

DIVISION 7. PLUMBING CODE

Sec. 14-281. Plumbing Code. With the following additions, deletions, and revisions, the International Plumbing Code, 2003 Edition, a copy of which, authenticated by the signatures of the Mayor and City Secretary, made public record by this Section, and on file in the City Secretary's office, is incorporated by reference and adopted as the Plumbing Code of the City of Corpus Christi:

(1) CHAPTER 1, ADMINISTRATION, is deleted. Section 13-1, Administration, Code of Ordinances, contains the administrative rules for the administration of the Plumbing Code and the other Technical Construction Codes of the City of Corpus Christi, including the Building Code, Electrical Code, Gas Code, and Plumbing Code.

CHAPTER 2 – DEFINITIONS

(2) Section 202 of the International Plumbing Code is amended by adding the following definitions for:

SECTION 202 DEFINITIONS

Backflow Prevention Assembly Tester. A Backflow Prevention Assembly Tester is an individual licensed by the Texas Commission on Environmental Quality under 30 TAC 30.51 – 30.62.

CHAPTER 3 – GENERAL REGULATIONS

(3) *Section 301.3 of the International Plumbing Code is revised to read as follows:*

301.3 Connections to drainage system. All plumbing fixtures, drains, appurtenances and appliances used to receive or discharge liquid wastes or sewage shall be connected properly to the drainage system of the building or premises, in accordance with the requirements of this code. This section shall not be construed to prevent indirect waste systems provided in Chapter 8.

Exceptions:

1. Bathtubs, showers, clothes washers and laundry sinks must not be required to discharge to the sanitary drainage system where such fixtures discharge to an approved gray water recycling system.
2. Bathtubs, showers, clothes washers, laundry sinks, hand washing lavatories, and sinks not used for food preparation or disposal of chemicals and biological ingredients must not be required to discharge to the sanitary drainage system where such fixtures discharge to an approved gray water/condensate irrigation system.

(4) *Section 305.6 of the International Plumbing Code is revised to read as follows:*

305.6 Freezing. A water pipe shall not be installed outside of a building, in attics or crawl spaces, concealed in outside walls, or in any other place subjected to freezing temperature unless provision is made to protect them from freezing by a ½ inch thickness of pipe insulation, or heat tracing, or both. Water service pipe shall be installed not less than 12 inches (305 mm) deep or less than 6 inches (152 mm) below the frost line.

(5) *Section 312.2 of the International Plumbing Code is revised by adding a new subsection 312.2.1. to read as follows:*

312.2 Drainage and vent water test.

312.2.1 Test following repairs and alterations to existing buildings.

Repairs/replacements of the building sewer, and associate branches of the building sewer, the building storm sewer and associate branches of the building storm sewer must be tested with a 10-foot head of water. Repair of the building drain and associated branches of the building drain, the building storm drain and associate branches of the building storm drain must have a water test applied to the drainage system up to the lowest fixture outlet and to a point three feet outside the building.

(6) *Section 312.5 of the International Plumbing Code is revised to read as follows:*

312.5 Water supply system test. Upon completion of a section or of the entire water supply system, the system, or portion completed, shall be tested and proved tight, prior to covering the piping, under a water pressure of not less than 85 psi (586 kPa); or by an air test of not less than 85 psi (586 kPa). The water utilized for tests shall be obtained from a potable source of supply. The required test shall be performed in accordance with this section.

(Note: City normal working pressure is between 40 psi (276 kPa) and 45 psi (210 kPa). Minimum pressure is 35 psi (241 kPa). There are no current plans to raise the working pressure.)

CHAPTER 6 – WATER SUPPLY AND DISTRIBUTION

(7) Section 606.1.4. of the International Plumbing Code is revised to read as follows:

606.1 Location of full-open valves. Full-open valves shall be installed in the following locations:

4. On the base of every water riser pipe in occupancies other than multiple family residential occupancies that are four stories or more in height and in one- and two-family residential occupancies.

(8) Section 606.2 of the International Plumbing Code is revised by deleting subsection 606.2.2. and renumbering subsection 606.2.3. as 606.2.2.

606.2 Location of shutoff valves. Shutoff valves shall be installed in the following locations:

2. On the water supply pipe to each appliance or mechanical equipment.

(9) Section 606.4 of the International Plumbing Code is revised to read as follows:

606.4 Valve identification. Service and hose bibb valves shall be identified, except in a one or two family residential occupancy. All valves installed in locations that are not adjacent to the fixtures or appliances shall be identified, indicating the fixture or appliance served.

(10) Section 608.1 of the International Plumbing Code is amended by adding a new subsection 608.1.1 to read as follows:

608.1 General. A potable water supply system shall be designed, installed and maintained in such a manner so as to prevent contamination from non-potable liquids, solids or gases being introduced into the potable water supply through cross connections or any other piping connections to the system. Backflow preventer applications shall conform to Table 608.1.

608.1.1 Testing and certification of backflow devices. The owner of any reduced pressure principle backflow preventer, pressure-type vacuum breaker, and double check-valve assembly backflow preventer must have the backflow device tested and certificated by a Backflow Prevention Assembly Tester before a backflow preventer is placed in service and on annually thereafter to ensure its proper operation. The Backflow Prevention Assembly Tester must file a copy of the initial and each annual certification with the Building Official within 7 days of the testing.

(11) Section 608.12 of the International Plumbing Code is revised to read as follows:

608.12 Pumps and other appliances. Water pumps, filters, softeners, tanks and all other devices that handle or treat potable water shall be protected against contamination. Whenever a pump is connected to the potable water system, the water supply must be protected by either a proper backflow preventer with a low pressure cutoff, or by the use of water supply tanks with an air gap.

(12) Section 608.13 of the International Plumbing Code is amended by adding a new subsection 608.13.10 to read as follows:

608.13 Backflow protection. Means of protection against backflow shall be provided in accordance with Sections 608.13.1 through 608.13.9.

608.13.10 Testing and certification of backflow preventers by Backflow Prevention Assembly Tester. All reduced pressure principle backflow preventers, pressure-type vacuum breakers, and double check-valve assemblies must be tested and certified by a Backflow Prevention Assembly Tester. Certification of proper operation must be provided in writing to the Building Official before the backflow prevention device is placed in service and on a yearly basis thereafter.

(13) Section 608.14 of the International Plumbing Code is revised to read as follows:

608.14 Location of backflow preventers. Access shall be provided to backflow preventers as specified by the installation instructions of the approved manufacturer. If needed, additional access and clearance must be provided to allow for the required testing, maintenance, and repair. Access and clearance must require a minimum of one (1) foot (305 mm) between the lowest portion of the assembly and grade, floor or platform. Installations elevated more than five (5) feet (1.53m) above the floor or grade must be provided with a permanent platform capable of supporting a tester or maintenance person.

(14) Section 608.16.4 of the International Plumbing Code is revised to read as follows:

608.16.4 Connections to automatic fire sprinkler systems and standpipe systems. The potable water supply to automatic fire sprinkler and standpipe systems shall be protected against backflow by a double detector check-valve assembly or a reduced pressure principle detector backflow preventer.

(15) Chapter 6, Water Supply and Distribution, of the International Plumbing Code is amended by adding a new section 612 to read as follows:

SECTION 614 LAWN IRRIGATION SYSTEMS

614.1 Landscape Irrigation Systems

614.1.1 Drip emitters or soakers. Any irrigation system located within or designed to irrigate the vegetation located within five feet of a paved roadway, driveway, parking lot, or sidewalk tied to a curb (other than those portions of the sidewalks at intersections or ramps for the disabled) must use drip-emitters or soaker type hoses instead of spray heads, unless the irrigation system uses spray heads that do not produce more than minimal runoff or overspray.

614.1.2 Spray heads. All other areas adjoining paved areas may be watered with sprinklers if the following guidelines are observed:

1. Operating pressures may not exceed manufacturer's recommendations to prevent misting and drifting.
2. Check valves must be used where elevation differential may cause low head drainage onto paved areas.
3. Sprinklers must be spaced as per manufacturer's recommendations and adjusted for prevailing winds.

4. Sprinkler systems must be designed for minimal runoff and overspray of paved and non-irrigated areas, and must use low angle nozzle, as needed, to prevent wind drift of water onto non-irrigated areas.
5. Sprinkler heads must not be installed within eighteen inches of uncurbed paved areas to prevent damage from vehicles.
6. All systems must be equipped with a readily accessible emergency cut off valve.
7. Unprotected sprinkler heads may not be installed at locations where they may be damaged or run over by motor vehicles.

614.1.3 Definitions. For the purposes of Section 614:

1. The term 'roadway' means a public highway, city street, private street, or alley.
2. The term 'minimal runoff and overspray' means that under prevailing wind conditions the sprinkler system will not throw water by the water pressure or water will not be blown onto adjoining pavement in a quantity that will either:
 - a. Allow the water to stand within the gutter of a paved roadway, parking lot, or driveway for more than twice the number of minutes as the irrigation system was operated for, or
 - b. Allow an individual to observe the water flowing down an inclined paved surface or in a gutter while the sprinkler system is in operation.

CHAPTER 7 – SANITARY DRAINAGE

(16) Section 702.5 of the International Plumbing Code is amended by adding a new subsection 702.5.1 to read as follows:

702.5 Chemical waste system.

702.5.1 Acid waste and vent piping. Acid waste and vent piping for drainage systems must be of a high silicon cast iron, borosilicate glass, polypropylene, or other materials approved by the Building Official. Fittings must conform to the type of piping used. Acid waste and vent piping must not be connected to the conventional plumbing system.

- (1) The specific piping material selected must be compatible with the actual acid waster based on the manufacturer’s recommendation.
- (2) All piping system components must be aligned properly without strain. Joints between polypropylene and other types of piping material must be made with adapters complying with manufacturer’s recommendations.
- (3) Support spacing for polypropylene pipe must be based on the design temperature under the manufacturer’s recommendations.

(17) Table 702.1 of the International Plumbing Code is amended to read as follows:

Table 702.1 ABOVE-GROUND DRAINAGE AND VENT PIPE

MATERIAL	STANDARD
Acrylonitrile butadiene styrene (ABS) plastic pipe	ASTM D 2661; ASTM F 628; CSA B181.1
Brass pipe	ASTM B 43
Cast-iron pipe	ASTM A 74; CISPI 301; ASTM A 888
Coextruded composite ABS DWV Schedule 40 IPS pipe (solid)	ASTM F 1488
Coextruded composite ABS DWV Schedule 40 IPS pipe (cellular core)	ASTM F 1488
Coextruded composite PVC DWV Schedule 40 IPS pipe (solid)	ASTM F 1488
Coextruded composite PVC DWV Schedule 40 IPS pipe (cellular core)	ASTM F 1488
Coextruded composite PVC IPS – DR, PS140, PS200 DWV	ASTM F 1488
Copper or copper-alloy pipe	ASTM B 42; ASTM B 302
Copper or copper-alloy tubing (Type K, L, M or DWV)	ASTM B 75; ASTM B 88; ASTM B 251; ASTM B 306

MATERIAL	STANDARD
Glass pipe	ASTM C 1053
Polyolefin pipe	CSA CAN/CSA-B181.3
Polypropylene acid waste pipe (Polypropylene acid waste pipe may only be used for acid wastes and venting applications.)	ASTM D2146, ANSI B16.12, and ASTM D635
Polyvinyl chloride (PVC) plastic pipe (Type DWV)	ASTM D 2665; ASTM D 2949; ASTM F 891; CSA CAN/CSA-B181.2; ASTM F 1488
Stainless steel drainage systems, Types 304 and 316L	ASME A112.3.1

(18) Section 703 of the International Plumbing Code is amended by adding a new section 703.6 to read as follows:

SECTION 703 BUILDING SEWER

703.6 Pre-tap connection. When connection to the public sewer requires connection to an existing pre-tap, the tie-in must be made within 48 inches from the finish grade; on private property, at the easement or at the edge of the property; and be readily accessible for inspection.

703.6.1 Exceptions. When it is obvious from ground level that proper connection has been made, even if the depth of the tie-in is more than forty-eight inches (48”), the inspection must be approved. Written acceptance of the tie-in inspection from the City Wastewater Department will be the only other approval for compliance.

(19) Section 704.1 of the International Plumbing Code is amended by adding a new section 704.1.1 to read as follows:

704.1 Slope of horizontal drainage piping.

704.1.1 Minimum velocity. Where conditions do not permit building drains and sewers to be laid with a fall as great as specified in Table 704.1, then a lesser slope may be permitted provided the computed velocity will not be less than 2 feet per second.

(20) Section 708.3 of the International Plumbing Code is revised to read as follows:

708.3 Where required. Cleanouts shall be located in accordance with Sections 708.3.1 through 708.3.5.

708.3.1 Horizontal drains within buildings. All horizontal drains shall be provided with cleanouts located not more than 100 feet (30 480 mm) apart.

708.3.2 Building sewers. All building sewers shall be provided with cleanouts located not more than 100 feet (30 480 mm) apart measured from the upstream entrance of the cleanout.

708.3.3 Changes of direction. Cleanouts shall be installed at each change of direction of the building drain or horizontal waste or soil lines greater than 45 degrees (0.79 rad). Where more than one change of direction occurs in a run of piping, only one cleanout shall be required for each 40 feet (12 192 mm) of developed length of the drainage piping.

708.3.4 Base of stack. A cleanout shall be provided at the base of each waste or soil stack.

708.3.5 Building drain and building sewer junction. There shall be a two-way double riser cleanout at the junction of the building drain and the building sewer. The cleanout shall be either inside or outside the building wall and shall be brought up to the finished ground level or to the basement floor level. An approved two-way cleanout is allowed to be used at this location to serve as a required cleanout for both the building drain and building sewer.

708.3.6 Manholes. In pipe having a nominal diameter greater than 3 inches, the cleanouts may be omitted, if manholes are located at distances not exceeding 300 feet and at every change of direction. Manholes serving a building drain shall have secured gas-tight covers and shall be located in accordance with Section 708.8.

708.3.7 Wye cleanout to public sewer. A wye-type cleanout, not less than four inches (4") in diameter, must be extended to grade and must be located at the junction of the building sewer and public sewer, at the property line.

(21) Tables 710.1(1) and 710.1(2) of the International Plumbing Code is revised to read as follows:

**TABLE 710.1(1)
BUILDING DRAINS AND SEWERS**

DIAMETER OF PIPE (inches)	MAXIMUM NUMBER OF DRAINAGE FIXTURE UNITS CONNECTED TO ANY PORTION OF THE BUILDING DRAIN OR THE BUILDING SEWER, INCLUDING BRANCHES OF THE BUILDING DRAIN ^a			
	Slope per foot			
	1/16 inch	1/8 inch	1/4 inch	1/2 inch
1 1/4			1	1
1 1/2			3	3
2			21	26
2 1/2			24	31
3		36 ^b	42 ^b	50 ^b

MAXIMUM NUMBER OF DRAINAGE FIXTURE UNITS CONNECTED TO ANY PORTION OF THE BUILDING DRAIN OR THE BUILDING SEWER, INCLUDING BRANCHES OF THE BUILDING DRAIN ^a				
4		180	216	250
5		390	480	575
6		700	840	1,000
8	1,400	1,600	1,920	2,300
10	2,500	2,900	3,500	4,200
12	2,900	4,600	5,600	6,700
15	7,000	8,300	10,000	12,000

For **SI**: 1 inch = 25.4 mm, 1 inch per foot = 0.0833 mm/m.

^a The minimum size of any building drain serving a water closet shall be 3 inches.

^b Not over two water closets

**TABLE 710.1(2)
HORIZONTAL FIXTURE BRANCHES AND STACKS***

MAXIMUM NUMBER OF DRAINAGE FIXTURE UNITS (dfu)				
DIAMETER OF PIPE (inches)	Total for a horizontal branch	Stacks ^b		
		Total discharge into one branch interval	Total for stack of three branch intervals or less	Total for stack greater than three branch intervals
1 ½	3	2	4	8
2	6	6	10	24
2 ½	12	9	20	42
3	20 ^d	20 ^d	48 ^e	72 ^e
4	160	90	240	500
5	360	200	540	1,100
6	620	350	960	1,900
8	1,400	600	2,200	3,600
10	2,500	1,000	3,800	5,600
12	3,900	1,500	6,000	8,400

	MAXIMUM NUMBER OF DRAINAGE FIXTURE UNITS (dfu)			
15	7,000	Footnote c	Footnote c	Footnote c

For **SI**: 1 inch = 25.4 mm.

- a Does not include branches of the building drain. Refer to Table 710.0(1).
- b Stacks shall be sized based on the total accumulated connected load at each story or branch interval. As the total accumulated connected load decreases, stacks are permitted to be reduced in size. Stack diameters shall not be reduced to less than one-half of the diameter of the largest stack size required.
- c Sizing load based on design criteria.
- d Not more than 2 water closets.
- e Not more than 6 water closets.

CHAPTER 8 – INDIRECT/SPECIAL WASTE

(22) Section 802.2 of the International Plumbing Code is revised to read as follows:

802.2 Installation. All indirect waste piping shall discharge through an air gap or air break into a waste receptor or standpipe. Waste receptors and standpipes shall be trapped and vented and shall connect to the building drainage system.

CHAPTER 9 - VENTS

(23) Section 903.1 of the International Plumbing Code is amended by adding a new subsection 903.1.2 to read as follows:

903.1 Stack required.

903.1.2 Minimum size of vent stack with water closet. Every sanitary drainage system receiving the discharge of a water closet must have a minimum three (3) inch diameter main vent that is either a vent stack or a stack vent. Such vent must run undiminished in size and as directly as possible from the building drain through to the open air above the roof.

(24) Section 913.1 of the International Plumbing Code is amended by adding a new subsection 913.1.1 to read as follows:

913.1 Limitation. Island fixture venting shall not be permitted for fixtures other than sinks and lavatories. Residential kitchen sinks with a dishwasher waste connection, a food waste grinder, or both, in combination with the kitchen sink waste, shall be permitted to be vented in accordance with this section.

913.1.1 Conditions in which an island vent may be used. An island vent may be used:

1. If the sink or lavatory is installed in an island.
2. If the total developed length of the fixture drain through the wier of the trap exceeds 8 feet.
3. If the structure prevents venting by another means.

(25) Section 913.2 of the International Plumbing Code is amended by adding a new subsection 903.2.1 to read as follows:

913.2 Vent connection. The island fixture vent shall connect to the fixture drain as required for an individual or common vent. The vent shall rise vertically to above the drainage outlet of the fixture being vented before offsetting horizontally or vertically downward. The vent or branch vent for multiple island fixture vents shall extend to a minimum of 6 inches (152 mm) above the highest island fixture being vented before connecting to the outside vent terminal.

913.2.1 A vertical vent must be installed on the drain line downstream of the island vent configuration.

(26) Section 313.2 of the International Plumbing Code is amended by adding new subsections 913.2.1 and 913.2.2 to read as follows:

913.2 Vent connection.

913.2.1 Vents for traps. Traps for island sinks and similar equipment must be roughed in above the floor and may be vented by extending the vent vertically to not less than the drain board height, returning vertically downward and connecting it to the horizontal sink drain immediately downstream from the vertical fixture drain. Horizontal venting will not be permitted in this installation.

913.2.2 Vents for bar and fountain sink traps. Traps serving sinks which are part of the equipment of bars, soda fountains, and counters need not be vented when the location and construction of such bars, soda fountains, and counters makes it impossible to do so. When these conditions exist, such sinks may be vented under 913.2.1. Drainage must be under 802.

(27) Section 917.1 of the International Plumbing Code is amended by adding a new subsection 917.1.1 to read as follows:

917.1 General.

917.1.1 Installation of air admittance valves (mechanical vents) restricted.

It must be unlawful to use air admittance valves, except when conditions prevent the installation of a conventional or island fixture vent system.

CHAPTER 10 – TRAPS, INTERCEPTORS, AND SEPARATORS

(28) Section 1002.1 of the International Plumbing Code is revised to read as follows:

1002.1 Fixture traps. Each plumbing fixture shall be separately trapped by a water-seal trap, except as otherwise permitted by this code. The trap shall be placed as close as possible to the fixture outlet. The distance of a clothes washer standpipe above a trap shall conform to Section 802.4. A fixture shall not be double trapped. An automatic clothes washer or laundry tub must not discharge to a trap serving a kitchen sink.

(29) Section 1002.4 of the International Plumbing Code is amended by adding an exception to read as follows:

1002.4 Trap seals.

Exception. Multiple traps may be primed with one trap seal if a distribution box is used.

(30) Section 1003.3 of the International Plumbing Code is revised to read as follows:

1003.3 Grease traps and grease interceptors. Grease traps and grease interceptors shall comply with the requirements of Sections 1003.3.1 through 1003.3.9.

1003.3.1 Grease interceptors required. A grease interceptor must be installed in the waste line leading from sinks, drains food waste grinders, garbage can washers, dumpster drains, or other fixtures in restaurants, hotel kitchens or bars, factory cafeterias or restaurants, clubs, churches, schools, or other commercial food preparation or cooking areas where, in the opinion of the Building Official, grease can be introduced into the drainage system in quantities that can affect line stoppage or hinder sewage disposal. All floor drains located in the food preparation or cooking areas must be connected to the grease interceptor. Mop and service sinks used for the disposal of wastewater from mopping of floor surfaces in food preparation and cooking areas must be connected to the grease interceptor.

1003.3.2 Food waste grinders. In addition to the requirements in Section 1003.3.5, where food waste grinders connect to grease traps or grease interceptors, the grease interceptor shall be sized and rated for the discharge of the food waste grinder. In addition to the requirements in Section 1003.3.5, solid interceptors and grease interceptors shall be sized and rated for the discharge of the food waste grinder. A solids interceptor must be installed between a food waste grinder and a factory fabricated interceptor.

1003.3.4 Grease traps and grease interceptors. Grease traps and grease interceptors shall conform to PDI G1017 or ASME A112.14.3 and shall be installed in accordance with the manufacturer's instructions.

1003.3.5 Design criteria and sizing method grease interceptors.

1003.3.5.1 Flow rate. Grease interceptors will be sized according to the fixture unit flow rate of each fixture discharging into the interceptor. Fixture unit flow rate must be 7.5 GPM per fixture unit. One, two, or three compartment sinks must be assigned a fixture unit value of 3.0.

Dishwashing and utensil washing machines must be assigned a fixture unit value of 6.0. For all other grease producing fixtures, use Table 709.1 to select appropriate fixture unit value.

1003.3.5.2 Total fixture unit count. When total fixture count has been determined, multiply value by 7.5 GPM per fixture unit to obtain total flow rate. Floor drains installed only for the purpose of cleanup, and not used for direct discharge of any grease producing fixture, may not be included in the sizing calculations. Hand sinks installed in food preparation and cooking areas only for the purpose of employee hygiene may not be included in the sizing calculations, but must be connected to the grease interceptor.

1003.3.5.3 Water seal. Each grease interceptor must have an approved water seal of not less than two inches in depth, or the diameter of its outlet, whichever is greater.

1003.3.5.4 Sampling port. A four inch sampling port must be installed downstream of the confluence of the grease interceptor discharge and the building sewer system. The sampling port must be installed perpendicular to the effluent lateral to allow visual observation and sampling. The design location must ensure accessibility of the sampling port for monitoring activities.

1003.3.5.5 Manhole covers. Manhole covers must be 24 inches in diameter, gas tight, and capable of supporting any vehicle traffic. The manhole covers must have pre-cast concrete rings to extend to grade, as necessary.

1003.3.6 Factory fabricated interceptors. Factory fabricated grease interceptors must be certified and labeled by the Plumbing and Drainage Institute (PDI).

1003.3.6.1 Materials. Factory fabricated interceptors may be of the following materials: cast iron, stainless steel, concrete, and other industry approved materials.

1003.3.6.2 Flow rate. Factory fabricated grease interceptors must have a minimum flow rate of 25 GPM and a maximum flow rate of 50 GPM.

1003.3.6.3 Flow control devices. When factory fabricated interceptors are installed, flow control devices may be installed at the drain outlet of each grease producing fixture. Flow Control Devices having adjustable or removable parts are prohibited.

1003.3.7 Custom fabricated interceptors. After calculating the required flow rate, the grease interceptor is to be designed with a primary compartment having a seven (7) minute retention time, and a secondary compartment having a five (5) minute retention time. Refer to Figure 1003.1 for details of construction and inlet and outlet piping arrangements.

1003.3.7.1 Minimum flow rate. Custom fabricated concrete grease interceptors must have a minimum flow rate of 40 gallons per minute.

1003.3.7.2 Concrete interceptors. Concrete must be a minimum of 3000 PSI concrete.

1003.3.7.3 Flow control devices. Flow control devices may not be used with custom fabricated concrete interceptors.

1003.3.8 Prohibited interceptors.

1003.3.8.1 Carbon steel. Carbon steel grease interceptors are prohibited in underground applications.

1003.3.8.2 Water cooled interceptors. Water cooled grease interceptors are prohibited.

1003.3.8.3 Grease removal devices or grease recovery devices. Grease removal devices or grease recovery devices are prohibited.

1003.3.9. Water connection. The water connection for operating an interceptor may not allow any backflow to occur.

(31) Section 1003.4.2.2 of the International Plumbing Code is revised to read as follows:

1003.4.2.2 Garages, detail shops, and service stations. Where automobiles are serviced, greased, repaired, washed or where gasoline is dispensed, oil separators shall have a minimum capacity of 6 cubic feet (0.168 m³) for the first 100 square feet (9.3 m²) of area to be drained, plus 1 cubic foot (0.28 m³) for each additional 100 square feet (9.3 m²) of area to be drained into the separator. Parking garages in which servicing, repairing or washing is not conducted, and in which gasoline is not dispensed, shall not require a separator. Areas of commercial garages utilized only for storage of automobiles are not required to be drained through a separator.

(32) Section 1003.8 of the International Plumbing Code is amended by adding a new subsection 1003.8.1 to read as follows:

1003.8 Sand interceptors in commercial establishments.

1003.8.1 Design criteria and sizing method. The sizing method for custom fabricated oil and sand interceptors assigns a flow rate of 20 GPM (gallons per minute) for the first bay and an additional 10 GPM for each additional bay. The tank should be designed to have a twelve (12) minute retention time with two compartments. The primary compartment must be 2/3 of the total volume and the secondary compartment must be 1/3 of the total volume. See Figure 1003.2 and Figure 1003.3 for details of construction and piping arrangements.

1003.8.2 Materials. Concrete used for interceptor construction must be at least 3000 PSI.

1003.8.3 Drainage to sanitary sewer. Sand interceptors must drain only into the sanitary sewer.

(33) Chapter 10, Traps, of the International Plumbing Code is amended by adding Figures 1003.1, 1003.2, and 1003.3 to read as follows:

INSERT FIGURE 1003.1

INSERT FIGURE 1003.2

INSERT FIGURE 1003.3

CHAPTER 11 – STORM DRAINAGE

(34) Section 1104.2 of the International Plumbing Code is revised to read as follows:

1104.2 Combining storm with sanitary drainage. The sanitary and storm drainage systems of a structure shall be entirely separate.

CHAPTER 12 – SPECIAL PIPING AND STORAGE SYSTEMS

(35) Chapter 12, Special Piping and Storage Systems, of the International Plumbing Code is amended by adding a new Section 1204 to read as follows:

SECTION 1204 INSPECTIONS

1204.1 Inspections. Nonflammable medical gas installations must be inspected and certified as conforming to the latest edition of NFPA 99C, Gas and Vacuum Systems, by the owner of the property, a registered professional engineer, and a licensed master or journeyman plumber, who holds a medical gas technician endorsement.

(36) Appendix A of the International Plumbing Code is deleted. Section 103.7, Fees, as adopted by Section 13-1 of the Code of Ordinances, contains the fee schedule applicable to the Plumbing Code.

(37) Appendix B, Rates of Rainfall for Various Cities, of the International Plumbing Code is not adopted, but is provided for information and reference.

(38) Appendix C, Gray Water Recycling Systems, of the International Plumbing Code is amended by revising the title to read "Gray Water Recycling and Gray Water/ Condensate Irrigation Systems and by adding a new section C102. Appendix C, as amended, and is adopted and made part of this code as amended. Section C102 shall read as follows:

APPENDIX C
GRAY WATER RECYCLING AND
GRAY WATER/CONDENSATE IRRIGATION SYSTEMS

C102 GRAY WATER/CONDENSATE IRRIGATION SYSTEMS

C102.1 General. Gray water/condensate disposal systems. Modification of the drains and piping systems to allow the diversion of gray water and condensate for the irrigation of vegetation and watering of foundations is permitted. However, no modifications may be made if the diversion of gray water will impair the proper operation of the drainage system. The plans and installation of a gray water disposal system, which provides for the storage of gray water, must be designed and certified by a registered professional engineer or registered professional sanitarian.

C102.2 Definitions. The following terms must have the meaning shown herein.

Condensate. The untreated water that is collected as a result of the water vapors in humid air being converted into the liquid state through contact with cooling coils or evaporators in air conditioning and other cooling systems.

Gray Water. Wastewater from clothes washing machines, showers, bathtubs, hand washing lavatories, and sinks that are not used for food preparation or disposal of chemical and biological ingredients.

(39) Appendix D, Degree Day and Design Temperatures for Cities in the United States, of the International Plumbing Code is not adopted, but is provided for information and reference.

(40) Appendix E, Sizing of Water Piping Systems, of the International Plumbing Code is adopted and made part of this code.

(41) Appendix F, Structural Safety, of the International Plumbing Code is adopted and made part of this code.

(42) Appendix G, Fuel-Gas Piping, of the International Plumbing Code is adopted and made part of this code.

APPENDIX H

TRAVEL TRAILERS AND TRAVEL TRAILER PARKS

(43) Appendix H, Travel Trailers and Travel Trailer Parks, is added to read as follows:

H101 GENERAL

H101.1 General. The requirements set forth in this Appendix must apply specifically to all new Travel Trailer Parks, and to additions to existing parks as herein defined, and are to provide minimum standards for sanitation and plumbing installation within these parks, for the accommodations, use and parking of travel trailers. Plumbing installations in travel trailers must be installed under ANSI A119.2, Part I.

H102 DEFINITIONS

H101.2 Definitions. Definitions contained in Chapter 2 of the Standard Plumbing Code must also apply to this Appendix B except where the following special definitions must apply.

AIR LOCK. A condition where air is trapped in a drain or drain hose and retards or stops the flow of liquid waste or sewage.

CENTER. The center of a manufactured home or travel trailer is the longitudinal center line located midway between the right and the left side.

COMBINATION COMPARTMENT. A shower stall with or without a door which provides for or includes a water closet. It is sized for occupancy of only one person.

DEPARTMENT HAVING JURISDICTION. The administrative authority or other law enforcement agency having jurisdiction over this regulation.

DEPENDENT TRAVEL TRAILER. A trailer coach not equipped with a water closet.

DRAIN HOSE. The approved type hose, flexible and easily detachable, used for connecting the drain outlet to a sewer inlet connection.

DRAIN OUTLET. The lowest end of the main drain to which the terminal end of the drain hose is connected.

INDEPENDENT MOBILE HOME OR TRAVEL TRAILER. One equipped with a water closet and a bath or shower.

INLET COUPLING. The terminal end of the water system to which the water service connection is made. It may be a swivel fitting or threaded pipe end.

INTERMEDIATE WASTE HOLDING TANK (travel trailers only). An enclosed tank for the temporary retention of water-borne waste.

LENGTH. The distance measured from the tip of the hitch to the part farthest to the rear of a manufactured home or travel trailer.

MANUFACTURED HOME OR TRAVEL TRAILER PARK. A site, lot, tract or parcel of land upon which one or more mobile home or travel trailer is parked, for the temporary or permanent use as living quarters of one or more families.

PARK SANITARY DRAINAGE SYSTEM. The entire system of drainage piping used to convey sewage or other wastes from the manufactured home or travel trailer drain outlet connection, at its connection to the manufactured home or travel trailer site, to a City's sanitary sewer or private sewage disposal system.

PARK WATER SUPPLY SYSTEM. All of the water supply piping within the park, extending from the main public supply or other source of supply to, but not including, the manufactured home or travel trailer service system, and including branch service lines, fixture devices, service buildings and appurtenances thereto.

SERVICE BUILDING. A building housing toilet and bathing facilities for men and women, with laundry facilities.

SEWER LATERAL. That portion of the park sanitary drainage system extending to a manufactured home or travel trailer site.

TRAVEL TRAILER. A vehicular, portable structure built on a chassis, designed to be used as a temporary dwelling for travel, recreational and vacation uses, permanently identified "Travel Trailer" by the manufacturer on the trailer and when factory equipped for the road, having a body width not exceeding 8 ft and being of any length provided its gross weight does not exceed 4500 lb, or being of any weight provided its overall length does not exceed 29 ft.

TRAVEL TRAILER SANITARY SERVICE STATION - One used for emptying waste holding tanks.

H103 GENERAL REGULATIONS

H103.1 Governing provisions. The general provisions of the Standard Plumbing Code must govern the installation of plumbing systems in travel trailer parks, except where special conditions or construction are specifically defined in this Appendix.

H103.2 Travel trailer sites

H103.2.1 Travel trailers must not hereafter be parked in any travel trailer park unless there are provided plumbing and sanitation facilities installed and maintained in conformity with these regulations. Every travel trailer must provide a gas and watertight connection for sewage disposal which must be connected to an underground sewage collection system discharging into a public or private disposal system.

H103.2.2 No dependent travel trailer must be parked at any time in a space designed and designated for an independent travel trailer unless public toilet and bath facilities are available within 200 ft of the dependent travel trailer.

H104 PLANS AND SPECIFICATIONS

H104.1 General. The owner or operator of every travel trailer park, before providing areas of space for the use and accommodation of independent travel trailers, must make application for a permit and file two sets of plans and specifications with the Building Inspection Department. The plans and specifications must be in detail as follows:

1. A scaled plot plan of the park, indicating the spaces, area, or portion of the park for the parking of independent travel and independent trailers.
2. Size, location and specification of the park sanitary drainage system.
3. Size, location and specification of water supply lines and their location.
4. Size, location and layout of service building.
5. Size, location, specification and layout of the fire protection system.
6. A scaled layout of typical trailer sites.
7. Applications must bear the approval of the local enforcement agencies as to compliance with city or county plumbing, zoning and health ordinances.
8. Plumbing required by this article must comply with all city or county plumbing and health ordinances and regulations.
9. The issuance of a permit must not constitute approval of any violation of this article or of any city or county ordinance or regulation.
10. An approved set of plans and a copy of the permit must be kept on the park premises until the final inspection has been made.

H105 SERVICE BUILDINGS

H105.1 Minimum facilities

H105.1.1 Each travel trailer park must have at least one service building to provide necessary sanitation and laundry facilities. Those parks serving independent travel trailers need provide only minimum facilities. However, a service building with adequate laundry facilities and storage locker room is more desirable.

H105.1.2 The service building must be of permanent construction with an interior finish of moisture resistant material which will stand frequent washing and cleaning and the building must be well lighted and ventilated at all times.

H105.2 Independent trailers. The service buildings of independent travel trailer parks only must have a minimum of one laundry tray, one water closet, one lavatory, one shower or bath tub for women and one water closet, one lavatory and one shower or bath tub for men.

H105.3 Dependent trailers. The service buildings in parks that also accommodate dependent travel trailers must have a minimum of one laundry, two water closets, one lavatory, one shower or bath tub for women and one water closet, one urinal, one shower or bath tub for men and one slop-water closet for emptying containers of human waste. The above facilities are for a maximum of ten dependent travel trailers. For every ten additional dependent travel trailers the following additional fixtures must be provided: One laundry and one shower or bath tub for each sex, one water closet for every 10 additional dependent travel trailers for women and one water closet for every 15 additional dependent travel trailers for men.

H105.4 Water supply for fixtures

H105.4.1 Hot and cold water must be provided for all fixtures except water closets. The slop-water closet must be provided with hot and cold water faucets over the bowl in addition to the flushing mechanism (preferably a flushometer valve).

H105.4.2 Each water closet, slop-water closet, tub and shower, must be in separate compartments, with self-closing doors on all water closet compartments. The shower stall must be a minimum of 3 ft x 3 ft in area, with a dressing compartment with a stool or bench for women.

H105.4.3 The laundry trays and washing machines must be contained in a room separate from the toilet rooms.

H105.5 Floor drains. A minimum 3-inch floor drain must be installed in each toilet room and laundry room.

H106 MATERIALS

H106.1 General. Unless otherwise provided for in this Appendix, all piping fixtures or devices used in the installation of sanitary drainage and water supply systems for travel trailer parks, or parts thereof, must conform to the quality and weights of materials required by the Standard Plumbing Code.

H107 GENERAL REGULATIONS

H107.1 General. Unless otherwise provided for in this Appendix, all plumbing fixtures, piping, drains, appurtenances and appliances designed and used in a park sanitary drainage and water supply system and service connections must be installed in conformance with the Standard Plumbing Code.

H108 PARK SANITARY DRAINAGE SYSTEM

H108.1 Separation of sewers and water system. The main sewer and sewer laterals must be installed in a separate trench not less than 5 ft from the park water service or distribution system. See 1205.3 of the Standard Plumbing Code.

H108.2 Minimize size pipe. The minimum size of pipe in any travel trailer park sanitary drainage system must be 4 inches.

H108.3 Minimum design standards. Each travel trailer must be considered as six fixture units in determining discharge requirements in the design of park sanitary drainage and sewage disposal systems.

H108.4 Minimum grade. Minimum grade for sewers must be so designated that the flow will have a mean velocity of 2 ft per second when the pipe is flowing half full.

H108.5 Connection to public sewer. The discharge of a park sanitary drainage system must be connected to a public sewer. Where a public sewer is not available, an individual sewage disposal system must be installed, of a type that is acceptable and approved by the Administrative Authority or other law enforcement agency having jurisdiction over this regulation.

H108.6 Manholes and cleanouts. Manholes and cleanouts must be provided as required in Chapter 7 of the Standard Plumbing Code. Manholes and cleanouts must be accessible and brought to grade.

H108.7 Venting. The main sewer must be provided with a minimum 4-inch vent, not more than 5 ft down stream from its upper trap. Long mains must be provided with additional relief vents at intervals of not more than 200 ft thereafter, if the manhole covers are not of the perforated type. These relief vents must be a minimum of 4 inches and must not be securely supported and extended a minimum of 10 ft above the ground.

H108.8 Branch lines and sewer laterals. Branch lines or sewer laterals to individual travel trailers must not be less than 4-inch diameter.

H108.9 Sewer inlets. Sewer inlets must be 4-inch diameter and extend above grade 3 to 6 inches. Each inlet must be provided with a gas-tight seal when connected to a trailer and have a gas-tight seal when connected to a trailer and have a gas-tight seal plug for use when not in service.

H108.10 Trailer sites. Each trailer site must be provided with a house trap. Sewer laterals over 30 ft from the main park sanitary drainage sewer must be properly vented and provided with a clean out brought to grade.

H108.11. Shortest possible drain connection required. To provide the shortest possible drain connection between the travel trailer outlet and drain inlet, all drain inlets must terminate with reference to the site location of the travel trailer.

H108.12 Drain connections. Drain connection must slope continuously downward and form no traps. All pipe joints and connections must be installed and maintained gas and water tight.

H108.13 Leaks prohibited. No sewage, waste water, or any other effluent must be allowed to be deposited on the surface of the ground.

H108.14 Static water test. Upon completion and before covering the park sanitary drainage system must be subjected to a static water test. The water test must be applied to the drainage system either in its entirety or in sections. If applied to the entire system, all openings in the piping must be tightly closed, except the highest opening, and the system must be filled with water to point of overflow. If the system is tested in sections, each opening must be tightly plugged except the highest opening of the section under test, and each section must be filled with water, but no section must be tested with less than a 10 ft head of water. In testing successive sections at least the upper 10 ft of the next preceding section must be tested, so that no joint or pipe in the system must have been submitted to a test of less than a 10 ft head of water. The water must be kept in the system, or in the portion under test, for at least 15 minutes before inspection starts; the system must then be tight at all points.

H109 WATER DISTRIBUTION SYSTEM

H109.1 General. Every travel trailer site must be provided with an individual branch service line delivering safe, pure, and potable water. The outlet of the branch service line must terminate on the left side of the site of the travel trailer.

H109.2 Minimum size. Water service lines to each trailer site must be sized to provide a minimum of 8 gpm at the point of connection with the trailer distribution system.

H109.3 Backflow and service shutoff.

H109.3.1 A back pressure backflow preventer or reduced pressure principle backflow preventer must be installed on the branch service line to each independent trailer at, or near, the trailer service connection. Backflow preventive devices must be of an approved type certified by a recognized testing agency as to compliance and performance outlined herein. Valves must be designed and maintained to close drip tight at a reduced pressure of not less than 1 nor more than 5 psi. Valves must be identified with the manufacturer's name and model number.

H109.3.2 A separate service shutoff valve must be installed in each branch service line on the supply of the backflow protective device.

H109.4 Service connection. The service connection must be not less than ½-inch diameter; no rigid pipe may be used. Flexible metal tubing is permitted. Fittings at either end must be of a quick disconnect type not requiring any special tools or knowledge to install or remove.

H110 TRAVEL TRAILER CONNECTIONS

H110.1 Responsibility. When it is evident that there exists, or may exist, a violation of these rules, the owner, operator, lessee, person in charge of the park, or any other person causing a violation must cause it to be corrected immediately or disconnect the service connection and travel trailer drain connection from the respective park branch service line and sewer lateral.

H110.2 Drain connections. Travel trailer drain connections must be of approved semi-rigid or flexible reinforced hose having smooth interior surfaces of not less than 3 in inside diameter. Drain connections must be equipped with a standard quick disconnect screw or clamp type fitting, not less in size than the outlet. Drain connections must be gas-tight and no longer than necessary to make the connection between the travel trailer outlet and the trap inlet on the site.

H111 MAINTENANCE

H111.1 General. All devices or safeguards required by this Appendix must be maintained in good working order. The owner, operator, or lessee of the travel trailer park or his designated agent must be responsible for their maintenance.

(44) Appendix I, Manufactured Homes and Manufactured Home Parks, is added to read as follows:

APPENDIX I

MANUFACTURED HOMES AND MANUFACTURED HOME PARKS

I101 PURPOSE, APPLICATION AND SCOPE

I101.1 General. The requirements set forth in this Appendix must apply specifically to all new manufactured home parks, and to additions to existing parks as herein defined, and are to provide minimum standards for sanitation and plumbing installation within these parks, for the accommodation, use and parking of manufactured home. Plumbing installations in manufactured homes must be installed under ANSI A119.2, Part II.

I102 DEFINITIONS

I102.1 Definitions. Definitions contained in Chapter 2 of the Standard Plumbing Code and in Section H102 of Appendix H must also apply to Appendix I, except where the following special definitions must apply:

MANUFACTURED HOME - a vehicular, portable structure built on a chassis and designed to be used as a dwelling without a permanent foundation when connected to indicated utilities per ANSI A119.2.

I103 GENERAL REGULATIONS

I103.1 General. The general provisions of the Standard Plumbing Code must govern the installation of plumbing systems in manufactured home parks, except where special conditions or construction are specifically defined in this Appendix.

I103.2 Requirements for manufactured homes. Manufactured homes must not hereafter be parked in any manufactured home park unless plumbing and sanitation facilities have been installed and maintained in conformity with these regulations. Every manufactured home must provide a gas and watertight connection for sewage disposal which must be connected to an underground sewage collection system discharging into a public or a private disposal system.

I104 PLANS AND SPECIFICATIONS

I104.1 Required plans and specifications. The owner or operator of every manufactured home park, or the plumbing contractor employed by him before providing areas of space for the use and accommodation of independent manufactured homes, must make application for a permit and file two sets of plans and specifications with the Plumbing Official. The plans and specifications must be in detail as follows:

1. A scaled plot plan of the park, indicating the spaces, area or portion of the park for the parking of independent manufactured homes.
2. Size, location and specification of park sanitary drainage system.
3. Size, location and specification of water supply lines.
4. Size, location and layout of service building. See I110.
5. Size, location, specification and layout of the fire protection system.
6. A scaled layout of typical manufactured home sites.

7. Applications must bear the approval of the local enforcement agencies as to compliance with city or county plumbing, zoning and health ordinances.
8. Plumbing required by this Appendix must comply with all city or county plumbing and health ordinances and regulations.
9. The issuance of a permit must not constitute approval of any violation of this Appendix or of any city or county ordinance or regulation.
10. An approved set of plans and a copy of the permit must be kept on the park premises until the final inspection has been made.

I105 MATERIALS

I105.1 General. Unless otherwise provided for in this Appendix, all piping fixtures or devices used in the installation of drainage and water supply systems for manufactured home parks or parts thereof, must conform to the quality and weights of materials by the Standard Plumbing Code.

I106 GENERAL REGULATIONS

I106.1 General. Unless otherwise provided for in this Appendix, all plumbing fixtures, piping, drains, appurtenances and appliances designed and used in a park sanitary drainage and water supply system and service connections must be installed in conformance with the Standard Plumbing Code.

I107 PARK SEWAGE SYSTEM

I107.1 Minimum System

I107.1.1 The main sewer and sewer laterals must be installed in a separate trench not less than 5 ft from the park water service or distribution system. See 1205.3 of the Standard Plumbing Code.

I107.1.2 The minimum size of pipe in any manufactured home park sanitary drainage system must be 4 inches.

I107.1.3 Each manufactured home must be considered as 15 fixture units in determining discharge requirements in the design of park sanitary drainage and sewage disposal systems.

I107.1.4 Minimum grade for sewers must be so designed that the flow will have a mean velocity of 2 ft per second when the pipe is flowing half full.

I107.2 Discharge. The discharge of a park sewage system must be connected to a City's sanitary sewer. Where the sanitary sewer is not available, an individual sewage disposal system must be installed, of a type that is acceptable and approved by the Plumbing Official or other law enforcement agency having jurisdiction over this regulation.

I107.3 Manholes and Cleanouts. Manholes and cleanouts must be provided as required in Chapter 7 of the Standard Plumbing Code. Manholes and cleanouts must be accessible and brought to grade.

I107.4 Inlets. Sewer inlets must be 4-inch diameter and extend above grade 3 to 6 inches. Each inlet must be provided with a gas-tight seal when connected to a manufactured home and have a gas-tight seal plug for use when not in service.

I107.5 Unit Site Requirements

I107.5.1 Each manufactured home site must be provided with a house trap. Sewer laterals over 30 ft from the main park sanitary drainage sewer must be properly vented and provided with a clean out brought to grade.

I107.5.2 To provide the shortest possible drain connection between the manufactured home outlet and drain inlet, and drain inlets must terminate in the rear one-third of the manufactured home as placed on the site.

I107.5.3 Drain connections must slope continuously downward and form no traps. All pipe joints and connections must be installed and maintained gas and water-tight.

I107.5.4 No sewage, waste water, or any other effluent must be allowed to be deposited on the surface of the ground.

I107.6 Testing The System. Upon completion and before covering, the park sanitary drainage system must be subjected to a static water test, and inspected by the plumbing inspection department. The water test must be applied to the drainage system either in its entirety or in sections. If applied to the entire system, all openings in the piping must be tightly closed, except the highest opening, and the system must be filled with water to point of overflow. If the system is tested in sections, each opening must be tightly plugged except the highest opening of the section under test, and each section must be filled with water, but no section must be tested with less than a 10 ft head of water. In testing successive sections, at least the upper 10 ft of the next preceding section must be tested so that no joint or pipe in the system must have been submitted to a test of less than a 10 ft head of water. The water must be kept in the system, or in the portion under test, for at least 15 minutes before inspection starts; the system must then be tight at all points.

I108 WATER SUPPLY SYSTEM

I108.1 Individual branch service line required. Every manufactured home site must be provided with an individual branch service line delivering safe, pure, and potable water. The outlet of the branch service line must terminate on the left side of the site of the manufactured home.

I108.2 Minimum water service line size. Water service lines to each manufactured home site must be sized to provide minimum of 17 gpm at the point of connection with the manufactured home distribution system. The minimum size of branch service line to each site must be 3/4 inch.

I108.3 Back pressure backflow preventer. A back pressure backflow preventer or reduced pressure principle backflow preventer must be installed on the branch service line to each independent manufactured home at, or near, the manufactured home service connection. Backflow preventive devices must be of an approved type certified by a recognized testing agency as to compliance and performance outlined herein.

Valves must be designed and maintained to close drip tight at a reduce pressure of not less than 1 nor more than 5 psi. Valves must be identified with the manufacturer's name and model number.

I108.4 Separate service shutoff valve. A separate service shutoff valve must be installed in each branch line on the supply side of the backflow protective device.

I108.5 Size of service connection. The service connection must not be less than ½-inch diameter; no rigid pipe may be used. Flexible metal tubing is not permitted. Fittings at either end must be of a quick disconnect type not requiring any special tools or knowledge to install or remove.

I108.6 Minimum size of water supply system. The water supply system must be designed to provide a minimum of 150 gallons per day for each manufactured home, plus such additional volume as may be required for fire protection of the park, service buildings and other community facilities.

I109 MANUFACTURED HOME CONNECTIONS

I109.1 Correction required. When it is evident that there exists, or may exist, a violation of these rules, the owner, operator, lessee, person in charge of the park, or any other person causing a violation must cause to be corrected immediately or disconnect the service connections and manufactured home drain connection from the respective park branch service line and sewer lateral.

I109.2 Required drain connections. Manufactured home drain connections must be of approved semi-rigid pipe having smooth interior surfaces of not less than 3-inch inside diameter. Drain connections must be equipped with a standard quick disconnect screw, clamp type fitting, or solvent welder, not less in size than the outlet. Drain connections must be gas-tight and no longer than necessary to make the connection between the manufactured home outlet and the inlet on the site.

I110 SERVICE BUILDINGS

I110.1 Required service building. Each manufactured home park must have at least one service building to provide necessary sanitation and laundry facilities. Those parks serving independent travel trailers need provide only minimum facilities. However, a service building with adequate laundry facilities and storage locker rooms is most desirable.

I110.2 Construction of service building. The service building must be of permanent construction with an interior finish of moisture resistant material which will stand frequent washing and cleaning and the building must be well lighted and ventilated at all time.

I110.3 Minimum fixtures in service building. The service buildings of independent manufactured home parks only must have a minimum of one laundry trap, one water closet, one lavatory, one shower or bathtub for women and one water closet, one lavatory and one shower or bathtub for men.

I110.4 Hot and cold water. Hot and cold water must be provided for all fixtures except water closets. The slop-water closet must be provided with hot and cold water faucets over the bowl in addition to the flushing mechanism.

I110.5 Water closets. Each water closet, slop-water closet, tub and shower, must be in separate compartments, with self-closing doors on all water closet compartments. The shower stall must be a minimum of 3 ft x 3 ft in area, with a dressing compartment with a stool or bench for women.

I110.6 Laundry. The laundry trays and washing machines must be contained in a room separate from the toilet rooms.

I110.7 Minimum floor drain. A minimum 3-inch floor drain must be installed in each toilet room and laundry room.

I111 MAINTENANCE

I111.1 General. All devices or safeguards required by this Appendix must be maintained in good working order. The owner, operator, or lessee of the manufactured home park or his designated agent must be responsible for their, maintenance.