

**PORT OF SAN FRANCISCO
PLUMBING CODE**

2008 EDITION

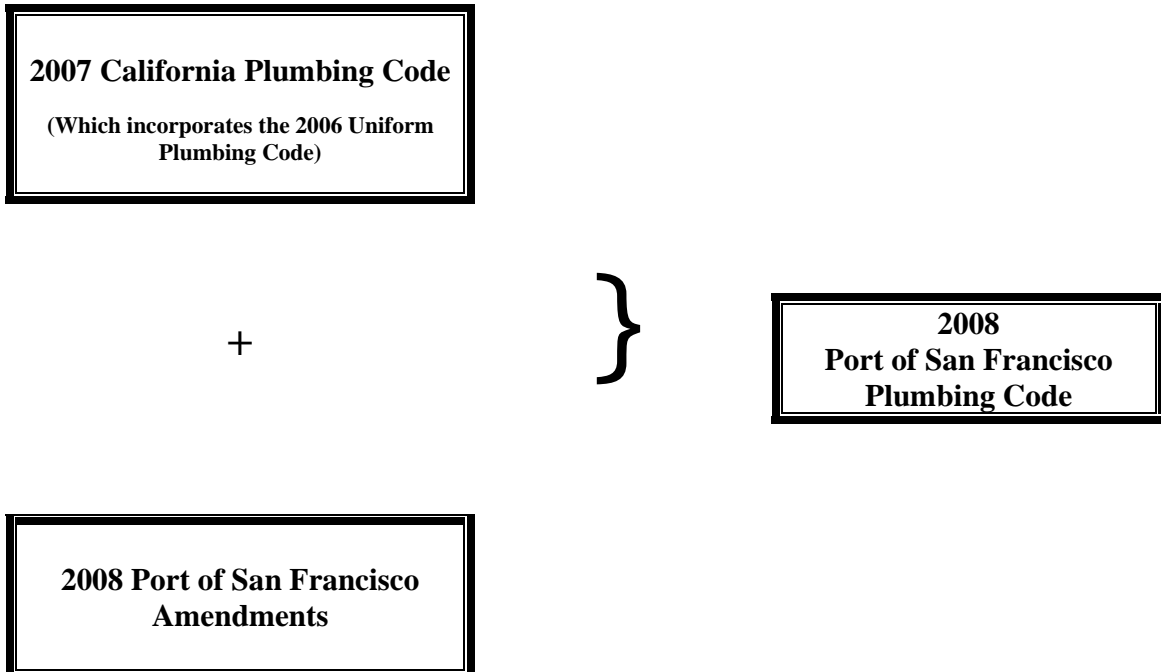


Effective Date: January 1, 2008

PUBLISHER'S NOTE

The proposed 2008 Port of San Francisco Plumbing Code adopts, with amendments, the 2007 California Plumbing Code, which incorporates by adoption the 2006 Uniform Plumbing Code with California amendments.

The Port of San Francisco Plumbing Code amendments contained herein are designed to be used in conjunction with the 2007 California Plumbing Code.



2008 Port of San Francisco Plumbing Code

**PREFACE TO THE
PORT PLUMBING CODE**

To simplify use of the Port of San Francisco Plumbing Code, amendments with corresponding sections of the 2007 California Plumbing Code, explanatory remarks appearing in *italics* are provided at the beginning of each amendment indicating whether the Port of San Francisco Plumbing Code amendment to the 2007 California Plumbing Code is adding, revising, or replacing a section or portion of a section.

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Adopt Appendix Chapter 1 of the 2007 California Plumbing Code Administration, amended as follows:

Chapter 1 ADMINISTRATION

101.1

102.2.7

SECTION 101.0 – TITLE, SCOPE AND GENERAL

101.1 Revise this section as follows:

101.1 This document shall be known as the 2008 Port of San Francisco Plumbing Code, may be cited as such and will be referred to herein as “this code.”

101.2 Revise this section as follows:

101.2 This code shall provide health, safety and welfare.

102.1 Revise this section as follows:

102.1 Authority Having Jurisdiction. The Port of San Francisco Commission, through the Chief Harbor Engineer, shall be the authority having jurisdiction.

102.1.1 Add the following section:

102.1.1 Administrative Authority. The Chief Harbor Engineer of the Port of San Francisco is hereby authorized to enforce all the provisions of this code as set forth in the Port of San Francisco Building Code Section 104.A.2.

102.2.4 Revise this section as follows:

102.2.4 Authority to Disconnect Utilities in Emergencies. The Chief Harbor Engineer 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.14 of the Building Code.

102.2.7 Add the following new section:

102.2.7 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 Port Code Procedures (PCP) supplemental to this code, shall not take effect until approved by the Port Building Code Review Board and signed by the Chief Harbor Engineer except in unusual circumstances where the Chief Harbor Engineer has determined that there is an immediate need to protect the public health and safety. When the Chief Harbor

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Adopt Appendix Chapter 1 of the 2007 California Plumbing Code Administration, amended as follows:

Chapter 1 ADMINISTRATION

102.2.8

Engineer finds that such circumstances exist, the Chief Harbor Engineer may order immediate enforcement of a particular rule or regulation. The Chief Harbor Engineer shall arrange for a subscription service to such rules and regulations, the entire cost of which is to be borne by the subscribers.

Note: Port Code Procedures may be found in the Port Building Code.

102.2.8 Add the following new section:

102.2.8 Code Revisions. The Chief Harbor Engineer shall transmit to the Port Building Code Review Board (PBCRB), at intervals not exceeding three years, recommendations for changes to this code, based on studies of the following:

1. Results obtained and problems encountered in legal actions taken to correct code violations.
2. Changes or improvements in materials, methods of construction or design, and changes proposed by interested persons.
3. Investigations of fire and structural damage to buildings, and of determination of unsatisfactory building performance.
4. Periodic changes to the California Plumbing Code and other State regulations which may affect this code.
5. Port Code Procedures currently in effect.
6. Violations of the code found on inspections or investigations.

102.2.9 Add the following new section:

102.2.9 Modifications. When there are practical difficulties involved in carrying out the provisions of this code, the Chief Harbor Engineer may grant modifications for individual cases. The Chief Harbor Engineer 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

102.3.1 Revise section as follows:

102.3.1 Violations. It shall be a violation of this code for any person, firm, or corporation to erect, construct, enlarge, alter, repair, move, improve, remove, convert, demolish, equip, use, or maintain any plumbing or permit the same to be done in violation of this code.

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Adopt Appendix Chapter 1 of the 2007 California Plumbing Code Administration, amended as follows:

Chapter 1 ADMINISTRATION

102.3.2

103.1.2

102.3.2 Penalties (Reserved)

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

103.1.1 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.

103.1.2. Replace Section 103.1.2.1, and the first paragraph of Section 103.1.2.2 as follows:

103.1.2 Exempt Work. A permit shall not be required for the following:

- (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, valves, hose bibbs or roof drain not requiring cutting into or removal of piping.
- (4) Replacement of toilets with 1.6 gallon (6.06 liter) per flush toilet fixtures.
- (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) Installation of plumbing systems installed by a utility in the operation of their utility business.
- (9) Replacement of water conservation devices not requiring cutting into or removal of piping.
- (10) Work performed in buildings or structures owned and occupied by the State and Federal governments.

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Adopt Appendix Chapter 1 of the 2007 California Plumbing Code Administration, amended as follows:

Chapter 1 ADMINISTRATION

103.1.4

103.4.4.2

103.1.4 Add the following new section:

103.1.4 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 Permit Fees and Table 1A-G - Inspections, Survey, and Reports of Section 110A of the Building Code.

103.2.1. Replace this section as follows:

103.2.1 Application. Permit applicants shall file with the Port Engineering Division's Building Permit Group an application on a form furnished for that purpose.

103.3.1. Replace this section as follows:

103.3.1 Issuance. 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.

103.3.4.1 (Reserved)

103.4.1 Replace this section as follows:

103.4.1 Permit Fees. Before any permit is issued, the applicant shall pay building permit fees, as set forth in Section 110A, Table 1A-A Building Permit Fees and plumbing permit and inspection fees as set forth in Section 110A, Table 1A-C - Plumbing Permit 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.

103.4.2 Revise as follows:

103.4.2 Plan Review Fees. When plumbing plan review services are required, fees shall be paid as set forth in Section 110A-Table 110A-B of the Building Code.

103.4.4.2 Revise this section as follows:

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Adopt Appendix Chapter 1 of the 2007 California Plumbing Code Administration, amended as follows:

Chapter 1 ADMINISTRATION

103.4.4.2

105.0

103.4.4.2 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 Permit Fees, and Table 1A-K – Investigation Fees, Hearings, Code Enforcement Fees - of the Building Code for applicable fees. ~~The investigation fee shall be equal to the amount of the permit fee that would be required by this code if a permit were to be issued.~~ The payment of such investigation fee shall not exempt any person from compliance with all other provisions of this code

103.4.5 Replace this section as follows:

103.4.5 Fee Refunds. For fee refunds, see Section 107A.6 of the Building Code.

103.5.6 Revise the fourth paragraph as follows:

To obtain reinspection, the applicant shall pay the reinspection fee in accordance with Table 1-1 Section 110A, Table 1A-G-Inspections, Surveys and Reports – of the Building Code.

104.0 Add the following new section:

SECTION 104.0 – ABATEMENT OF PUBLIC NUISANCE

104.0 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 shall apply.

105.0 Add the following new section:

SECTION 105.0 – PORT BUILDING CODE REVIEW BOARD (PBCRB)

Application may be made to the PBCRB for approval of alternate materials, methods and types of construction and for variances from the provisions of this code. See Building Code, Section 105A.

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Chapter 2 DEFINITIONS

201.0

216.0

SECTION 201.0 – GENERAL

201.0. 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 new 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 new 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.

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Chapter 3 GENERAL REGULATIONS

306.2

314.8.3

SECTION 306.0 – DAMAGE TO DRAINAGE SYSTEM OR PUBLIC SEWER

306.2. Revise this section as follows:

306.2 Roofs, inner courts, vent shafts, light wells, or similar areas having rainwater drain, shall discharge ~~to the outside of the building or to the gutter and shall not be connected to the sanitary drainage system unless first approved by the Authority Having Jurisdiction~~ directly into a building drain or building sewer, storm drain, or to an approved alternate location based on approved geotechnical and engineering designs approved by the Chief Harbor Engineer.

SECTION 314.0 – HANGERS AND SUPPORTS

314.1 Add the following sentence.

All sanitary piping installed under piers, wharfs or docks shall be braced at not more than 20 foot (6,096 mm) intervals with rigid stainless steel hardware to prevent horizontal movement from wave action.

314.2 Add the following sentence.

Piping suspended under piers, wharfs or docks shall be provide with lateral support in such a manner to as to prevent horizontal movement from wave action.

314.8 Add the following new section:

314.8 Materials

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

314.8.2 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.

314.8.3 All plumbing systems installed under piers or wharfs shall be supported by stainless steel hangers and 4-band no-hub couplings.

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Chapter 4
PLUMBING FIXTURES AND FIXTURE FITTINGS

412.1

Table 4-1

SECTION 412.0 – MINIMUM NUMBER OF REQUIRED FIXTURES

412.1 Revise this section as follows:

412.1 Fixture Count. Plumbing fixtures shall be provided for the type of building occupancy and in the minimum number shown in Table 4-1. In accordance with Section 2902 of the Building Code.

TABLE 4-1 – MINIMUM PLUMBING FIXTURES

Table 4-1. Add a note under the title as follows:

**TABLE 4-1
Minimum Plumbing Facilities**

**NOTE : This Table is not applicable in the Port of San Francisco.
Refer to Section 2902 of the Building Code.**

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**Chapter 5
WATER HEATERS**

No Port of San Francisco Plumbing Code Amendments

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Chapter 6 WATER SUPPLY AND DISTRIBUTION

603.4.6.5

605.9

SECTION 603.0 – CROSS-CONNECTION CONTROL

603.4.6.5 Add the following new section:

All such installations shall be approved in writing by the San Francisco Water Department prior to installation.

SECTION 604.0 – MATERIALS

604.1. Add the following sentence to the end of the first 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 605.0 – VALVES

605.9. Add the following new section:

605.9 All buildings four stories or more in height 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 6-2.

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Chapter 7 SANITARY DRAINAGE

701.1.3

710.1.1.

SECTION 701.0 – MATERIALS

701.1.3. Revise this section as follows:

701.1.3 No vitrified clay pipe or fittings shall be used above ground or where pressurized by a pump or ejector or underground within the foundation line of the building. They shall be kept at least twelve (12) inches (305mm) below ground.

701.1.6. Add the following new section:

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

707.9 Revise the first sentence as follows:

All required clean outs shall be to grade, readily accessible, and so located as to serve the purpose for which it is intended.

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

710.1.1 Add the following new 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.

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**Chapter 8
INDIRECT WASTES**

No Port of San Francisco Plumbing Code Amendments

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Chapter 9 VENTS

907.1

907.3

SECTION 907.0 – VENT STACKS AND RELIEF VENTS

907.1. Revise this section as follows:

907.1 Each drainage stack that extends ~~ten (10)~~ **six (6)** or more stories above the building drain or other horizontal drain, 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. Each such vent stack shall also be connected to the drainage stack at each fifth floor, counting down from the uppermost fixture drain, by means of a yoke vent, the size of which shall be not less in diameter than either the drainage or the vent stack, whichever is smaller.

907.3. Add the following new 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.

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 7-5.

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Chapter 10 TRAPS AND INTERCEPTORS

1016.2.1

1016.0 SAND INTERCEPTORS

1016.2.1 Add the following new section:

1016.2.1 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 7-5.

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.
- (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 1½" (38.1 mm) outlet may be used. The bottom of sump shall maintain a 1'- 0" (25.4 mm) distance from the inlet, creating a 1'- 0" (25.4 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" x 30" (762 mm x 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.

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Chapter 11 STORM DRAINAGE

SECTION 1101.0 – GENERAL

1101.1.2. Add the following new section:

1101.1.2 Leaders, Connection to Drain. All stormwater 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 906.0 of the California Plumbing Code.

1101.1.2 Add the following new section:

1101.1.2 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 curblin as possible.

1101.1.3 Add the following new section:

1101.1.3 Temporary Provisions Drain Trap. When, under the provisions of Section 1101.1.2 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.

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Chapter 12 FUEL PIPING

1209.5.1

1209.5.1.3

SECTION 1209.0 – GAS-PIPING SYSTEM DESIGN, MATERIALS, AND COMPONENTS

1209.5.1.1 Add a new second paragraph as follows:

1209.5.1.1 Ferrous gas piping in exterior or similar locations shall be protected from corrosion by approved machine applied protective coatings or wrapping materials that conform to recognized standards. Field wrapping, providing equivalent protection may be used and is restricted to those fittings and short sections where factory wrap has been damaged or necessarily stripped for threading or welding. Zinc coatings shall not be deemed adequate for exterior or similar use. Protectively coated pipe shall be inspected and tested and any visible void, damage or imperfection to the pipe coating shall be repaired to comply with Section 313.

1209.5.1.2 Add the following new section:

1209.5.1.2 In portions of fish processing facilities, canneries and other indoor wet locations, and in locations where walls are frequently washed or subject to sea air, ferrous gas piping shall be protected as required for exterior locations.

1209.5.1.3 Add the following new section:

1209.5.1.3 Unless specifically approved by the Chief Harbor Engineer, gas piping shall be prohibited underneath piers, docks or wharfs.

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Chapter 13

HEALTH CARE FACILITIES AND MEDICAL GAS AND VACUUM SYSTEMS

No Port of San Francisco Plumbing Code Amendments

2008 Port of San Francisco Plumbing Code

**Chapter 14
MANDATORY REFERENCED STANDARDS**

No Port of San Francisco Plumbing Code Amendments

2008 Port of San Francisco Plumbing Code

**Chapter 15
FIRESTOP PROTECTION**

No Port of San Francisco Plumbing Code Amendments

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**Chapter 16
GRAY WATER SYSTEMS**

No Port of San Francisco Plumbing Code Amendments

This Chapter is adopted by Port of San Francisco

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**Appendix A
RECOMMENDED RULES FOR SIZING THE WATER SUPPLY SYSTEM**

No Port of San Francisco Plumbing Code Amendments

**Appendix B
EXPLANATORY NOTE ON COMBINATION WASTE AND VENT SYSTEMS**

No Port of San Francisco Plumbing Code Amendments

**Appendix D
SIZING STORMWATER DRAINAGE SYSTEMS**

No Port of San Francisco Plumbing Code Amendments

**Appendix E
MANUFACTURED / MOBILE HOME PARKS AND RECREATIONAL VEHICLE PARKS**

No Port of San Francisco Plumbing Code Amendments

**Appendix F
FIREFIGHTER BREATHING AIR REPLENISHMENT SYSTEMS**

No Port of San Francisco Plumbing Code Amendments

**Appendix I
INSTALLATION STANDARDS**

No Port of San Francisco Plumbing Code Amendments

**Appendix K
PRIVATE SEWAGE DISPOSAL SYSTEMS**

No Port of San Francisco Plumbing Code Amendments

**Appendix L
ALTERNATE PLUMBING SYSTEMS**

No Port of San Francisco Plumbing Code Amendments