condition, or other requirement contained in a Discharge Authorization Permit shall be filed within 15-days from the issuance of the Discharge Authorization Permit, provided such request does not create a violation of any existing applicable requirements, standards, laws, or rules and regulations. The filing of a request by the Industrial User for a Discharge Authorization Permit modification, suspension, or termination, or a notification of planned changes or anticipated noncompliance, does not stay any Discharge Authorization Permit condition.

**806.5.2 Submission of Request.** Any person seeking reconsideration of a Discharge Authorization Permit provision shall submit a request for reconsideration in writing. The request shall be addressed to the Regulatory Services Group and shall state in detail the provision(s) of the Discharge Authorization Permit objected to, the reason(s) for the objection and the proposed alternative, if any.

**806.5.3 Failure to File on Time.** Failure to file a request for reconsideration within the time specified in this section shall be deemed a waiver of the right to challenge or appeal a Discharge Authorization Permit limitation, condition, or other requirement.

**806.5.4 Final Decision.** The decision of the Commission on a request for reconsideration, permit
modification or issuance of a Discharge Authorization Permit shall be final and binding upon the parties.

**806.5.5 Final Denial.** If the Commission fails to reach a decision on a request within 30-days from the date the request is filed, the failure shall be deemed a final denial of the request.

**806.6 Transferability.** Discharge Authorization Permits shall be issued to a specific user for a specific operation and shall not be reassigned, transferred, or sold to a new owner, new user, different premises, or a new or changed operation without the prior written approval of the Commission.

**806.6.1 Advanced Notice.** Discharge Authorization Permits may be transferred to a new owner or operator ***only if*** the permittee gives at least 30-days advance notice to the Commission, and the Commission approves the Discharge Authorization Permit transfer. The notice to the Commission shall include a written certification by the new owner or operator which:

(1) States that the new owner and/or operator have no immediate intent to change the facility's operations and processes.

(2) Identifies the specific date on which the transfer is to occur.

(3) Acknowledges full responsibility for complying with the existing Discharge Authorization Permit.

**806.6.2 Failure to Provide Advanced Notice.** Failure to provide advance notice of a transfer shall render the Discharge Authorization Permit void as of the date of facility transfer.

**806.7 Discharge Authorization Permit Re-issuance.** An Industrial User with an expiring Discharge Authorization Permit shall apply for a new Discharge Authorization Permit by submitting a complete Discharge Authorization Permit application within 90 days prior to the expiration of the Industrial User's existing Discharge Authorization Permit. Renewal of the Discharge Authorization Permit shall be contingent on payment of the permit renewal fee, and compliance with the terms, conditions and limitations of the existing Discharge Authorization Permit.

**806.8 Discharge Authorization Permit; New Industrial User.** Any Industrial User required to obtain a Discharge Authorization Permit who proposes to begin discharging

into the Commission's sewer system, shall submit the required Discharge Authorization Permit Application. A complete application for the Discharge Authorization Permit shall be submitted to the Commission at least 90-days prior to the date the discharge is intended to start.

# SECTION 807
# RIGHT OF ENTRY

## 807.1 Investigation Authority

**807.1.1 Scope of Duties.** Employees or agents of the Commission shall have the right to enter and inspect any properties, buildings and premises in the WSSD or in those portions of Montgomery and Prince George's Counties outside of the WSSD, while in the pursuit of their official duties cited in this code including but not limited to: Inspecting, monitoring, reviewing records, copying records, setting up monitoring or measuring equipment or any other actions necessary to determine compliance with this Code. Commission personnel shall have the right to document locations, processes, conditions or equipment, at an Industrial User's facility through the use of photographs or video cameras or at the discretion of the Commission, require the Industrial User to supply such documentation.

**807.1.2 Inspections.** Inspections of facilities shall be performed by the code official, employees of the Commission, or its agents as deemed necessary by the Commission. Inspections may be performed anytime the facility is in operation, discharging or has a potential to discharge.

**807.1.3 Identification and Entry.** Where an Industrial User has security measures or safety procedures in force that require proper identification and clearance or special protective equipment before entry can be gained into the premises, the Industrial User shall make necessary arrangements at its own expense, to enable Commission employees, their agents, the State or EPA entry without delay for the purposes of performing their official duties.

**807.1.4 Termination of Services.** Failure to permit inspections on demand shall be a violation of these regulations and may prompt the termination of water and/or sewer service.

**807.1.5 Jurisdictional Coordination.** Joint activities as indicated in Section 807.1.1 between Commission employees and employees of outside jurisdictions, State or Federal agencies may be conducted on any private premise and into any building that discharges ultimately to the outside jurisdiction or is subject to inspection by other State or Federal Regulatory agencies.

**807.1.6 Intimidation or Obstruction.** Industrial Users shall not initiate or permit any action which harasses, intimidates, obstructs or threatens Commission employees or their agents in the performance of their official duties.

# SECTION 808
# REPORTING REQUIREMENTS

## 808.1 Submission of Required Information

**808.1.1 Documentation.** Upon request of the Commission, any discharger or potential discharger of industrial wastes into the Commission's sewer system shall submit plans, reports, questionnaires, notices, analytical data, or any other information necessary to evaluate waste discharge characteristics and ensure compliance with these regulations, and Federal and State pretreatment requirements or standards. These documents, as outlined above or as specified in 40 CFR 403.12, shall be completed in a manner as approved by the Commission and returned in a time frame as specified in 40 CFR 403.12 or, in the absence of such specification, in a time frame as directed by the Commission. All information submitted in order to meet the above pretreatment requirements, shall be signed by an authorized representative, as well as include the certification statement contained in 40 CFR 403.6(a)(2)(ii) when applicable. Analytical results associated with the required reports shall be based upon data obtained through appropriate sampling and analysis performed during the period covered by the report, which data are representative of conditions occurring during the reporting period.

**808.1.2 Process Changes.** Industrial Users shall immediately report any process changes that alter the characteristics of any industrial discharge to the Commission. Failure to report process changes or modifications to the Commission shall be a violation of the Code.

**808.1.3 Record Preservation.** Industrial Users shall retain and preserve any records, books, documents, memoranda, reports, correspondence, computer files, and summaries of these materials relating to testing, internal or external monitoring, sampling, investigative and chemical analyses made by or on behalf of the Industrial User in connection with its discharge (including documentation associated with Best Management Practices) for a minimum of 3-years from the date of drafting or preparation. All records that pertain to matters that are the subject of special orders, or any other enforcement or litigation activities brought by the Commission, shall be retained and preserved until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired. Such materials shall be made available to Commission personnel upon request.

**808.1.4 Compliance Schedule.** Industrial Users installing a pretreatment technology or taking any other series of activities necessary to obtain and maintain compliance with a pretreatment standard or requirement may be required to follow a compliance schedule developed by the Commission, or the Industrial User as approved by the Commission.

Compliance schedules shall contain increments of progress in the form of activities to be performed and dates for the commencement and completion of these activities leading to the construction and operation of the pretreatment technology or completion

of other required activities to bring the Industrial User into compliance. Failure to initiate or complete the required activities to comply with the milestone and date elements of a compliance schedule shall be a violation of this Code.

**808.1.5 Owner's Expense.** All pretreatment technologies shall be installed, operated and maintained at the owner's expense.

**808.1.6 Documentation Approval.** Where pretreatment is necessary to conform to the requirements of the Commission, plans, procedures and complete specifications for the proposed work shall be submitted for review and approval by the Commission. Neither submission of plans nor issuance of a permit shall be construed to indicate that the Commission in any way vouches for, or warrants the capabilities of, any such pretreatment system or device, plans, specifications or data in any manner. The review and approval of plans, procedures or other information required by the Commission shall in no way relieve the Industrial User from the responsibility for modifying its pretreatment facilities to achieve compliance with the Commission's limitations. Industrial Users shall not make any alterations to pretreatment facilities without prior written notice to and approval of the Commission.

**808.1.7 Public Information.** Records concerning Industrial Users and the nature of their discharges shall be public information unless the Industrial User declares and is able to demonstrate to the satisfaction of the Commission, that the release of the information would divulge information, processes, or methods of operation entitled to protection as trade secrets pursuant to the requirements of the Maryland Public Information Act. Any such declaration shall be made at the time of the submission of the information or data. Effluent data shall not be treated as confidential information. When requested by the Industrial User furnishing a report, the portions of a report which might disclose trade secrets or secret processes shall not be made available for inspection by the public. Confidential portions of a report shall be available for use by the State or EPA in judicial review or enforcement proceedings involving the Industrial User furnishing the report.

**808.1.8 Periodic Reports.** All Significant Industrial Users shall submit to the Commission at least quarterly on dates specified by the Commission, reports indicating flows, and the nature and concentration of pollutants in the discharge in a format prescribed in the Discharge Authorization. Specified standards or the Commission itself may require these reports to be filed more frequently. In addition, the Commission may require other users to submit periodic reports. In cases where the local limit or Pretreatment Standard requires compliance with a Best Management Practice (or pollution prevention alternative), the User shall submit documentation required by the Commission or the Pretreatment Standard necessary to determine the compliance status of the User.

**808.1.9 Slug Control Plan.** The Commission may require any Industrial User to develop and implement a slug control plan. However, the Commission shall evaluate whether each Significant Industrial User needs a plan or other action to control slug discharges within 1-year of the regulatory changes or within 1-year of identifying an Industrial User as significant. Significant Industrial Users shall be required to notify the Commission immediately of any changes at their facility affecting potential for a slug discharge. Any Industrial User required to develop and implement a slug control plan shall submit a plan which addresses, at a minimum, the following:

(1) Description of discharge practices, including non-routine batch discharges.

(2) Description of stored chemicals.

(3) Procedures for immediately notifying the Commission of any accidental or slug discharge. Such notification shall also be given for any discharge which would violate any of the prohibited discharges cited in Section 804 of this code.

(4) Procedures to prevent adverse impact from accidental spills, including inspection and maintenance of storage areas, handling and transfer of materials, loading and unloading operations, control of plant site run-off, worker training, building of containment structures or equipment, measures for containing pollutants (including inorganic, and organic chemicals) and/or measures and equipment for emergency response.

(5) The Industrial User shall permanently post a notice in a prominent place advising all employees to notify the Commission in the event of a dangerous discharge for which a notification is required.

(6) Employers shall advise all appropriate employees who may cause or be adversely affected by such a discharge of the emergency notification procedure.

# SECTION 809
# SAMPLING AND ANALYSES

**809.1 Monitoring Point.** Dischargers of industrial wastes into the Commission's sewerage system shall be required to construct and maintain at their expense a suitable monitoring structure downstream from any pretreatment technology, process, storage facility, or other approved works, to facilitate observation, measurement, and sampling of wastes. Monitoring structures shall be constructed in a manner and location approved by the Commission that are accessible at all times for sampling. Industrial Users shall install equipment, as specified by the Commission, for the purpose of measuring flow or wastewater characteristics or any other equipment necessary to determine compliance with these regulations. The Commission shall reserve the right to require restricted discharges

during peak flows, designate certain wastewater to specific sewers; relocate and /or consolidate points of discharge; separate domestic and industrial waste streams.

**809.2 Monitoring Point Alternative.** In the event that no monitoring facility is required, the monitoring point shall be considered to be the nearest downstream manhole or the discharge point(s) inside the Industrial User's facility that are representative of the Industrial User's discharge, except as shall otherwise be stated in a Discharge Authorization Permit.

**809.3 Reporting Procedure.** All analyses, including sampling techniques, submitted in support of any application, report, evidence or required by any permit or order shall be performed in accordance with 40 CFR Part 136 and amendments thereto. Where 40 CFR part 136 does not include sampling or analytical techniques for the pollutant in question, or where the Administrator determines that the part 136 sampling and analytical techniques are inappropriate for the pollutant in question, sampling and analyses shall be performed using validated analytical methods or any other sampling and analytical procedures, including procedures suggested by the Commission or other parties, approved by the Administrator. Additional monitoring beyond permit requirements shall be submitted to the Commission if collected at the Industrial Waste Monitoring Point (IWMP) designated by the Commission.

**809.4 Reporting Timeframe.** In the event self-monitoring indicates a violation of one or more parameters, the Industrial User shall report the violation to the Commission within 24-hours of becoming aware of the violation. This reporting requirement shall not be satisfied by means other than direct communication with Commission personnel (i.e., telephone recording system messages or electronic mail messages shall not satisfy this notification requirement). The violation data and the explanation for the violation shall be submitted within 7-days of becoming aware of the violation.

# SECTION 810
# PENALTIES

**810.1 Prosecution.** Any violator of these Regulations may be prosecuted by the Commission under the provisions of Section 21, Chapter 122 of the Acts of 1918 of the General Assembly of the State of Maryland and subsequent amendments thereto. Each day of a violation shall constitute a separate offense, and applicable penalties shall be applied to each offense.

**810.2 Service Termination.** The Commission may terminate water and sewer service to any premises in order to prevent any actual or threatened discharge of any wastes that present an endangerment to the POTW, the environment, or to the health and welfare of any person(s).

**810.3 False Representation.** Persons who make any false statements, representation, or certification in any application, record, plan, or other document filed or required to be

maintained pursuant to these regulations; or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under these regulations; or who withholds, omits, or fails to report information requested or required; shall be prosecuted.

**810.4 Suspension and Revocation.** Industrial Users subject to the requirements of a Discharge Authorization Permit may have their Discharge Authorization Permit suspended or revoked for failure to comply with the requirements contained therein.

**810.5 Notice of Violation.** In the event an Industrial User violates established limits, reporting requirements, notification requirements, or other pretreatment requirements, a written documentation of the violation shall be issued to the user (e.g. Notice of Violation, letter, directive, etc.).

**810.6 Monetary.** The Commission may assess administrative penalties up to $1,000 for each violation stated in an Administrative Order, not to exceed $50,000. A civil citation with associated fines as well may be issued for violations of any provision of this code in accordance with the Commission's Enforcement Response Plan.

# SECTION 811
# PUBLIC NOTICE OF VIOLATIONS

**811.1 General.** The Commission shall publish annually in a newspaper(s) of general circulation that provides meaningful public notice within the jurisdictions(s) served by the Commission a list of Industrial Users who by definition are in significant noncompliance during the previous 12 months with applicable pretreatment requirements.

**811.2 Conditions for Non-Compliance.** For the purpose of this Section a Significant Industrial User (or any Industrial User which violates Sections 811.2.3, 811.2.4 and 811.2.8) shall be in significant noncompliance if its violation meets 1 or more of the following criteria:

**811.2.1 Exceeding Discharge Limits.** Chronic violations of wastewater discharge limits, defined here as those in which 66-percent or more of all of the measurements taken during a 6-month period exceed (by any magnitude) a numeric Pretreatment Standard or Requirement, including instantaneous limits, as defined by 40 CFR 403.3(l).

**811.2.2 Exceeding Technical Review Criteria.** Technical Review Criteria (TRC) violations, defined here as those in which 33-percent or more of all the measurements for each pollutant parameter taken during a 6-month period equal or exceed the product of the numeric Pretreatment Standard or Requirement including instantaneous limits, as defined by 40 CFR 403.3(l) multiplied by the applicable TRC (TRC=1.4 for BOD, TSS, fats, oil and grease, and TRC=1.2 for all other pollutants except pH).

**811.2.3 POTW Pass-Through.** Any other violation of a pretreatment effluent limit (daily maximum or longer-term average) that the Commission determines has caused, alone or in combination with other discharges, interference or pass through (including endangering the health of POTW personnel or the general public).

**811.2.4 Endangerment.** Any discharge of a pollutant that has caused imminent endangerment to human health, welfare, or to the environment or has resulted in the Commission's exercise of its emergency authority under 40 CFR 403.8(f)(1)(vi)(B) to halt or prevent such a discharge.

**811.2.5 Failure to Meet Compliance Dates.** Failure to meet, within 90-days after the schedule date, a compliance schedule milestone contained in a local control mechanism or enforcement order for starting construction, completing construction, or attaining final compliance.

**811.2.6 Failure to Submit Documentation.** Failure to provide within 30-days after the due date, required reports such as baseline monitoring reports, 90-day compliance reports, periodic self-monitoring reports, certification statements, plans, representative data and reports on compliance with compliance schedules or other information requested by the Commission; or failure to notify the Commission of modifications to processes, wastewater constituents, and pretreatment systems.

**811.2.7 Accurate Reporting.** Failure to accurately report noncompliance.

**811.2.8 Other Violations.** Any other violation or group of violations, which may include a violation of Best Management Practices, which the Commission determines may adversely affect the operation or implementation of the local pretreatment program.

# SECTION 812
# LIABILITY FOR EXPENSES

**812.1 Repair Reimbursement.** The property owner, tenant, or Industrial User shall reimburse the Commission for the cost of any work or repair made necessary by the neglect or action of the property owner, tenant, or Industrial User resulting from the discharge of an industrial waste.

**812.2 Activity Reimbursement.** The property owner, tenant, or Industrial User shall reimburse the Commission for all costs associated with investigations, monitoring, analyses, or enforcement actions resulting from violation(s) of Commission requirements or standards.

# SECTION 813
# NOTICE

**813.1 Immediate Notification.** In the event of any accident, negligence, slug loading, or other occurrence which may result in a violation of pretreatment standards, permit conditions, or could cause a problem with the collection systems or treatment processes, the Industrial User shall immediately notify the Commission and any applicable outside jurisdiction, of the incident. The notification shall include location of discharge(s), type, concentration and volume of waste, and corrective action being taken.

**813.2 Written Notification.** Within 5-days following an accidental discharge, the User shall submit to the Commission (and any applicable outside jurisdiction) a detailed written report describing the cause of the discharge and the measures to be taken by the User to prevent similar future occurrences. Such notification shall ***not*** relieve the User of any expense, loss, damage, or other liability which may be incurred as a result of the discharge, nor shall such notification relieve the User of any fines, civil penalties, or other liability which may be imposed by this regulation or other applicable law.

# SECTION 814
# HAULED WASTES

**814.1 Applicability.** The regulations in this subsection shall pertain to companies, individuals or partnerships hereinafter referred to as Waste Haulers, engaged in the business of transportation and disposal of domestic wastes or grease from food service establishments. These regulations shall also apply to businesses as deemed appropriate by the Commission including, but not limited to, grease interceptor cleaning, buses, carpet cleaning and mobile food service companies.

**814.1.1 Waste Hauler Permits.**

**814.1.1.1 Waste Hauler Discharge Permit.** Individuals, partnerships, or corporations engaged in the cleaning of septic tanks, holding tanks or grease interceptors shall apply for a **Waste Hauler Discharge Permit** for ***each*** truck used in ***discharging*** wastes at the waste disposal sites designated by the Commission.

**814.1.1.2 Zero Discharge Permit.** Individuals, partnerships, or corporations engaged in the cleaning of grease interceptors within the WSSC service area shall apply for a **Zero Discharge Permit** if they elect to dispose of this waste at a waste disposal site outside of the Commission's jurisdiction. A Zero Discharge Permit is ***not*** an authorization to discharge at the Commission's disposal sites.

**814.1.2 Terms and Conditions.** Waste Haulers shall comply with all conditions for issuance of a Waste Hauler Discharge Permit or a Zero Discharge Permit as established by the Commission. Upon receiving a permit, the Waste Hauler shall comply with all permit conditions.

Discharge of waste without a Waste Hauler Discharge Permit shall be prohibited. (Recreational vehicles shall be ***exempt*** from obtaining a Waste Hauler Discharge Permit.)

The cleaning of grease interceptors within the WSSC service area without the appropriate permit shall be prohibited. (Food Service Establishments that self-clean flow-based grease interceptors ***shall not*** be required to obtain a permit).

**814.1.3 Non-Domestic Wastes.** Wastes from wastewater treatment plants or non-domestic sources shall not be discharged at the designated disposal sites unless specifically authorized in writing by the Commission. The contents of grease abatement systems at FSEs are considered domestic wastewater for the purposes of this section,

**814.1.4 Point of Discharge.** Discharge of waste at any place in the sewer collection system other than those designated by the Commission shall be prohibited.

**814.2 Permit Suspension, Termination, or Denial.** The Waste Hauler Discharge Permit or Zero Discharge Permit may be suspended, terminated, or denied for good cause including, but not limited to, the following:

**814.2.1 Non-Compatible Wastes.** Information indicating that the permitted discharge poses a threat to the collection system, treatment system, or Commission personnel

**814.2.2 Permit Violations.** Violation of any terms or conditions of the Waste Hauler Discharge Permit or Zero Discharge Permit.

**814.2.3 Misrepresentation.** Obtaining a Waste Hauler Discharge Permit or Zero Discharge Permit by misrepresentation or failure to disclose fully, all relevant facts.

**814.2.4 Failure to Obtain a Permit.** Cleaning a grease interceptor or discharging any waste to the collection system without first securing the appropriate permit.

**814.2.5 Discharge of Non-Domestic Wastes.** The unauthorized discharge of waste from non-domestic sources at a Commission disposal site.

**814.2.6 Denying Access by the Commission.** Denying Commission personnel access to a vehicle or its contents for purposes of collecting a sample and/or obtaining instrument readings (i.e. % LEL, pH, $H_2S$, etc.).

**814.2.7 Failure to Provide Records.** Failure to provide paper records as described in section 814.3.3.

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**814.2.8 Other Licenses and Permits.** Failure to obtain or maintain appropriate current hauling licenses or permits from Federal, State, or local agencies.

**814.2.9 Fats, Oils, and Grease Discharges.** Discharge of greasy wastewater at non-designated disposal sites.

## 814.3 Permit Conditions

**814.3.1 Disposal Sites.** ***Only*** disposal sites designated by the Commission shall be used for the discharge of waste from a permitted vehicle into the Commission's sewer system.

**814.3.2 Permit Conditions.** Waste Haulers shall comply with ***all*** permit conditions.

**814.3.3 Requests for Information.** The Commission, or its representative, may request information concerning the nature or origin of the contents of any permitted vehicle. The permittee shall be required to comply with all such requests including information concerning the name, address, date of the waste pick-up, disposal points, volumes, and waste characteristics. This information shall be in the possession of the driver at the time of discharge. The Commission may also request additional information related to the use of its designated waste disposal sites.

**814.3.4 Permit Transferability.** Permits shall ***not*** be transferable without approval from the Commission. The permittee shall notify the Commission immediately if their State license plate or registration has changed on any of their permitted vehicles.

**814.3.5 Mixed Wastes and Multi-Use Vehicles.** The Commission shall reserve the right to refuse acceptance of any load. Dischargers may be required to cease unloading operations at any time. Permitted tank trucks may not be used to transport potable water and they shall not be allowed to make any connection to the Commission's water supply system. In the case of composite loads, any part of the load that is restricted or prohibited shall make the ***entire*** load unacceptable for discharge.

**814.3.6 Sampling.** Upon request, any permitted vehicle shall provide Commission personnel with access to the wastewater contained in the vehicle. Commission personnel may characterize the waste through the collection of samples and/or readings in a manner and number as specified by the Commission.

**814.3.7 Notifications of Spills and Clean-up.** The waste haulers shall notify WSSC immediately, via phone, of all spill occurrences followed by filing, in-writing within 7 days, a report detailing the reason for the spill, the areas impacted, clean-up activities, and whether the spill reached any environmentally sensitive area such as parks, residential, commercial or institutional areas, streams, rivers, lakes, ponds or storm drain. Any corrective actions taken to avoid the occurrences of the spills in future should also be a part of this reporting. In the case where the spill occurs at a FSE, a copy of this report shall also be provided to the owner of the grease interceptor.

**814.3.8 Additional Conditions.** The Commission reserves the right to establish permit conditions in addition to those appearing in these regulations.

**814.4 Penalties**

**814.4.1 Civil Citations.** Any violation of the above conditions and those specified in this Code, shall be cause for issuance of a State of Maryland civil citation ($250.00-$1000.00) and/or suspension or revocation of all permits assigned to the permittee upon written notice of such violation. Such violations may be cause for legal prosecution by the Commission under provisions of this Code**.** The following violations shall be addressed with a civil citation, including but not limited to:

(1) Discharging without a hose.

(2) Discharging without a permit.

(3) Unauthorized transfer of permit.

(4) Creating unsanitary conditions through spillage of wastes.

(5) Failure to comply with grease interceptor cleaning procedures.

**814.4.2 Permit Revocation.** The discharge of any ***unapproved*** waste from a non-domestic source at a Commission disposal site shall result in the immediate revocation of ***all*** discharge permits held by the permittee.

# SECTION 815
# FEES

**815.1 Scope.** The Commission shall establish charges and fees that shall include but not be limited to:

**815.1.1 Commission Pretreatment Program.** Fees for reimbursement of costs of setting up and operating the Commission's Pretreatment Program.

**815.1.2 Monitoring Activities.** Fees for monitoring, inspection, and surveillance activities.

**815.1.3 Permits.** Fees for permit applications;

**815.1.4 Legal.** Legal fees; and

**815.1.5 Other.** Other fees as the Commission may deem necessary to carry out the requirements contained herein.

# SECTION 816
# UPSET PROVISION
## (Categorical Industrial Users only)

**816.1 Scope.** An upset, as defined by the Federal general pretreatment regulations in 40 CFR Part 403, is an exceptional incident in which there is ***unintentional and temporary*** non-compliance with categorical pretreatment standards because of factors beyond the reasonable control of the Industrial User. An upset shall not include non-compliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation.

**816.2 Upset Defense.** An upset may be used as an affirmative defense to an action brought for noncompliance with categorical pretreatment standards only if the Industrial User demonstrates, through properly signed contemporaneous logs, or other relevant evidence, that includes the following:

**816.2.1 Specific Cause.** An upset occurred and the Industrial User can identify the specific cause(s) of the upset.

**816.2.2 Prudent Operation.** The permitted facility was, at the time, being operated in a prudent and workmanlike manner and in compliance with applicable operation and maintenance procedures.

**816.2.3 Timely Reporting.** The Industrial User has submitted the following information to the Commission within 24-hours of becoming aware of the upset; if this information is provided orally, a written submission shall follow within 5-days: A description of the indirect discharge and cause of noncompliance; the period of noncompliance, including exact dates and times, or if not corrected, the anticipated time that the noncompliance is expected to continue; steps being taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance.

**816.2.4 Burden of Proof.** In any enforcement proceeding, the Industrial User seeking to establish the occurrence of an upset shall have the burden of proof.

**816.2.5 Legal Remedy.** Industrial Users shall have the opportunity for a judicial determination on any claim of upset only in an enforcement action brought for noncompliance with categorical pretreatment standards.

**816.2.6 Temporary Shutdown.** The Industrial User shall control production or all discharges to the extent necessary to maintain compliance with categorical pretreatment standards upon reduction, loss, or failure of its treatment facility until the facility is

restored, or an alternative method of treatment is provided. This requirement shall apply in the situation where, among other things, the primary source of power of the treatment facility is reduced, lost, or fails.

# SECTION 817
# BYPASS PROVISION

**817.1 Emergency Limits.** Bypass of an Industrial User's treatment facility shall be ***prohibited*** unless it is unavoidable to prevent loss of life, personal injury, or severe property damage; or no feasible alternative exists, such as the use of auxiliary treatment facilities.

**817.2 Essential Maintenance.** The Industrial User may allow any bypass to occur which shall not cause pretreatment standards or requirements to be violated, but only if it also is for essential maintenance to assure efficient operations. If bypass is needed for maintenance, the Industrial User shall notify the Commission of necessary maintenance within 24-hours. Industrial User shall submit data documenting that standards were being met and shall submit written a report within 30-days of the event.

**817.3 Notice**

**817.3.1 Written Notice.** If an Industrial User knows in advance of the need for a bypass, the User shall submit prior written notice to the Commission, a minimum of 10-days before the date of the bypass.

**817.3.2 Verbal Notice.** An Industrial User shall submit verbal notice of an unanticipated bypass that exceeds applicable pretreatment standards to the Commission within 24-hours from the time the Industrial User becomes aware of the bypass. A written submission shall also be provided within 5-days of the time the Industrial User becomes aware of the cause. The written submission shall include the duration of the bypass, including exact dates and times, and if the bypass has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass. The Commission may waive the written report on a case-by-case basis if the oral report has been received within 24-hours.

**817.4 Exceptions.** The Commission shall take enforcement action against an Industrial User for a bypass unless:

**817.4.1 Unavoidable.** The bypass was unavoidable to prevent loss of life, personal injury, or severe property damage.

**817.4.2 No Alternatives.** There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition shall not be satisfied if

adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventative maintenance.

**817.4.3 Notices Submitted.** The Industrial User submitted notices as required cited in Section 817.3.

**817.5 Commission Authorization.** The Commission may approve an anticipated bypass, after considering its adverse effects, if the Commission determines that it shall meet the 3 conditions cited in Section 817.4.

# SECTION 818
# FOOD SERVICE ESTABLISHMENT DISCHARGE REQUIREMENTS

**818.1 Applicability.** The regulations in this Section shall apply to establishments where food is served to or provided for the public, with or without charge, including, but not limited to restaurants, cafeterias, hotel kitchens, church kitchens, school kitchens, hospital cafeterias, bars, or any other commercial operation that has the potential to discharge grease laden wastewater; hereafter referred to as Food Service Establishments (FSE).

**818.2 Permit Required.** All Food Service Establishments (FSE) shall apply to the Commission for a FSE Wastewater Discharge Permit. Existing FSEs shall apply for a Discharge Permit within 30 days of receiving an application. Failure to return the completed application shall subject the FSE to enforcement action. New FSEs shall obtain a Discharge Permit prior to discharging.

**818.2.1 FSE Wastewater Discharge Permit Requirements.** The FSE Wastewater Discharge Permit contains requirements necessary for the Commission to assess and ensure compliance with these Regulations. The FSE Wastewater Discharge Permit shall, at a minimum, contain the following:

(1) Best Management Practices (BMPs) for controlling FOG discharges

(2) Grease abatement system operations and maintenance standards, when applicable

(3) On-site record keeping requirements (see Section 808.1.3)

(4) Statement of non-transferability.

(5) The FSE Wastewater Discharge Permit may contain other conditions as deemed appropriate by the Commission to ensure compliance with all applicable regulations.

**818.2.2 FSE Wastewater Discharge Permit Modifications.** The Commission may modify the FSE Wastewater Discharge Permit for good cause including, but not limited to, the following:

(1) To incorporate any new pretreatment standards or requirements.

(2) To address significant alterations or additions to the FSE's operations since the time of FSE Wastewater Discharge Permit issuance.

**818.2.3 Permit Transferability.** The FSE Wastewater Discharge Permit shall not be reassigned or transferred without prior written approval by the Commission.

**818.2.4 Discharge Fee.** Issuance and validity of the FSE Wastewater Discharge Permit shall be conditional on payment by the FSE of the annual Discharge Fee as determined by the Commission. Failure to pay the Discharge Fee shall render the FSE Wastewater Discharge permit invalid.

**818.2.5 Other Permits.** Food Service Establishments shall maintain the required County Health Department permits at all times. Failure to maintain health department permits may render the FSE Wastewater Discharge permit invalid.

**818.3 Inspections.** All Food Service Establishments are subject to routine inspections as determined by the Commission. (see also Section 807)

**818.4 Grease Abatement System Installation and Maintenance Requirements, General.** When directed by the Commission, FSEs shall install and maintain a WSSC approved grease abatement system that meets or exceeds minimum requirements cited in Section 302.10.

**818.4.1 Wastewater Discharge Permittee/Property Owner's Responsibility.** Grease Abatement Systems shall be maintained in efficient operation at all times by the owner/operator at the owner's/operator's expense.

**818.4.2 25% Rule.** It shall be the Permittee's/Property Owner's responsibility to ensure that the accumulation of FOG and solids does not exceed 25% of the liquid retention capacity of the Grease Abatement System. If a grease abatement system is specifically designed to function properly with FOG and solids accumulation greater then 25%, the allowable accumulation of FOG and solids may be adjusted by WSSC on a case-by-case basis.

**818.4.3 Maintenance Interval.** The minimum maintenance and cleaning frequency for Volume-Based Grease Interceptors shall be quarterly or by the "25% rule", whichever is more stringent. The maintenance and cleaning for Flow-Based Grease Interceptors shall be conducted pursuant to manufacturers' recommendations or by the "25% rule," whichever is more stringent. Deviation from required maintenance

intervals less frequent than minimums determined by the Commission shall be approved by the Commission in writing.

**818.5 Waste Hauler.** A valid WSSC Waste Hauler Permit is required for all Waste Haulers performing pumping and cleaning services on Grease Abatement Systems located in the WSSC service area. Pumping and disposal of the contents shall be performed in accordance with conditions of the waste hauler discharge permit cited in Section 814.

**818.6 Use of Additives.** The introduction into the plumbing system of any surfactant, solvent, emulsifier, free enzymes or material that allows the grease to pass from the grease abatement system into the collection system is prohibited.

**818.6.1** Use of a biological additive may be conditionally allowed with WSSC's approval if the product manufacturer or distributor can demonstrate to the satisfaction of the WSSC that:

(1) The additive will not interfere with the normal operation of the grease interceptor.

(2) The additive will not interfere with operations of the receiving wastewater treatment plant.

(3) The use of the additive does not increase the potential for FOG to be discharged to the sanitary sewer.

(4) The only active ingredients are bacterial products.

(5) The use of the additive will not cause foaming in the sanitary sewer.

(6) The pH of the additive is between 6 and 10.

**818.6.2** The use of an additive will not substitute for the need for proper cleaning or maintenance of the grease abatement device and cannot be used as justification for altering the cleaning frequency.

**818.6.3** Additives that are added to drain lines that do not connect to a grease abatement device are not impacted by this restriction.

**818.6.4** Normal kitchen and dish cleaning products are not considered additives for the purpose of this section.

**818.7 On-Site Plumbing System Maintenance.** The on-site plumbing system for commercial and multi-unit residential properties shall be maintained by, and at the expense of the property owner; including cleaning of the system due to grease related discharges. All jetted material must be removed at the nearest downstream manhole. Chemical cleaning of sewer lines is prohibited, except in conjunction with a jetting operation.

**818.8 Violations.**

**818.8.1** Failure to properly maintain a grease abatement system or to present records of maintenance; removal and/or tampering with the flow control device; or failure to comply with any condition of a FSE wastewater discharge permit shall be a violation of this Code, and shall subject the permittee to penalties and other enforcement action as provided for in the Commission's FSE Enforcement Response Plan.

**818.8.2** Repeated violations for failure to clean or maintain a flow-based grease interceptor may result in a requirement to install a volume-based interceptor as provided for in the Commission’s FSE Enforcement Response Plan.

**818.8.3** Repeated violations for failure to clean or maintain a volume-based grease interceptor will subject the FSE to increased enforcement as provided for in the Commission’s FSE Enforcement Response Plan.

# APPENDIX A

## RESIDENTIAL SYSTEM DEVELOPMENT CHARGE

Rates Effective July 1, 1999

**Fixture Code Revisions Effective May 1, 2007**

| Code | Fixture Description | Water Supply Fixture Unit Value | SDC Water Charge | Drainage Fixture Unit Value | SDC Sewer Charge | SDC Combined Charge |
|---|---|---|---|---|---|---|
| R0 | Bathtub (Residential) | 3.00 | $ 264 | 1.60 | $ 184 | $ 448 |
| **4B** | **BFP - Testable** | - | $ - | - | $ - | $ - |
| **4C** | **BFP - Non-Testable** | - | $ - | - | $ - | $ - |
| R1 | Bidet | 1.00 | $ 88 | 1.40 | $ 161 | $ 249 |
| RW | Clothes Washer Standpipe/Box | 2.00 | $ 176 | 1.60 | $ 184 | $ 360 |
| RR | Clothes Washer (water only) | 2.00 | $ 176 | | | $ 176 |
| R2 | Dishwasher (Residential) | 1.00 | $ 88 | 1.60 | $ 184 | $ 272 |
| 68 | Ejector Pump | - | $ - | - | $ - | $ - |
| **F3** | **Faucet - Pot Filler** | **1.00** | **$ 88** | **-** | **$ -** | **$ 88** |
| R5 | Floor Drain (primed) | - | $ - | - | $ - | $ - |
| GP | Grinder Pump - Unknown Type | - | $ - | - | $ - | $ - |
| R7 | Hose Bibb | 3.00 | $ 264 | - | $ - | $ 264 |
| RP | Hose Bibb on Well | - | $ - | - | $ - | $ - |
| R9 | Humidifier (Residential type) | - | $ - | - | $ - | $ - |
| RA | Ice Maker (Residential type) | - | $ - | - | $ - | $ - |
| RC | Instant Hot | - | $ - | - | $ - | $ - |
| RH | Lawn Sprinkler - 3/4" Water Supply | 4.00 | $ 352 | - | $ - | $ 352 |
| RI | Lawn Sprinkler -1" & Larger Water Supply | 10.00 | $ 880 | - | $ - | $ 880 |
| MO | Modular Unit | - | $ - | - | $ - | $ - |
| RJ | Pool Fill | 4.00 | $ 352 | - | $ - | $ 352 |
| RK | Sauna (with water) / Steamer | 0.50 | $ 44 | - | $ - | $ 44 |
| RL | Shower Stall | 2.00 | $ 176 | 1.40 | $ 161 | $ 337 |
| RM | Sink (Bar) | 1.00 | $ 88 | 1.40 | $ 161 | $ 249 |
| RN | Sink (Kitchen) | 2.00 | $ 176 | 1.60 | $ 184 | $ 360 |
| RF | Sink (Laundry Tray) | 2.00 | $ 176 | 1.60 | $ 184 | $ 360 |
| RG | Sink (Lavatory) | 1.00 | $ 88 | 0.90 | $ 104 | $ 192 |
| RB | Water Closet (Flush Tank 1.6 gpf) | 2.00 | $ 176 | 2.00 | $ 230 | $ 406 |
| WS | Water Conditioner | - | $ - | - | $ - | $ - |
| 60 | Water Heater - Not Gas | - | $ - | - | $ - | $ - |
| 8F | Gas - Boiler (under 200K) | - | $ - | - | $ - | $ - |
| XB | Gas - Boiler (200K+) | - | $ - | - | $ - | $ - |
| VP | Gas - Cooking Equipment | - | $ - | - | $ - | $ - |
| 87 | Gas - Dryer | - | $ - | - | $ - | $ - |
| VQ | Gas - Generator | - | $ - | - | $ - | $ - |
| VN | Gas - Heater (Construction) | - | $ - | - | $ - | $ - |
| 8T | Gas - Heater (Decorative) | - | $ - | - | $ - | $ - |
| 6A | Gas - Heater (Pool) | - | $ - | - | $ - | $ - |
| **8N** | **Gas - Heating Equipment** | **-** | **$ -** | **-** | **$ -** | **$ -** |
| **85** | **Gas - Lab Burner** | - | $ - | - | $ - | $ - |
| 8G | Gas - Other | - | $ - | - | $ - | $ - |

| | | | | | | |
|---|---|---|---|---|---|---|
| **XX** | **Gas - Paint Booth** | - | $ - | - | $ - | $ - |
| 9D | Gas - Test | - | $ - | - | $ - | $ - |
| 8D | Gas - Water Heater (under 200K) | - | $ - | - | $ - | $ - |
| XD | Gas - Water Heater (200K+) | - | $ - | - | $ - | $ - |

| Dwelling Unit Type | SDC Water Charge | SDC Sewer Charge | SDC Combined Charge |
|---|---|---|---|
| Apartment (per unit) | $ 896 | $ 1,140 | $ 2,036 |
| 1 - 2 Toilets / Residential Dwelling Unit | $ 1,344 | $ 1,710 | $ 3,054 |
| 3 - 4 Toilets / Residential Dwelling Unit | $ 2,240 | $ 2,850 | $ 5,090 |
| 5 Toilets / Residential Dwelling Unit | $ 3,135 | $ 3,991 | $ 7,126 |
| 6 or More Toilets / Residential Dwelling Unit | Per Fixture Basis | | |

1. Permits must accurately reflect **EVERY** fixture code to be installed for **ALL** residential and apartment units, and renovation projects. **Permits that do not reflect 100% fixture accuracy will FAIL inspection.** Modifications to the permit must be made and "updated" in the Permits system prior to scheduling an inspection.

2. Fixture unit values shown in this chart shall be used ***only*** for calculating System Development Charges. For system design and hydraulic calculations, use the fixture unit values shown in the International model codes.

3. For fixtures not listed, the Code Official shall use the value of a fixture with similar flow characteristics.

# APPENDIX B

## NON-RESIDENTIAL SYSTEM DEVELOPMENT CHARGE

Rates Effective July 1, 1999

**Fixture Code Revisions Effective May 1, 2007**

| Code | Fixture Description | Water Supply Fixture Unit Value | SDC Water Charge | Drainage Fixture Unit Value | SDC Sewer Charge | SDC Combined Charge |
|---|---|---|---|---|---|---|
| 7N | Backwash Surge Tank (2" max. drain) | - | $ - | 3.00 | $ 345 | $ 345 |
| 79 | Baptistery | 10.00 | $ 880 | 3.00 | $ 345 | $ 1,225 |
| 01 | Bathtub | 10.00 | $ 880 | 2.00 | $ 230 | $ 1,110 |
| **4B** | **BFP - Testable** | **-** | **$ -** | **-** | **$ -** | **$ -** |
| **4C** | **BFP - Non-Testable** | **-** | **$ -** | **-** | **$ -** | **$ -** |
| 15 | Bidet | 1.00 | $ 88 | 2.00 | $ 230 | $ 318 |
| 7M | Booster Pump | - | $ - | - | $ - | $ - |
| 96 | Clothes Washer Standpipe/Box | 3.00 | $ 264 | 3.00 | $ 345 | $ 609 |
| 9W | Clothes Washer (Water Only) | 3.00 | $ 264 | - | $ - | $ 264 |
| 4V | Cooling Tower (Water Supply 1" & smaller) | 10.00 | $ 880 | - | $ - | $ 880 |
| 4U | Cooling Tower (Water Supply 1-1/4" & larger) | 75.00 | $ 6,600 | - | $ - | $ 6,600 |
| 4W | Dental Cuspidor to OSD | 0.25 | $ 22 | - | $ - | $ 22 |
| 4X | Dental Cuspidor w/drain | 0.25 | $ 22 | 0.50 | $ 58 | $ 80 |
| 77 | Dip Well | 0.25 | $ 22 | - | $ - | $ 22 |
| 03 | Dishwasher (Residential Type) | 1.00 | $ 88 | 2.00 | $ 230 | $ 318 |
| 44 | Dishwasher (Commercial) | 2.00 | $ 176 | 4.00 | $ 460 | $ 636 |
| 7F | Disposal (Commercial 2") | 4.00 | $ 352 | 3.00 | $ 345 | $ 697 |
| 71 | Disposal (Commercial 3") | 4.00 | $ 352 | 5.00 | $ 575 | $ 927 |
| DS | Drain to Storm | - | $ - | - | $ - | $ - |
| 18 | Drinking Fountain | 0.25 | $ 22 | 0.50 | $ 58 | $ 80 |
| 68 | Ejector Pump | - | $ - | - | $ - | $ - |
| 1B | Emergency - Eye Wash | 0.25 | $ 22 | - | $ - | $ 22 |
| 1A | Emergency - Shower | 3.75 | $ 330 | - | $ - | $ 330 |
| **F1** | **Faucet - Commercial Kitchen** | **4.00** | **$ 352** | **-** | **$ -** | **$ 352** |
| **F2** | **Faucet - Hand Sink** | **1.00** | **$ 88** | **-** | **$ -** | **$ 88** |
| **F3** | **Faucet - Pot Filler** | **1.00** | **$ 88** | **-** | **$ -** | **$ 88** |
| **F4** | **Faucet - Service Sink** | **2.00** | **$ 176** | **-** | **$ -** | **$ 176** |
| FH | Fire Hydrant | - | $ - | - | $ - | $ - |
| 73 | Fire Sprinkler Connection | - | $ - | - | $ - | $ - |
| UX | Floor Drain (primed) | - | $ - | - | $ - | $ - |
| UM | Floor Drain (not primed) | - | $ - | - | $ - | $ - |
| FV | Flush Valve | 5.00 | $ 440 | - | $ - | $ 440 |
| 8F | Gas - Boiler (under 200K) | - | $ - | - | $ - | $ - |
| XB | Gas - Boiler (200K+) | - | $ - | - | $ - | $ - |
| VP | Gas - Cooking Equipment (All) | - | $ - | - | $ - | $ - |
| 87 | Gas - Dryer | - | $ - | - | $ - | $ - |
| VQ | Gas - Generator | - | $ - | - | $ - | $ - |
| VN | Gas - Heater (Construction) | - | $ - | - | $ - | $ - |
| 8T | Gas - Heater (Decorative) | - | $ - | - | $ - | $ - |

| | | | | | | |
|---|---|---|---|---|---|---|
| 6A | Gas - Heater (Pool) | - | $ - | - | $ - | $ - |
| **8N** | **Gas - Heating Equipment** | **-** | **$ -** | **-** | **$ -** | **$ -** |
| 85 | Gas - Lab Burner | - | $ - | - | $ - | $ - |
| 8G | Gas - Other | - | $ - | - | $ - | $ - |
| XX | Gas - Paint Booth | - | $ - | - | $ - | $ - |
| **8U** | **Gas - Sub-meter** | **-** | **$ -** | **-** | **$ -** | **$ -** |
| 9D | Gas - Test | - | $ - | - | $ - | $ - |
| 8D | Gas - Water Heater (under 200K) | - | $ - | - | $ - | $ - |
| XD | Gas - Water Heater (200K+) | - | $ - | - | $ - | $ - |
| GP | Grinder Pump - Unknown Type | - | $ - | - | $ - | $ - |
| 69 | Grease Interceptor | - | $ - | - | $ - | $ - |
| 6D | Grease Recovery Device | - | $ - | - | $ - | $ - |
| **6F** | **Grease Trap** | **-** | **$ -** | **-** | **$ -** | **$ -** |
| 9X | Hose Bibb (wall hydrant, etc.) | 3.00 | $ 264 | - | $ - | $ 264 |
| RP | Hose Bibb on Well | - | $ - | - | $ - | $ - |
| 67 | Humidifier (Residential Type) | - | $ - | - | $ - | $ - |
| 75 | Ice Maker (Residential Type) | 0.25 | $ 22 | - | $ - | $ 22 |
| 04 | Instant Hot | - | $ - | - | $ - | $ - |
| BG | Irrigation System w/3/4" supply | 10.00 | $ 880 | - | $ - | $ 880 |
| BH | Irrigation System w/1" supply | 75.00 | $ 6,600 | - | $ - | $ 6,600 |
| BI | Irrigation System w/1-1/4" supply | 160.00 | $ 14,080 | - | $ - | $ 14,080 |
| BJ | Irrigation System w/1-1/2" supply | 270.00 | $ 23,760 | - | $ - | $ 23,760 |
| BK | Irrigation System w/2" supply | 550.00 | $ 48,400 | - | $ - | $ 48,400 |
| M1 | Mechanical Supply Closed Loop | - | $ - | - | $ - | $ - |
| MO | Modular Building | - | $ - | - | $ - | $ - |
| 65 | Oil/Sand Interceptor | - | $ - | - | $ - | $ - |
| MH | On-Site Manhole | - | $ - | - | $ - | $ - |
| DG | Receptor Drain 1-1/4" | - | $ - | 1.00 | $ 115 | $ 115 |
| DH | Receptor Drain 1-1/2" | - | $ - | 2.00 | $ 230 | $ 230 |
| 50 | Receptor Drain 2" | - | $ - | 3.00 | $ 345 | $ 345 |
| 51 | Receptor Drain 3" | - | $ - | 5.00 | $ 575 | $ 575 |
| 52 | Receptor Drain 4" | - | $ - | 6.00 | $ 690 | $ 690 |
| 54 | Receptor Drain 6" | - | $ - | 6.00 | $ 690 | $ 690 |
| FC | Pool Fill (1/2" supply) | 4.00 | $ 352 | - | $ - | $ 352 |
| FD | Pool Fill (3/4" supply) | 10.00 | $ 880 | - | $ - | $ 880 |
| FE | Pool Fill (1" supply) | 75.00 | $ 6,600 | - | $ - | $ 6,600 |
| FF | Pool Fill (1-1/4" supply) | 160.00 | $ 14,080 | - | $ - | $ 14,080 |
| FG | Pool Fill (1-1/2" supply) | 270.00 | $ 23,760 | - | $ - | $ 23,760 |
| FI | Pool Fill (2" supply) | 550.00 | $ 48,400 | - | $ - | $ 48,400 |
| 5E | Pre-Treatment Unit | - | $ - | | $ - | $ - |
| 97 | Private Meter | - | $ - | - | $ - | $ - |
| RU | Re-piping | - | $ - | - | $ - | $ - |
| 62 | Roof Drain | - | $ - | - | $ - | $ - |
| AC | Shell Permit Sewer Rough-In | - | $ - | - | $ - | $ - |
| AB | Shell Permit Water Rough-In | - | $ - | - | $ - | $ - |
| JH | Shower Stall (1-1/4" drain) | 5.00 | $ 440 | 1.00 | $ 115 | $ 555 |
| JI | Shower Stall (1-1/2" drain) | 5.00 | $ 440 | 2.00 | $ 230 | $ 670 |
| JJ | Shower Stall (2" drain) | 5.00 | $ 440 | 3.00 | $ 345 | $ 785 |

| | | | | | | |
|---|---|---|---|---|---|---|
| WG | Shower, per head, gang/column | 5.00 | $ 440 | | $ - | $ 440 |
| 26 | Sink - Clinical (Flush Valve) | 5.00 | $ 440 | 6.00 | $ 690 | $ 1,130 |
| WL | Sink - Compartment (one faucet) | 4.00 | $ 352 | | $ - | $ 352 |
| WN | Sink - Compartment (two faucets) | 8.00 | $ 704 | - | $ - | $ 704 |
| **4A** | **Sink - Hand** | **1.00** | **$ 88** | **1.00** | **$ 115** | **$ 203** |
| 21 | Sink - 1-1/2" Drain | 2.00 | $ 176 | 2.00 | $ 230 | $ 406 |
| WA | Sink - Laundry Tray (with clothes washer) | 6.00 | $ 528 | 3.00 | $ 345 | $ 873 |
| 47 | Sink - Laundry Tray (without clothes washer) | 3.00 | $ 264 | 2.00 | $ 230 | $ 494 |
| 20 | Sink - Lavatory - Common | 1.00 | $ 88 | 1.00 | $ 115 | $ 203 |
| JS | Sink - Mop or Service (1-1/2" trap) | 2.00 | $ 176 | 2.00 | $ 230 | $ 406 |
| JT | Sink - Mop or Service (2" trap) | 2.00 | $ 176 | 3.00 | $ 345 | $ 521 |
| JU | Sink - Mop or Service (3" trap) | 2.00 | $ 176 | 5.00 | $ 575 | $ 751 |
| WO | Sink - Wash Fountain | 4.00 | $ 352 | 3.00 | $ 345 | $ 697 |
| YO | Spray - Hand Held | 4.00 | $ 352 | - | $ - | $ 352 |
| 12 | Urinal | 3.00 | $ 264 | 4.00 | $ 460 | $ 724 |
| U2 | Water Closet - Flush Tank (Non-public) | 2.00 | $ 176 | 4.00 | $ 460 | $ 636 |
| U4 | Water Closet - Flush Tank (Public) | 2.00 | $ 176 | 6.00 | $ 690 | $ 866 |
| U3 | Water Closet - Flush Valve (Non-public) | 5.00 | $ 440 | 4.00 | $ 460 | $ 900 |
| U5 | Water Closet - Flush Valve (Public) | 5.00 | $ 440 | 6.00 | $ 690 | $ 1,130 |
| WS | Water Conditioner | - | $ - | - | $ - | $ - |
| WT | Water Dispenser | 0.50 | $ 44 | - | $ - | $ 44 |
| **60** | **Water Heater - Not Gas** | **-** | **$ -** | **-** | **$ -** | **$ -** |
| WR | Water Supply Only 3/8" | 2.00 | $ 176 | - | $ - | $ 176 |
| YE | Water Supply Only 1/2" | 4.00 | $ 352 | - | $ - | $ 352 |
| YD | Water Supply Only 3/4" | 10.00 | $ 880 | - | $ - | $ 880 |
| YC | Water Supply Only 1" | 75.00 | $ 6,600 | - | $ - | $ 6,600 |
| YB | Water Supply Only 1-1/4" | 160.00 | $ 14,080 | - | $ - | $ 14,080 |
| YA | Water Supply Only 1-1/2" | 270.00 | $ 23,760 | - | $ - | $ 23,760 |
| WZ | Water Supply Only 2" | 550.00 | $ 48,400 | - | $ - | $ 48,400 |
| WY | Water Supply Only 3" | 1,500.00 | $ 132,000 | - | $ - | $ 132,000 |
| WX | Water Supply Only 4" | 3,000.00 | $ 264,000 | - | $ - | $ 264,000 |
| WW | Whirlpool, Therapeutic (water only) | 10.00 | $ 880 | - | $ - | $ 880 |
| | | | | | | |

Permits must accurately reflect **EVERY** fixture code to be installed for **ALL** non-residential, residential, apartment units, and renovation projects. **Permits that do not reflect 100% fixture accuracy will FAIL inspection.**

Modifications to the permit must be made and "updated" in the Permits system prior to scheduling an inspection.

Fixture unit values shown in this chart shall be used ***only*** for calculating System Development Charges.
For system design and hydraulic calculations, use the fixture unit values shown in the International model codes.

For fixtures not listed, the Code Official shall use the value of a fixture with similar flow characteristics.