2022San Francisco Plumbing Code

Amendments to the

2022 California Plumbing Code, Title 24, Part 5

Operative date: January 1, 2023

PROPOSED SAN FRANCISCO PLUMBING CODE AMENDMENTS

2022 EDITION

Text Format:

Explanatory remarks are boxed and italicized.

Unchanged language from the 2022 California Code is shaded, and may include **bold** and/or *italicized* formatting.

San Francisco amendments are printed in unformatted ("plain") text, and may include **bold** and/or *italicized* formatting.

Repealed San Francisco amendments appear in plain and strikeout.

New San Francisco amendments appear underlined

Marginal Markings:

An arrow [←] represents the location of language that has been deleted by San Francisco from the 2022 California Code.

Chapter 1 ADMINISTRATION

Division I CALIFORNIA ADMINISTRATION

No San Francisco Plumbing Code Amendments

Division II ADMINISTRATION

SECTION 101.0 – GENERAL

101.1 Revise this section as follows:

101.1 Title. This document shall be known as the " $[\leftarrow]$ 2019 2022 San Francisco Plumbing Code," may be cited as such, and will be referred to herein as "this code."

SECTION 103.0 – DUTIES AND POWERS OF THE AUTHORITY HAVING JURISDICTION

103.1 Replace the third paragraph with the followings:¹

The Authority Having Jurisdiction, when necessary, may call upon the Police Department and other City and County of San Francisco agencies for aid or assistance in carrying out or enforcing any of the provisions of this code.

103.4 Revise the first paragraph of this section as follows:

103.4 Right of Entry. Where it is necessary to make an inspection to enforce the provisions of this code or other codes or ordinances, or where the Authority Having Jurisdiction has reasonable cause to believe that there exists in a building or upon premises a condition or violation of this code or other codes or ordinances that makes the building or premises unsafe, insanitary, dangerous or hazardous, the Authority Having Jurisdiction shall be permitted to enter the building or premises at reasonable times to inspect or to perform the duties imposed upon the Authority Having Jurisdiction by this code or other codes or ordinances, provided that where such building or premises is occupied, the Authority Having Jurisdiction shall present credentials to the occupant and request entry. Where such building or premises is unoccupied, the Authority Having Jurisdiction 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. Where entry is refused, the Authority Having Jurisdiction has recourse to every remedy provided by law to secure entry.

103.5 Add the following section:

103.5 Rules and Regulations. The Authority Having Jurisdiction shall have the power to render interpretations of this code and to adopt and enforce rules and supplemental regulations to clarify the application of its provisions. Such interpretations, rules and regulations shall be in conformance with the intent and purpose of this code. Such rules and regulations, commonly referred to as "Code Rulings" and "Administrative Bulletins" supplemental to this code, shall not take effect until approved by the Building Inspection Commission and signed by the Authority Having Jurisdiction except in unusual circumstances where the Authority Having Jurisdiction has determined that there is an immediate need to protect the public health and safety. When the Authority Having Jurisdiction finds that such circumstances exist, the Authority Having Jurisdiction may order immediate enforcement of a particular rule or regulation. The Authority Having Jurisdiction shall arrange for a subscription service to such rules and regulations, the entire cost of which is to be borne by the subscribers.

103.6 Add the following section:

103.6 Code Revisions. The Authority Having Jurisdiction shall transmit to the Building Inspection Commission, at intervals not exceeding three years, recommendations for changes to this code, based on studies of the following:

- 1. Requests of the Board of Examiners for variances from this code, and for approvals of alternate materials, alternate designs and methods of construction.
 - 2. Code changes recommended by the Board of Examiners.
- 3. Code changes recommended by the Code Advisory Committee or other bodies subordinate to the Building Inspection Commission.
- 4. Results obtained and problems encountered in legal actions taken to correct code violations.
- 5. Changes or improvements in materials, methods of construction or design, and changes proposed by interested persons.
- 6. Investigations of fire and structural damage to buildings, and of determination of unsatisfactory building performance.
- 7. Periodic changes to the California Plumbing Code and other State regulations which may affect this code.
 - 8. Administrative Bulletins and Code Rulings currently in effect.
 - 9. Violations of the code found on inspections or investigations.

103.7 Add the following section:

103.7 Modifications. When there are practical difficulties involved in carrying out the provisions of this code, the Authority Having Jurisdiction may grant modifications for individual cases. The Authority Having Jurisdiction shall first find that a special individual reason makes the strict letter of this code impractical and that the modification is in conformance with the intent and purpose of this code and that such modification does not lessen the standard of this code to safeguard life or limb, health, property, or public welfare. The details of any action

granting modifications shall be recorded and entered in the files of the Department of Building Inspection.

SECTION 104.0 – PERMITS

104.1 Add the following as the second paragraph of this section:

Emergency work for the protection of life or limb, health, property and public welfare shall have a permit obtained within one day of commencing such work, excluding Saturdays, Sundays and legal holidays.

104.1.1 Add the following section:

104.1.1 Homeowner's Permit. A permit for plumbing work in, on or about a single-family dwelling may be issued by the Authority Having Jurisdiction, provided said work is done by the owner or a family member who has demonstrated, to the satisfaction of the administrative authority, his or her qualifications to satisfactorily perform the plumbing work in the dwelling which is, or is intended to be, occupied by the owner. If the plumbing work performed under the homeowner's permit does not comply with the requirements of this code and if the corrections are not made as required by the Department of Building Inspection, then the work shall be corrected by a State-licensed plumbing contractor under a separate permit.

Such State-licensed plumbing contractor shall be required to pay only the permit issuance fee as set forth in Section 110A, Table 1A-C - Plumbing/Mechanical Permit Issuance and Inspection Fees - of the Building Code. If additional inspection is required, the appropriate fees as set forth in Section 110A, Table 1A-C - Plumbing/ Mechanical Permit Issuance and Inspection Fees and Table 1A-G - Inspection, Surveys and Reports - of the Building Code shall apply.

104.1.2 Add the following section:

104.1.2 Amending Applications. After a permit has been issued and an inspection of the work has been made, the scope of the permit may be altered by filing an amended permit application and paying fees for any additional work as set forth in Table 1A-C - Plumbing/ Mechanical Permit Issuance and Inspection Fees and Table 1A-G - Inspections, Survey, and Reports of Section 110A of the Building Code.

104.2 Replace Section 104.2(1) and the first paragraph of Section 104.2(2) as follows:

104.2 Exempt Work. A permit shall not be required for the following: $[\leftarrow]$

- (1) Repair of leaks not requiring cutting into or removing piping.
- (2) Unstopping of traps, sewers, vents or waste pipes not requiring cutting into or removal of traps or piping.
- (3) Replacement, repair or maintenance of faucets, angle stops, hose bibbs or roof drain not requiring cutting into or removal of piping.
 - (4) Replacement of toilets except in structures with alternate water piping.
 - (5) Replacement of furnace filters.
- (6) Removal of drainage, water or gas piping from a building when the water supply, gas and drainage lines have been disconnected in an approved manner under a permit.

- (7) Work involved in setting up for display of plumbing fixtures or appliances, when not connected to any supply or drainage lines, in a sales establishment.
- (8) Replacement of water conservation devices not requiring cutting into or removal of piping.
- (9) Work performed in buildings or structures owned and occupied by the State and Federal governments.

104.3 Replace this section as follows:

104.3 Application for Permit. [←] Permit applicants shall file with the Department of Building Inspection an application on a form furnished for that purpose.

A permit for inspection of the proposed plumbing work set forth in the application will be issued to State-licensed contractors or to homeowners subject to the requirements of Section 104.1.1. A separate permit shall be obtained for each separate building, structure or property.

104.3.2 Replace this section as follows:

104.3.2 \leftarrow Inspections Not Covered by Permit Fees.

104.3.2.1 Off Hours of Inspection. Off-hour inspection may be performed outside normal inspection hours by prior arrangement and prepayment of fees as set forth in Section 110A , Table 1A-G - Inspections, Surveys and Reports - of the Building Code.

104.3.2.2 Reinspections. A reinspection fee shall be assessed for each inspection or reinspection made necessary by any of the following conditions:

- (1) When the portion of the work for which the inspection is requested is not complete or code complying.
 - (2) When previously identified deficiencies in the work are not properly corrected.
 - (3) When the approved construction documents are not available to the inspector.
 - (4) When access is not provided on the date and time of the inspection appointment.
 - (5) When work deviates from the approved construction documents.

The first reinspection for failure to comply with code requirements shall not be assessed a reinspection fee. All subsequent reinspections for the same or subsequent errors or omissions shall be charged a reinspection fee.

Subsequent to inspector determination of reinspection fee requirements, no required or requested inspections shall be made nor shall the job be given a certificate of final completion and occupancy or final approval until the required reinspection fees are paid. See Section 110A, Table 1A-G - Inspections, Surveys and Reports - of the Building Code for applicable fees.

104.3.2.3 Survey. A plumbing survey may be requested when a plumbing inspector's assistance is desired to establish code compliance of existing or proposed plumbing system requirements. See Section 110A, Table 1A-G - Inspections, Survey and Reports - of the Building Code for applicable fees.

104.4 Add a new second paragraph to this section as follows:

An issued permit entitles the permittee to proceed with the work described therein. The issuance of a permit does not constitute approval of any work done under that permit. Permits shall not be transferable.

104.4.3 Replace this section as follows:

104.4.3 Permit Expiration. [←] Plumbing permits expire per Section 106A.4.4 of the San Francisco Building Code. Permit fees may be partially refunded if a written cancellation request is made to the Building Official prior to commencement of the permitted work and within 90 days of the date of permit issuance. See Section 110A, Table 1A-R - Refunds - of the Building Code for refunds.

104.4.3.1 104.4.3.2 Add the following section:

104.4.3.1 104.4.3.2 Commencement of Work on Permit Expired Due to Work Not Started. A new permit shall be obtained to undertake the work described on an expired permit on which no work was performed. If not more than one year has elapsed since the expiration of the original permit, the applicant is eligible for reduced fees. See Section 110A, Table 1A-B - Other Building Permit and Plan Review Fees - of the Building Code for applicable fees.

If a refund has been granted per Section 104.4.3, the applicant shall not be eligible for the reduced fees as set forth in Section 110A, Table 1A-B - Other Building Permit and Plan Review Fees - of the Building Code.

104.4.3.2 104.4.3.3 Add the following section:

104.4.3.2 104.4.3.3 Recommencement of Work on Permit Expired Due to Work Not Completed. The applicant shall obtain a new permit for the work not completed. The permit fee shall be based on work remaining to be done. Fees shall be as set forth in Section 110A, Table 1A-C - Plumbing/Mechanical Permit Issuance and Inspection Fees - of the Building Code.

104.5 Replace this section as follows:

104.5 Permit Fees. [←] Before any permit is issued, the applicant shall pay to the Central Permit Bureau the fees as set forth in Section 110A, Table 1A-C - Plumbing/ Mechanical Permit Issuance and Inspection Fees - of the Building Code. The replacement of a plumbing fixture or a gas appliance without a change in drainage, piping or venting shall not require the payment of permit issuance fee. A separate permit issuance fee shall be paid for each class of work, i.e., sewers and drainage, gas and water.

Final inspection will not be made unless all outstanding fees related to the permit work have been paid.

104.5.2 Revise this section as follows:

104.5.2 Investigation Fees. An investigation fee, in addition to the permit fee, shall be collected whether or not a permit is then or subsequently issued. [←] See Section 110A, Table 1A-C - Plumbing/Mechanical Permit Issuance and Inspection Fees, and Table 1A-K - Penalties, Hearings, Code Enforcement Assessments - of the Building Code for applicable fees. The payment of such investigation fee shall not exempt a person from compliance with other provisions of this code, nor from a penalty prescribed by law.

The Director may reduce the investigation fee to two times the amount of the permit fee as called for in Section 110A, Table 1A-C - Plumbing/Mechanical Permit Issuance and Inspection Fees - of the Building Code for work that was constructed prior to the current building ownership

or for work without permit which was done prior to January 1, 1967, if the owner files with the Director a notarized affidavit together with documents substantiating such dates of work.

Appeals of investigation fees may be filed with the Board of Appeals in the manner provided in Section 8 *et seq.* of the Business & Tax Regulations Code. Such filing shall be subject to the fees and rules of the Board of Appeals. The Board of Appeals, in reviewing the appeal, may reduce the appealed amount to not less than two times the permit fee as set forth in Section 110A, Table 1A-C - Plumbing/ Mechanical Permit Issuance and Inspection Fees - of the Building Code.

104.5.3 Replace this section as follows:

104.5.3 Fee Refunds. [\leftarrow] For fee refunds, see Section 107A.6 of the Building Code.

SECTION 105.0 – INSPECTIONS AND TESTING

105.2.6 Revise the fourth paragraph as follows:

To obtain reinspection, the applicant shall file an application therefore in writing upon a form furnished for that purpose and pay the reinspection fee in accordance with $[\leftarrow]$ Section 110A, Table 1A-G - Inspections, Surveys and Reports - of the Building Code.

SECTION 106.0 – VIOLATIONS AND PENALTIES

106.3 Replace this section as follows:

106.3 Penalties. [←] Any person, the owner or the owner's authorized agent, who violates, disobeys, omits, neglects or refuses to comply with, or resists or opposes the execution of any of the provisions of this code, shall be liable for a civil penalty, not to exceed \$500 for each day such violation is committed or permitted to continue, which penalty shall be assessed and recovered in a civil action brought in the name of the people of the City and County of San Francisco by the City Attorney in any court of competent jurisdiction. Any penalty assessed and recovered in an action brought pursuant to this paragraph shall be paid to the City Treasurer and credited to the Department of Building Inspection's Special Fund.

Any person, the owner or the owner's authorized agent, who violates, disobeys, omits, neglects or refuses to comply with, or who resists or opposes the execution of any of the provisions of this code, shall be guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine not exceeding \$500 or by imprisonment not exceeding six months, or by both such fine and imprisonment, unless otherwise provided in this code, and shall be deemed guilty of a separate offense for every day such violation, disobedience, omission, neglect or refusal shall continue. Any person who shall do any work in violation of any of the provisions of this code, and any person having charge of such work who shall permit it to be done, shall be liable for the penalty provided.

It shall be unlawful for any person to interfere with the posting of any notice provided for in this code or to tear down or mutilate any such notice posted by the Department of Building Inspection.

106.5 Revise this section as follows:

106.5 Authority to Disconnect Utilities in Emergencies. The Authority Having Jurisdiction shall have the authority to disconnect a plumbing system to a building, structure or equipment regulated by this code in case of emergency where necessary to eliminate an immediate hazard to life or property. For notification procedures, see Section 102A.16 of the Building Code.

SECTION 107.0 – BOARD OF APPEALS

107.0 Replace this title and the entire section as follows:

[—] 107.0 Board of Examiners. Application may be made to the Board of Examiners for approval of alternate materials, methods and types of construction and for variances from the provisions of this code. See Building Code, Section 105A.1.

108.0 Add the following section:

SECTION 108.0 – ABATEMENT OF PUBLIC NUISANCE

108.0 Abatement of Public Nuisance. In order to abate a nuisance as defined in Section 216.0 of this code, the inspection and abatement procedures as set forth in Section 102A of the Building Code, including, but not limited to, Section 102A.3 through 102A.8, shall apply.

109.0 Add the following section:

SECTION 109.0 – REPAIRS TO DEFECTIVE BUILDING SEWERS

109.0 Repairs to Defective Building Sewers

109.1 General. Any defective building sewer found to be a nuisance or hazardous to the public shall be repaired at the owner's expense by a licensed plumbing contractor in accordance with this code. In the event the owner fails to repair the defective building sewer after written notice has been sent the owner by the Authority Having Jurisdiction, the Authority Having Jurisdiction shall abate the condition in accordance with Section 102A of the Building Code.

109.2 Cost of Repairs by City and County of San Francisco. Whenever the Authority Having Jurisdiction, pursuant to the authority conferred by this code and the Building Code, shall cause a building sewer to be repaired or replaced, the cost thereof shall be paid from the "Plumbing Building Sewer Revolving Fund" and assessed against the property served by said building sewer

109.3 Plumbing Building Sewer Revolving Fund. A special revolving fund, to be known as the "Plumbing Building Sewer Revolving Fund," is hereby created for the purpose of defraying the costs and expenses which may be incurred by the Department of Building Inspection in carrying out the authority conferred by this code to repair or replace defective building sewers.

The Board of Supervisors shall transfer one-half of the funds appropriated to the "Side Sewer Repair" fund of the Department of Building Inspection or shall appropriate, establish or increase

the special revolving fund with such funds as it may deem necessary in order to expedite performance of the work of repairing or replacing defective building sewers. The special revolving fund shall be replenished with all funds collected under the proceeding hereinafter provided for, either upon voluntary payments or as a result of the sale of the property after delinquency, or otherwise. Balances remaining in the Plumbing Building Sewer Revolving Fund at the close of any fiscal year shall be carried forward in such fund.

109.4 Assessment for Costs. The Authority Having Jurisdiction shall take action to have the costs of all work done or caused to be done pursuant to this Section 109.0 assessed against the parcel or parcels of land upon which said building is served by the building sewer per Section 102A of the Building Code. Such costs shall include, in addition to all costs related to repairing or replacing the building sewer or demolishing and clearing the site, the City and County of San Francisco's costs in administering the required work. See Section 110A, Table 1A-K - Penalties, Hearings, Code Enforcement Assessments - of the Building Code for the applicable fee.

Chapter 2 **DEFINITIONS**

SECTION 201.0 – GENERAL

201.1 Add the following to the end of the first sentence:

Where words, terms and phrases are not defined, they shall have their ordinary accepted meaning within the context with which they are used.

SECTION 204.0 – B

204.0 Add the following definition:

Boiler. A closed vessel used for heating water or liquid, or for generating steam or vapor by direct application of heat from combustible fuels or electricity.

SECTION 208.0 – F

208.0 Add the following definition:

Foot Vent - See "Relief Vent," Section 220.0.

SECTION 216.0 – N

216.0 Add the following items after Item (3) under definition of "Nuisance":

- (4) Open, unsecured, leaking, plugged or otherwise defective sewer, gas or water lines.
- (5) Inadequate plumbing system maintenance, dilapidation, obsolescence, or damage.
- (6) Plumbing or plumbing fixtures, gas appliances or piping installed in violation of this code or without permit.

(7) Where a change in occupancy classification is made without complying with the applicable provisions of this code and the Building Code.

SECTION 218.0 – P

218.0 Revise this definition as follows:

Plumbing System. Includes all potable water, alternate water sources, building supply, and distribution pipes; all plumbing fixtures and traps; all drainage and vent pipes; and all building drains and building sewers, including their respective joints and connections, devices, receptors, and appurtenances within the property lines of the premises and shall include potable water piping, potable water treating or using equipment, medical gas and medical vacuum systems, liquid and fuel gas piping, and water heaters and vents for same, and fire sprinkler systems. Plumbing systems shall include all plumbing appliances, plumbing appurtenances and plumbing fixtures.

SECTION 221.0 – S

221.0 Add the following definition:

Story. That portion of a building included between the upper surface of any floor and the upper surface of the floor next above. For the purposes of this code, balcony, loft and mezzanine levels that contain plumbing outlets are also to be considered as stories.

Chapter 3 GENERAL REGULATIONS

SECTION 313.0 – HANGERS AND SUPPORTS

313.9 Add the following section:

313.9 Materials.

313.9.1 Plumber's tape hanger iron may be used to secure pipe not greater than 2 inches (50.8 mm) in diameter.

313.9.2 Hanger iron shall be galvanized and not thinner than 22 gauge, 1/32-inch thick (0.8 mm) and 3/4-inch (19.05 mm) wide, securely nailed or screwed to the structure. When the strap-iron is formed around the pipe, it shall be secured with a 1/4-inch (6.35 mm) stove bolt.

Chapter 4 PLUMBING FIXTURES AND FIXTURE FITTINGS

SECTION 405 – PROHIBITED FIXTURES

405.0 Add the following section:

405.4 Watercloset-Sink Combinations. Watercloset-Sink combinations are not allowed in structures with treated alternate water piping.

SECTION 415.0 – DRINKING FOUNTAINS

415.2 Add the following section:

415.2.1 Drink Tap Stations. New construction that provides one or more drinking fountains shall provide a Drink Tap Station per San Francisco Environment Code Section 2304.

Chapter 5 WATER HEATERS

SECTION 504.0 – WATER HEATER REQUIREMENTS

504.1 Add the following as the first paragraph of this section:

504.1 Location. Water Heaters mounted on the exterior of a building and located 7' or more above the floor or grade shall be provided with a permanent platform capable of supporting a tester or maintenance person.

Chapter 6 WATER SUPPLY AND DISTRIBUTION

SECTION 603.0 – CROSS-CONNECTION CONTROL

603.1 Add a third paragraph to this section as follows:

Structures with alternate water piping shall have a Reduced-Pressure Principle Backflow Prevention Assembly installed on the domestic supply as close as practical to the meter.

603.2 Revise Table 603.2 as follows:

Add a footnote for the Applicable Standards heading that states:

All backflow prevention assemblies or devices that are testable must have passed laboratory and field evaluation tests performed by a recognized testing organization.

Revise the tenth entry in the Table to read as follows:

Backflow preventer for Carbonated Beverage Dispensers (two	ASSE 1022	X	1 1	X	1 1	Installation includes carbonated beverage machines or dispensers. These devices operate under intermittent or continuous pressure
--	--------------	---	-----	---	-----	---

independent check valves with a vent to the atmosphere)	conditions. This device is only permitted in systems with no upstream copper pipe. Otherwise, a reduced pressure principle backflow prevention assembly is required.
---	--

(Added by Ord. 30-20, File No. 180969, App. 2/21/2020, Eff. 3/23/2020)

(Amendment to Section 603.3 deleted by Ord. 30-20, File No. 180969, App. 2/21/2020, Eff. 3/23/2020)

603.5.6.4 Add the following section:

603.5.6.4 <u>Approval.</u> All such installations shall be approved in writing by the San Francisco Water Department prior to installation.

603.5.12 Revise <u>Ssection</u> 603.5.12 as follows:

603 .5.12 Beverage Dispensers. Potable water supply to beverage dispensers, carbonated beverage dispensers, or coffee machines shall be protected by an air gap, a reduced pressure principle backflow prevention assembly, or a vented backflow preventer that complies with ASSE 1022, except that a vented backflow preventer may not be used to protect carbonated beverage dispensers in systems with upstream copper pipe. For carbonated beverage dispensers, piping material installed downstream of the backflow preventer shall not be affected by carbon dioxide gas.

(Added by Ord. 30-20, File No. 180969, App. 2/21/2020, Eff. 3/23/2020)

603.5.22 Add Section 603.5.22 as follows the following section:

603 .5.22 Industrial Water Chillers. Potable water connections to closed-loop industrial water chillers shall be protected from backflow by a reduced pressure principle backflow prevention assembly in accordance with Table 603.2.

(Added by Ord. 30-20, File No. 180969, App. 2/21/2020, Eff. 3/23/2020)

SECTION 604.0 - MATERIALS

604.1 Add the following sentence to the end of the second paragraph:

Connections between copper water piping and ferrous materials shall be made with dielectric or insulated fittings or brass nipples of 6 inches (152.4 mm) minimum length.

SECTION 606.0 - VALVES

606.2 Revise this section as follows:

606.2 Fullway Valve. A fullway valve controlling outlets shall be installed on the discharge side of each water meter and each unmetered water supply as near as possible to the point after where the water supply enters the building and before the first fitting or branch line. Water piping

supplying more than one building on one premise shall be equipped with a separate fullway valve to each building, so arranged that the water supply can be turned on or off to any individual or separate building provided; however, that supply piping to a single-family residence and building accessory thereto shall be permitted to be controlled by one valve. Such shutoff valves shall be accessible. A fullway valve shall be installed on the discharge piping from water supply tanks at or near the tank. A fullway valve shall be installed on the cold water supply pipe to each water heater at or near the water heater. In cases where one water heater or boiler supplies hot water to multiple units additional fullway valves will be installed so that the hot water supplies to any apartment / unit / dwelling or condominium can be shut off without interrupting the hot water supply to any other apartment / unit / dwelling or condominium. These valves shall be accessible in the dwelling unit they control or other common area within the building.

606.3 Revise this section as follows:

606.3 Multidwelling Units. In multidwelling units, one or more shutoff valves shall be provided in each dwelling unit so that the hot and cold water $[\leftarrow]$ supplies to $[\leftarrow]$ any apartment / unit / dwelling or condominium can be shut off without $[\leftarrow]$ interrupting the water supply to $[\leftarrow]$ another apartment / unit / dwelling or condominium. These valves shall be accessible in the dwelling unit they control or other common area within the building.

606.3.1 Add the following section:

606.3.1 Any apartment / unit / dwelling or condominium where a remodel is performed shall meet the requirements of sections 606.2, 606.3 and 606.5.

606.5 Revise this section as follows:

606.5 Control Valve. A control valve shall be installed immediately ahead of each plumbing fixture hot and cold water supply and water supplied appliances [\leftarrow] to permit servicing and replacement of individual fixtures.

606.9 606.11 Add the following section:

606.9 606.11 Backflow Assembly. All buildings four stories or more in height or water supply greater than 40 feet above the water meter shall have an approved backflow assembly installed as near as possible to the water meter and before the first fitting or branch line. The backflow assembly installed shall be in accordance to the degree of hazard within the building, but in no case less than an approved double check assembly. See Table 603.2.

SECTION 609.0 – INSTALLATION, TESTING, UNIONS AND LOCATION

609.10.2 609.11.2 Add the following section:

609.10.2 609.11.2 Air Chambers. Air chambers shall be installed on all hot and cold water outlets supplying quick-acting valves to provide water hammer relief. The size of each air chamber shall be 24 times the diameter of the fixture supply.

609.10.3 609.11.3 Add the following section:

609.10.3 609.11.3 Quick-Acting Valves. The following valves shall be considered quick-acting: flushometers, single-handle faucets, single-handle tub and tub/shower combination control valves, single-handle shower control valves, rapid response electric solenoid valves (such as used on ice-makers, clothes washers, etc.) and any other appliance or fixture that dispenses water in a quick open and close method in its operation.

Chapter 7 SANITARY DRAINAGE

Part I – DRAINAGE SYSTEMS

SECTION 701.0 – GENERAL

701.2(2)(a) Revise this section as follows:

701.2(2)(a) $[\leftarrow]$ ABS and PVC installations are limited to not more than two stories of areas of commercial or private residential accommodations.

701.2(3) Revise this section as follows:

701.2(3) No vitrified clay pipe or fittings shall be used aboveground or where pressurized by a pump or ejector or underground within the foundation line of the building. They shall be kept not less than 12 inches (305 mm) belowground.

701.2(7) Add the following section:

701.2(7) Copper tubing shall not be used for urinal drainage or applications which are detrimental to the integrity of copper tubing.

SECTION 706.0 – CHANGES IN DIRECTION OF DRAINAGE FLOW

706.4 Revise this section as follows:

706.4 Vertical to Horizontal. Vertical drainage lines connecting with horizontal drainage lines shall enter through 45 degree (0.79 rad) wye branches, combination wye and one-eighth bend branches, or other approved fittings of equivalent sweep. Branches or offsets of 60 degrees (1.05 rad) shall be permitted to be used where installed in a true vertical position. In buildings more than three stories in height, any fixture within 10 feet (304 mm) of the connection of the vertical to horizontal change shall enter the horizontal drainage line at least 10 feet (304 mm) downstream from the change or may connect into the next vertical downstream line.

SECTION 710.0 – DRAINAGE OF FIXTURES LOCATED BELOW THE NEXT UPSTREAM MANHOLE OR BELOW THE MAIN SEWER LEVEL

710.1.1 Add the following section:

710.1.1 Drainage of Fixtures Located Below the Fresh Air Inlet. Where a fixture is installed with the flood rim level equal to or lower than the elevation of the fresh air inlet serving the house trap, the piping serving the fixture shall be protected by installing an approved type of backwater valve. Where a fixture is installed with the flood rim level higher than the elevation of the fresh air inlet serving the house trap, the fixture shall not discharge through such backwater valve.

Chapter 8 INDIRECT WASTES

No San Francisco Plumbing Code Amendments.

Chapter 9 VENTS

SECTION 901.0 - GENERAL

901.1 Add the following second paragraph to this section:

No mechanical device shall be installed in any venting system. Such venting system shall remain unobstructed to an approved termination.

SECTION 907.0 – VENT STACKS AND RELIEF VENTS

907.1 Revise the first sentence of this section as follows:

907.1 Drainage Stack. Each drainage stack that extends $[\leftarrow]$ six (6) or more stories shall be served by a parallel vent stack, which shall extend undiminished in size from its upper terminal and connect to the drainage stack at or immediately below the lowest fixture drain.

907.3 Add the following section:

907.3 Vent Stacks and Relief Vents. Every building in which plumbing is installed shall have at least one main stack which shall run undiminished in size and as directly as possible from each building drain serving said building through to the open air above the roof.

For the purposes of this section, the main stack shall be defined as the largest size stack that is connected to a building drain or sewer.

A vent stack shall be installed with a soil or waste stack whenever relief vents or other branch vents are required in two or more branch intervals. A vent stack shall be installed in accordance with Section 706.1.

The size of the soil stack shall be determined by the total fixture units on that stack as per Table 703.2.

SECTION 911.0 – CIRCUIT VENTING

911.0 Revise this section as follows:

911.0 Circuit Venting. Circuit venting is not permitted unless it is approved as an alternative engineered design in accordance with Section 301.5 of this Code.

Chapter 10 TRAPS AND INTERCEPTORS

1001.3 Add the following section:

1001.3 Placement and Minimum Size of Building Traps. The building sewer or building drain shall have a building trap placed as near as possible to the curb line or immediately inside any subsidewalk basement wall under the sidewalk. Trap size shall be a minimum of 4 inches (101.6 mm).

SECTION 1008.0 – BUILDING TRAPS

1008.1 Revise this section as follows:

1008.1 General. Building traps shall not be installed except where required by the Authority Having Jurisdiction. Each building trap where installed shall be provided with a cleanout and with a relieving vent or fresh-air intake on the inlet side of the trap. [←] Such trap shall have a fresh air inlet of not less than 4 inch (101.6 mm) diameter pipe. The inlet shall be covered by an approved perforated plate not less than 16 square inches (10,323mm²).¹ Perforations shall be not more than 3/8 inch (9.6 mm) diameter and provide an aggregate open area of not less than one-half the cross-sectional area of the sewer trap. The air inlet shall be connected to the building side of the trap and shall lead to the open air, terminating at a point not less than 10 feet (3.05 m) from any window or door.

SECTION 1016.0 – SAND INTERCEPTORS

1016.3 Add the following section:

1016.3.1 When drains are provided for planter boxes, such drains shall enter into the sanitary or storm drainage plumbing system by discharging into an approved sump, receiving tank or sand settling tank. No trap shall be installed between the planter box and any approved receptor. Sizes of drains shall conform to Table 703.2.

Catch basins or sumps to drain surface water or collect subsoil drainage shall meet the following requirements:

- (1) The catch basin or sump shall be poured in place, and all sides and bottom shall be watertight.
- (2) A removable metal grill approved for applied design loads shall be placed on top with a screen to prevent mosquito breeding.
- (3) Each catch basin shall be served with its own trap and cleanout, and shall connect to the storm or sanitary system independently.
- (4) If inlet is located below the building sewer or drain, a sump pump minimum of 1-1/2" (38.1 mm) outlet may be used. The bottom of sump shall maintain a 1' 0" (304.8 mm) distance from the inlet, creating a 1' 0" (304.8 mm) sand trap.
- (5) If the depth of the sump is over 5' 0" (1.52 m) a larger catch basin shall be required with a permanent ladder securely bolted to the interior to provide access for maintenance. A minimum clear space of $30" \times 30"$ (762 mm \times 762 mm) shall be provided.
- (6) A listed and approved plastic catch basin may be installed in areas of residential buildings that are not subjected to any vehicular traffic and shall be installed on a concrete base to prevent settling, provided all other code requirements of this section and the listing and installation requirements of such catch basin are met.

Chapter 11 STORM DRAINAGE

SECTION 1101.0 – GENERAL

1101.2.1 Add the following section:

1101.2.1 Leaders, Connection to Drain. All storm water or casual water from roof areas, balconies, lightwells, courtyards or similar areas which total more than 200 square feet (18.4 square meters) aggregate shall drain or be conveyed directly to the building drain, or building sewer, or to an approved alternate location based on approved geotechnical and engineering designs. Such drainage shall not be directed to flow onto adjacent property or over public way, including sidewalks. The opening of the leader shall meet the same requirements as Section 1103.0 of the California Plumbing Code.

1101.2.2 Add the following section:

1101.2.2 Temporary Provisions. When the stormwater sewer is not yet installed, the building stormwater drainage system may discharge into the sewer on the street side of the main trap as near to the curbline as possible.

1101.2.3 Add the following section:

1101.2.3 Temporary Provisions Drain Trap. When, under the provisions of Section 1101.2.2 the building stormwater drainage system discharges to the sewer, a trap shall be placed in that drain at a point near where it branches into the sewer. The trap shall be supplied with clean water by an approved means such as a hose bibb or trap primer.

Chapter 12 FUEL GAS PIPING

SECTION 1208.0 – GAS PIPING SYSTEM DESIGN, MATERIALS, AND COMPONENTS

1208.5.1 Add a second paragraph as follows:

Gas piping in exterior locations, except as otherwise regulated by this code, shall be of galvanized iron or steel, with galvanized fittings.

Chapter 13 HEALTH CARE FACILITIES AND MEDICAL GAS AND VACUUM SYSTEMS

No San Francisco Plumbing Code Amendments.

Chapter 14 FIRESTOP PROTECTION

No San Francisco Plumbing Code Amendments.

Chapter 15 ALTERNATE WATER SOURCES FOR NONPOTABLE APPLICATIONS

No San Francisco Plumbing Code Amendments.

Chapter 16 NONPOTABLE RAINWATER CATCHMENT SYSTEMS

No San Francisco Plumbing Code Amendments.

Chapter 17 REFERENCED STANDARDS

Appendix A RECOMMENDED RULES FOR SIZING THE WATER SUPPLY SYSTEM

No San Francisco Plumbing Code Amendments.

Appendix B EXPLANATORY NOTES ON COMBINATION WASTE AND VENT SYSTEMS

No San Francisco Plumbing Code Amendments.

Appendix C ALTERNATE PLUMBING SYSTEMS

No San Francisco Plumbing Code Amendments.

Appendix D SIZING STORMWATER DRAINAGE SYSTEMS

No San Francisco Plumbing Code Amendments.

Appendix E MANUFACTURED MOBILE HOME PARKS AND RECTREATIONAL VEHICLE PARKS

No San Francisco Plumbing Code Amendments.

Appendix F FIREFIGHTER BREATHING AIR REPLENISHMENT SYSTEMS

Appendix G SIZING OF VENTING SYSTEMS

No San Francisco Plumbing Code Amendments.

Appendix H PRIVATE SEWAGE DISPOSAL SYSTEMS

No San Francisco Plumbing Code Amendments.

Appendix I INSTALLATION STANDARD

No San Francisco Plumbing Code Amendments.

Appendix J COMBINATION OF INDOOR AND OUTDOOR COMBUSTION AND VENTILATION OPENING DESIGN

No San Francisco Plumbing Code Amendments.

Appendix K POTABLE RAINWATER CATCHMENT SYSTEMS

No San Francisco Plumbing Code Amendments.

Appendix L SUSTAINABLE PRACTICES

No San Francisco Plumbing Code Amendments.

Appendix M PEAK WATER DEMAND CALCULATOR

Appendix N IMPACT OF WATER TEMPERATURE ON THE POTENTIAL FOR SCALDING AND LEGIONELLA GROWTH