

WCI Wisconsin Contractors Institute

WISCONSIN PLUMBERS | CONTINUING EDUCATION

N27 W23953 Paul Road, Suite 203
Pewaukee, WI 53072

262-293-6850

www.wcittraining.com

PART 3

Plumbing Definitions 101 (Course #12944) • 2 hours

(Approved for 2 hours for Master Plumber, Master Plumber-Restricted, Master Plumber-Restricted Appliance, Journeyman Plumber, Journeyman Plumber-Restricted, Journeyman Plumber – Restricted Appliance, POWTS Inspector, POWTS Maintainer, Soil Tester, UDC-Plumbing Inspector, Utility Contractor, Commercial Plumbing Inspector, and Cross Connection Control Tester.)

DISCLAIMER NOTE: This course is APPROVED by the Wisconsin Department of safety and professional services for continuing education to renew your plumbing license and is not intended to replace or supersede any state or local adopted codes.

Plumbing Definitions 101

Comm 81.01 Definitions. In chs. Comm 81 to 87, except as otherwise specifically defined:

- (1) "Accepted engineering practice" means a specification, standard, guideline or procedure in the field of plumbing or related thereto, generally recognized and accepted as authoritative documented through national standards or specifications.
- (2) "Accessible" when applied to a fixture, appliance, pipe, fitting, valve or equipment, means having access for maintenance, but which first may require the removal of an access panel or similar obstruction.
- (2m) "Accessory building" means a detached building, not used as a dwelling unit but is incidental to that of the dwelling.
- (3) "Aerobic treatment component" means a unit for the treatment of wastewater that utilizes the principle of oxidation for biological decomposition.
- (4) "Agent" means an individual or agency recognized by the department to act on the department's behalf relative to a specific activity or function.
- (5) "Air-break" means a piping arrangement for a drain system where the wastes from a fixture, appliance, appurtenance or device discharge by means of indirect or local waste piping terminating in a receptor at a point below the flood level rim of the receptor and above the outlet of the trap serving the receptor.
- (6) "Air-gap, drain system" means the unobstructed vertical distance through the free atmosphere between the outlet of indirect or local waste piping and the flood level rim of the receptor into which it discharges.
- (7) "Air-gap, water supply system" means the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank or plumbing fixture and the flood level rim or spill level of the receptacle.
- (7e) "Alternate plumbing system" means a type of plumbing system designed in such a manner that valid and reliable data shall demonstrate to the department that the plumbing system is in compliance with the intent of chs. Comm 81 to 84.
- (7m) "Ambulatory surgery center" means a health care facility that accepts federal funding in accordance with 42 CFR 416 of the federal register for health care finance and where 4 or more individuals that undergo a surgical procedure for which federal reimbursement is based.
- (8) "Anaerobic treatment component" means a unit for the treatment of wastewater which utilizes molecular oxygen in the absence of free oxygen for biological respiration and decomposition.
- (9) "Approved" means acceptance documented in writing by the department.
- (10) "Appurtenance" means a manufactured device or prefabricated assembly of component parts which is an adjunct to a plumbing product or plumbing system.

Part 3 Exam Questions:

1. **“Accessory building” means an attached building used as a dwelling unit.**
 - a. True
 - b. False

2. _____ means a piping arrangement for a drain system where the wastes from a fixture, appliance, appurtenance or device discharge by means of indirect or local waste piping terminating in a receptor at a point below the flood level rim of the receptor and above the outlet of the trap serving the receptor.
 - a. Air-break
 - b. Air-gap, drain system
 - c. Air-gap, water supply system
 - d. Alternative plumbing system

3. _____ means the unobstructed vertical distance through the free atmosphere between the lowest opening from any pipe or faucet supplying water to a tank or plumbing fixture and the flood level rim or spill level of the receptacle.
 - a. Air-break
 - b. Air-gap, drain system
 - c. Air-gap, water supply system
 - d. Alternative plumbing system

4. _____ means a type of plumbing system designed in such a manner that valid and reliable data shall demonstrate to the department that the plumbing system is in compliance with the intent of chs. Comm 81 to 84.
 - a. Air-break
 - b. Air-gap, drain system
 - c. Air-gap, water supply system
 - d. Alternative plumbing system

5. _____ means the unobstructed vertical distance through the free atmosphere between the outlet of indirect or local waste piping and the flood level rim of the receptor into which it discharges.
 - a. Air-break
 - b. Air-gap, drain system
 - c. Air-gap, water supply system
 - d. Alternative plumbing system

6. **“Approved” means acceptance documented in writing by the department.**
 - a. True
 - b. False

(11) **“Area drain”** means a receptor designed to collect storm waters from an open area.

(12) **“Areawide water quality management plan”** means those plans prepared by the department of natural resources, including those plans prepared by agencies designated by the governor under the authority of ss. 281.11, 281.12 (1), 281.15, and 283.83, Stats., for the purpose of managing, protecting and enhancing groundwater and surface water of the state.

Note: See ch. Comm 82 Appendix for a list of water quality management agencies and their addresses.

(13) **“Aspirator”** means a fitting or device supplied with water or other fluid under positive pressure which passes through an integral orifice or constriction causing a vacuum.

(14) **“Autopsy table”** means a fixture or table used for post– mortem examination.

(15) **“Automatic fire sprinkler system”** has the meaning specified under s. 145.01 (2), Stats.

Note: Section 145.01 (2), Stats., reads: **“Automatic fire sprinkler system”**, for fire protection purposes, means an integrated system of underground and overhead piping designed in accordance with fire protection engineering

standards. The system includes a suitable water supply, such as a gravity tank, fire pump, reservoir or pressure tank or connection beginning at the supply side of an approved gate valve located at or near the property line where the pipe or piping system provides water used exclusively for fire protection and related appurtenances and to standpipes connected to automatic sprinkler systems. The portion of the sprinkler system above ground is a network of specially sized or hydraulically designed piping installed in a building, structure or area, generally overhead, and to which sprinklers are connected in a systematic pattern. The system includes a controlling valve and a device for actuating an alarm when the system is in operation. The system is usually activated by heat from a fire and discharges water over the fire area.

(16) "Backflow" means the unwanted reverse flow of liquids, solids or gases.

(17) "Back pressure" means a pressure greater than the supply pressure that may cause backflow.

(17e) "Backflow preventer" means any generic backflow prevention device or assembly.

(18) "Backflow preventer with intermediate atmospheric vent" means a type of cross connection control device which consists of 2 independently acting check valves, internally force-loaded to a normally closed position and separated by an intermediate chamber with a means for automatically venting to atmosphere where the venting means is internally force-loaded to a normally open position. The terms "backflow preventer" or "dual check valve type with atmospheric port backflow preventer" has the same meaning as backflow preventer with intermediate atmospheric vent.

(19) "Back siphonage" means the creation of a backflow as a result of negative pressure.

Part 3 Exam Questions:

7. "Aspirator" means a fitting or device supplied with water or other fluid under _____ pressure which passes through an integral orifice or constriction causing a vacuum.
 - a. Negative
 - b. Positive
 - c. No
 - d. None of the above
8. _____ means the creation of a backflow as a result of negative pressure.
 - a. Area drain
 - b. Backflow
 - c. Back pressure
 - d. Back siphonage
9. _____ means the unwanted reverse flow of liquids, solids or gases.
 - a. Area drain
 - b. Backflow
 - c. Back pressure
 - d. Back siphonage
10. "Backflow" means the unwanted reverse flow of liquids, solids or gases.
 - a. True
 - b. False
11. _____ means a receptor designed to collect storm waters from an open area.
 - a. Area drain
 - b. Backflow
 - c. Back pressure
 - d. Back siphonage
12. _____ means a pressure greater than the supply pressure that may cause backflow.
 - a. Area drain
 - b. Backflow
 - c. Back pressure
 - d. Back siphonage

- (21) "Backwater valve" means a device designed to prevent the reverse flow of wastewater in a drain system.
- (22) "Ballcock" means a water supply valve opened or closed by means of a float or similar device used to supply water to a tank.
- (23) "Bathroom group" means a water closet, lavatory and a bathtub or shower located together on the same floor level.
- (24) "Battery of fixtures" means any group of 2 or more fixtures that discharge into the same horizontal branch drain.
- (25) "Bedpan sterilizer" means a fixture used for sterilizing bedpans or urinals by direct application of steam, boiling water or chemicals.
- (26) "Bedpan washer and sanitizer" means a fixture designed to wash bedpans and to flush the contents into the sanitary drain system and which may also provide for disinfecting utensils by scalding with steam or hot water.
- (27) "Bedpan washer hose" means a device supplied with hot or cold water, or both, and located adjacent to a water closet or clinical sink to be used for cleansing bedpans.
- (28) "Bedrock" means rock that is exposed at the earth's surface or underlies soil material and includes:
- Weathered in-place consolidated material, larger than 2 mm in size and greater than 50% by volume; and
 - Weakly consolidated sandstone at the point of increased resistance to penetration of a knife blade.
- (29) "Bell" means the portion of a pipe that is enlarged to receive the end of another pipe of the same diameter for the purpose of making a joint.
- (30) "Bench mark" or "BM" means a permanently established point, the elevation of which is assumed or known, which serves as a vertical reference point, and which may also serve as a horizontal reference point.

Part 3 Exam Questions:

13. "Battery of fixtures" means any group of ___ or more fixtures that discharge into the same horizontal branch drain.
- 1
 - 2
 - 3
 - 4
14. _____ means a water closet, lavatory and a bathtub or shower located together on the same floor level.
- Backwater valve
 - Ballcock
 - Bathroom group
 - Bell
15. _____ means a device designed to prevent the reverse flow of wastewater in a drain system.
- Backwater valve
 - Ballcock
 - Bathroom group
 - Bell
16. _____ means a water supply valve opened or closed by means of a float or similar device used to supply water to a tank.
- Backwater valve
 - Ballcock
 - Bathroom group
 - Bell
17. _____ means the portion of a pipe that is enlarged to receive the end of another pipe of the same diameter for the purpose of making a joint.
- Backwater valve
 - Ballcock
 - Bathroom group
 - Bell
18. _____ means a device supplied with hot or cold water, or both, and located adjacent to a water closet or clinical sink to be used for cleansing bedpans.
- Bedpan sterilizer
 - Bedpan washer and sanitizer
 - Bedpan washer hose
 - None of the above

(31) "Blackwater" means wastewater contaminated by human body waste, toilet paper and any other material intended to be deposited in a receptor designed to receive urine or feces.

(32) "BOD5" or "biochemical oxygen demand 5 day" means a measure of the amount of biodegradable organic matter in water.

(33) "Boiler blow-off basin" means a vessel designed to receive the discharge from a boiler blow-off outlet and to cool the discharge to a temperature that permits safe entry into the drain system.

(34) "Branch" means a part of a piping system other than a riser, main or stack.

(35) "Branch interval" means a vertical measurement of distance, 8 feet or more in length, between the connections of horizontal branches to a drainage stack.

Note: See ch. Comm 82 Appendix for explanatory material.

(35m) "Branch tailpiece" means a fitting consisting of a combination tail piece and a wye.

(36) "Branch vent" means a vent serving more than one fixture drain.

(37) "B.T.U." means British Thermal Units.

(38) "Building" means a structure for support, shelter or enclosure of persons or property.

(39) "Building drain" means horizontal piping within or under a building, installed below the lowest fixture or the lowest floor level from which fixtures can drain by gravity to the building sewer.

(40) "Building drain branch" means a fixture drain which is individually connected to a building drain and is vented by means of a combination drain and vent system.

Part 3 Exam Questions:

19. B.T.U means
- Boiling Thermal Units
 - British Thermal Units
 - Building Thermal Units
 - None of the above
20. _____ means wastewater contaminated by human body waste, toilet paper and any other material intended to be deposited in a receptor designed to receive urine or feces.
- Building drain
 - Branch vent
 - Branch
 - Blackwater
21. _____ means horizontal piping within or under a building, installed below the lowest fixture or the lowest floor level from which fixtures can drain by gravity to the building sewer.
- Building drain
 - Branch vent
 - Branch
 - Blackwater
22. _____ means a vent serving more than one fixture drain.
- Building drain
 - Branch vent
 - Branch
 - Blackwater
23. _____ means a part of a piping system other than a riser, main or stack.
- Building drain
 - Branch vent
 - Branch
 - Blackwater
24. "Branch interval" means a vertical measurement of distance, ____ feet or more in length, between the connections of horizontal branches to a drainage stack.
- 6
 - 7
 - 8
 - 9

- (41) "Building drain, sanitary" means a building drain which conveys wastewater consisting in part of domestic wastewater.
- (42) "Building drain, storm" means a building drain which conveys storm water, clear water, or both.
- (43) "Building permit" means any written permission from a municipality that allows construction to commence on a structure.
- (44) "Building sewer" means that part of the drain system not within or under a building which conveys its discharge to a public sewer, private interceptor main sewer, private onsite wastewater treatment system or other point of discharge or dispersal.
- (45) "Building sewer, sanitary" means a building sewer which conveys wastewater consisting in part of domestic wastewater.
- (46) "Building sewer, storm" means a building sewer which conveys storm water, clear water, or both.
- (47) "Building subdrain" means the horizontal portion of a drain system which does not flow by gravity to the building sewer.
- (48) "Building subdrain branch" means a fixture drain which is individually connected to a building subdrain and is vented by means of a combination drain and vent system.
- (49) "Burr" means a roughness or metal protruding from the walls of a pipe usually as the result of cutting the pipe.
- (50) "Business establishment" means any industrial or commercial organization or enterprise operated for profit, including but not limited to a proprietorship, partnership, firm, business trust, joint venture, syndicate, corporation or association.

Part 3 Exam Questions:

25. _____ means a building drain which conveys storm water, clear water, or both.
- Building drain, storm
 - Building sewer, sanitary
 - Burr
 - None of the above
26. _____ means a building sewer which conveys wastewater consisting in part of domestic wastewater.
- Building drain, storm
 - Building sewer, sanitary
 - Burr
 - None of the above
27. _____ means a roughness or metal protruding from the walls of a pipe usually as the result of cutting the pipe.
- Building drain, storm
 - Building sewer, sanitary
 - Burr
 - None of the above
28. _____ means a building sewer which conveys storm water, clear water, or both.
- Building sewer
 - Building sewer, storm
 - Building drain, sanitary
 - None of the above
29. _____ means that part of the drain system not within or under a building which conveys its discharge to a public sewer, private interceptor main sewer, private onsite wastewater treatment system or other point of discharge or dispersal.
- Building sewer
 - Building sewer, storm
 - Building drain, sanitary
 - None of the above
30. _____ means a building drain which conveys wastewater consisting in part of domestic wastewater.
- Building sewer
 - Building sewer, storm
 - Building drain, sanitary
 - None of the above

(51) "Camping unit transfer container" means a type of stationary holding tank used to collect and hold wastewater discharges generated by an individual camping trailer or recreational vehicle.

(51m) "Campsite receptor" means the vertical drain piping and trap combination that receives wastewater from recreational vehicles.

(52) "Catch basin" means a watertight receptacle built to arrest sediment of surface, subsoil or other waste drainage, and to retain oily or greasy wastes, so as to prevent their entrance into the building drain or building sewer.

(53) "Cesspool" means an excavation which receives domestic wastewater by means of a drain system without pretreatment of the wastewater and retains the organic matter and solids permitting the liquids to seep from the excavation.

(54) "Circuit vent" means a method of venting 2 to 8 traps or trapped fixtures without providing an individual vent for each trap or fixture.

(55) "Cleanout" means an accessible opening in a drain system used for the removal of obstructions.

(56) "Clear water" means wastewater other than storm water, having no impurities or where impurities are below a minimum concentration considered harmful by the department, including but not limited to noncontact cooling water and condensate drainage from refrigeration compressors and air conditioning equipment, drainage of water used for equipment chilling purposes and cooled condensate from steam heating systems or other equipment.

(56e) "Clinic sink" means a fixture having an integral trap and a flushing rim so that water cleanses the interior surface.

Note: This fixture has flushing and cleansing characteristics similar to a water closet. A clinic sink may also be referred to as a clinic service sink, a bedpan washing sink or a flushing rim sink.

(57) "Cold water" means water at a temperature less than 85°F.

(58) "Combination fixture" means a fixture combining one sink and laundry tray or a 2- or 3-compartment sink or laundry tray in one unit.

(59) "Combination drain and vent system" means a specially designed system of drain piping embodying the wet venting of one or more fixtures by means of a common drain and vent pipe adequately sized to provide free movement of air in the piping.

(59m) "Combination private water main" means a private water main that serves a fire protection system and any number of plumbing fixtures.

(59s) "Combination water service" means a water service that serves a fire protection system and any number of plumbing fixtures.

(60) "Common vent" means a branch vent connecting at or downstream from the junction of 2 fixture drains and serving as a vent for those fixture drains.

Part 3 Exam Questions:

31. "Circuit vent" means a method of venting 2 to 8 traps or trapped fixtures without providing an individual vent for each trap or fixture.
- True
 - False

32. _____ means an accessible opening in a drain system used for the removal of obstructions.
- Catch basin
 - Cleanout
 - Combination water service
 - Common vent

33. _____ means a water service that serves a fire protection system and any number of plumbing fixtures.
- Catch basin
 - Cleanout
 - Combination water service
 - Common vent
34. _____ means a branch vent connecting at or downstream from the junction of 2 fixture drains and serving as a vent for those fixture drains.
- Catch basin
 - Cleanout
 - Combination water service
 - Common vent
35. _____ means a watertight receptacle built to arrest sediment of surface, subsoil or other waste drainage, and to retain oily or greasy wastes, so as to prevent their entrance into the building drain or building sewer.
- Catch basin
 - Cleanout
 - Combination water service
 - Common vent
36. "Cold water" means water at a temperature less than _____ F.
- 70 degrees
 - 75 degrees
 - 80 degrees
 - 85 degrees

(60e) "Community-based residential facility" has the meaning specified under s. 50.01 (1g), Stats.

Note: Section 50.01 (1g), Stats., reads: "Community-based residential facility" means a place where 5 or more adults who are not related to the operator or administrator and who do not require care above intermediate level nursing care reside and receive care, treatment or services that are above the level of room and board but that include no more than 3 hours of nursing care per week per resident. "Community-based residential facility" does not include any of the following:

- A convent or facility owned or operated by members of a religious order exclusively for the reception and care or treatment of members of that order.
- A facility or private home that provides care, treatment and services only for victims of domestic abuse, as defined in s. 46.95 (1) (a), Stats., and their children.
- A shelter facility as defined under s. 560.9808 (1) (d), Stats.
- A place that provides lodging for individuals and in which all of the following conditions are met:
 - Each lodged individual is able to exit the place under emergency conditions without the assistance of another individual.
 - No lodged individual receives from the owner, manager or operator of the place or the owner's, manager's or operator's agent or employee any of the following:
 - Personal care, supervision or treatment, or management, control or supervision of prescription medications.
 - Care or services other than board, information, referral, advocacy or job guidance; location and coordination of social services by an agency that is not affiliated with the owner, manager or operator, for which arrangements were made for an individual before he or she lodged in the place; or, in the case of an emergency, arrangement for the provision of health care or social services by an agency that is not affiliated with the owner, manager or operator.
- An adult family home.
- A residential care apartment complex.
- A residential facility in the village of Union Grove that was authorized to operate without a license under a final judgment entered by a court before January 1, 1982, and that continues to comply with the judgment notwithstanding the expiration of the judgment.

(61) "Conductor" means a drain pipe inside the building which conveys storm water from a roof to the storm drain or storm sewer.

(61m) "Containment" means the installation of a cross connection control method, device or assembly to prohibit the flow of contamination from a building or facility into a water supply system.

(62) "Contaminant load" means the concentrations of substances in a wastewater stream.

(62e) "Containment tank" means a device with a valved outlet designed to temporarily hold potentially hazardous wastewater for evaluation before discharging to a POWTS or municipal sewer.

(62m) "Continuous pressure" means a pressure greater than atmospheric and exerted for a period of more than 12 continuous hours.

(62s) "Conveyance system" means that portion of a drain system that consists of a series of pipes that transport water from one area to another without providing detention.

(63) "Corporation cock" means a valve:

- (a) Installed in a private water main or a water service at or near the connection to a public water main; or
- (b) Installed in the side of a forced main sewer to which a forced building sewer is connected.

(64) "Critical level" means the reference point on a vacuum breaker that must be submerged before backflow can occur. When the critical level is not indicated on the vacuum breaker, the bottom of the vacuum breaker shall be considered the critical level.

(65) "Cross connection" means a connection or potential connection between any part of a water supply system and another environment containing substances in a manner that, under any circumstances, would allow the substances to enter the water supply system by means of back siphonage or back pressure.

(65m) "Cross connection control assembly" means a testable backflow preventer consisting of an arrangement of components.

(66) "Cross connection control device" means any mechanical device which automatically prevents backflow from a contaminated source into a potable water supply system.

(67) "Curb stop" means a valve placed in a water service or a private water main, usually near the lot line.

(68) "Dead end" means a branch leading from a drain pipe, vent pipe, building drain or building sewer and terminating at a developed length of 2 feet or more by means of a plug, cap or other closed fitting.

(69) "Department" means the department of commerce.

Part 3 Exam Questions:

37. "Continuous pressure" means a pressure greater than atmospheric and exerted for a period of more than ____ continuous hours.

- a. 6
- b. 9
- c. 12
- d. 24

38. "Design wastewater flow" means _____ of the estimated wastewater flow generated by a dwelling, building or facility.

- a. 50%
- b. 75%
- c. 100%
- d. 150%

39. _____ means a valve placed in a water service or a private water main, usually near the lot line.
- Conductor
 - Contaminant load
 - Curb stop
 - Detention
40. _____ means the collection and temporary storage of water for subsequent gradual discharge.
- Conductor
 - Contaminant load
 - Curb stop
 - Detention
41. _____ means a drain pipe inside the building which conveys storm water from a roof to the storm drain or storm sewer.
- Conductor
 - Contaminant load
 - Curb stop
 - Detention
42. _____ means the concentrations of substances in a wastewater stream.
- Conductor
 - Contaminant load
 - Curb stop
 - Detention

(70) "Design wastewater flow" means 150% of the estimated wastewater flow generated by a dwelling, building or facility.

(70m) "Detention" means the collection and temporary storage of water for subsequent gradual discharge.

(71) "Determination of failure" has the meaning specified under s. 145.245 (1) (a), Stats.

Note: Section 145.245 (1) (a), Stats., reads:

"Determination of failure" means any of the following:

1. A determination that a private sewage system is failing, according to the criteria under sub. (4), based on an inspection of the private sewage system by an employee of the state or a governmental unit who is certified to inspect private sewage systems by the department.
2. A written enforcement order issued under s. 145.02 (3) (f), 145.20 (2) (f) or 281.19 (2).
3. A written enforcement order issued under s. 254.59 (1) by a governmental unit.

(72) "Developed length" means the length of pipe line measured along the centerline of the pipe and fittings.

(72e) "Dfu" means drainage fixture unit.

(73) "Diameter" means in reference to a pipe the nominal inside diameter of the pipe.

(74) "Disinfection unit" means a type of POWTS treatment component, excluding a soil-based POWTS treatment component, that utilizes a chemical or photoelectric process to reduce the wastewater fecal coliform contaminant load.

(75) "Dispersal zone" means a dimensional volume of in situ soil that receives wastewater for treatment or distributes final effluent for dispersal.

(76) "Distribution cell" means a dimensional zone that is part of a POWTS treatment or dispersal component where wastewater is disseminated into in situ soil or engineered soil.

(77) "Documented data" means data which is developed in accordance with scientifically valid analytical protocols including field trials where appropriate, is subjected to peer review, results from more than one study, and consistent with other credible research.

(78) "Domestic wastewater" means the type of wastewater, not including storm water, normally discharged from or similar to that discharged from plumbing fixtures, appliances and devices including, but not limited to sanitary, bath, laundry, dishwashing, garbage disposal and cleaning wastewaters.

(79) “Double check backflow prevention assembly” means a type of cross connection control assembly which is composed of 2 independently acting check valves internally force-loaded to a normally closed position, tightly closing shut-off valves located at each end of the assembly and fitted with test cocks. The term “double check valve backflow preventer” has the same meaning as double check backflow prevention assembly.

(80) “Double check detector fire protection backflow preventer– assembly” means an assembly serving a fire protection system and consisting of 2 independently acting check valves, internally forced loaded to a normally closed position, 2 tightly closing shut-off valves, and properly located test cocks which also includes a parallel flow meter to indicate leakage or unauthorized use of water downstream of the assembly.

Part 3 Exam Questions:

43. “Dfu” means:
- Drainage fixture unit
 - Drainage flood unit
 - Drainage failure unit
 - None of the above
44. “Diameter” means in reference to a pipe the nominal _____ diameter of the pipe.
- Outside
 - Inside
 - Both a & b
 - None of the above
45. _____ means the length of pipe line measured along the centerline of the pipe and fittings.
- Distribution cell
 - Dispersal zone
 - Disinfection unit
 - Developed length
46. _____ means a dimensional zone that is part of a POWTS treatment or dispersal component where wastewater is disseminated into in situ soil or engineered soil.
- Distribution cell
 - Dispersal zone
 - Disinfection unit
 - Developed length
47. _____ means a type of POWTS treatment component, excluding a soil-based POWTS treatment component, that utilizes a chemical or photoelectric process to reduce the wastewater fecal coliform contaminant load.
- Distribution cell
 - Dispersal zone
 - Disinfection unit
 - Developed length
48. _____ means a dimensional volume of in situ soil that receives wastewater for treatment or distributes final effluent for dispersal.
- Distribution cell
 - Dispersal zone
 - Disinfection unit
 - Developed length

(80m) “Double check fire protection backflow prevention assembly” means an assembly serving a fire protection system and consisting of 2 independently acting check valves, internally forced loaded to a normally closed position, 2 tightly closing shut-off valves, and properly located test cocks. The term “double check valve backflow preventer for fire protection systems” has the same meaning as double check fire protection backflow prevention assembly.

(81) “Drain” means any pipe that carries wastewater or water-borne wastes.

(82) "Drain system" includes all the piping or any portion of the piping within public or private premises which conveys wastewater to a legal point of disposal, but does not include the mains of public sewer systems or a private onsite wastewater treatment system or public sewage treatment or disposal plant.

(82e) "Dual check backflow preventer wall hydrant–freeze resistant type" means a type of hose bibb that provides protection of the potable water supply from contamination due to backsiphonage or backpressure without damage to the device due to freezing, and is field testable to verify protection under the high hazard conditions present at a hose threaded outlet.

(82m) "Dual check valve type with atmospheric port backflow preventer" has the same meaning as specified in sub. (18).

(83) "Dwelling" means a structure, or that part of a structure, which is used or intended to be used as a home, residence or sleeping place by one person or by 2 or more persons maintaining a common household, to the exclusion of all others.

(84) "Effluent" means liquid discharged from a process, device, appurtenance or piping system.

(85) "Ejector" means an automatically operated device to elevate pressure.

(86) "Elevation" or "EL" means the vertical distance from the datum to a point under investigation.

(87) "Enforcement standard" or "ES" has the meaning specified under s. 160.01 (2), Stats.

Note: Section 160.01 (2), Stats., reads:

"Enforcement standard" means a numerical value expressing the concentration of a substance in groundwater which is adopted under ss. 160.07 and 160.09.

(88) "Engineered soil" means a mineral product that is equivalent to in situ soil for which treatment capability has been credited under Table 83.44–3, or superior to in situ soil in its ability to treat or disperse domestic wastewater from a POWTS.

(89) "Engineered system" means a system designed to meet the intent of the code but not the enumerated specifications of the state plumbing code.

(90) "Estimated wastewater flow" means the typical quantity of domestic wastewater generated daily by a dwelling, building or facility.

(90e) "Experimental plumbing system" has the same meaning as experimental system as specified in sub. (91).

(90m) "Exam sink" means a plumbing fixture used for hand washing in health care and related facilities.

Note: An exam sink may also be referred to as a treatment sink.

Part 3 Exam Questions:

49. _____ means the typical quantity of domestic wastewater generated daily by a dwelling, building or facility.

- Drain
- Estimated wastewater flow
- Engineered system
- None of the above

50. _____ means any pipe that carries wastewater or water–borne wastes.

- Drain
- Estimated wastewater flow
- Engineered system
- None of the above

51. _____ means a system designed to meet the intent of the code but not the enumerated specifications of the state plumbing code.

- a. Drain
- b. Estimated wastewater flow
- c. Engineered system
- d. None of the above

52. _____ means an automatically operated device to elevate pressure.

- a. Effluent
- b. Ejector
- c. Elevation
- d. None of the above

53. _____ means the vertical distance from the datum to a point under investigation.

- a. Effluent
- b. Ejector
- c. Elevation
- d. None of the above

54. _____ means liquid discharged from a process, device, appurtenance or piping system.

- a. Effluent
- b. Ejector
- c. Elevation
- d. None of the above

(91) "Experimental system" means a type of plumbing system from which valid and reliable data are being sought to demonstrate compliance with the intent of chs. Comm 82 to 84.

(92) "Failing private onsite wastewater treatment system" has the meaning specified under s. 145.245 (4), Stats.

Note: Section 145.245 (4) reads:

"Failing private sewage system" means a private sewage system which causes or results in any of the following conditions:

- (a) The discharge of sewage into surface water or groundwater.
- (b) The introduction of sewage into zones of saturation which adversely affects the operation of a private sewage system.
- (c) The discharge of sewage to a drain tile or into zones of bedrock.
- (d) The discharge of sewage to the surface of the ground.
- (e) The failure to accept sewage discharges and backup of sewage into the structure served by the private sewage system.

(93) "Farm" means a parcel of 35 or more acres of contiguous land that is devoted primarily to agricultural use, as defined under s. 91.01 (1) and (5), Stats.

Note: Section 91.01 (1) and (5), Stats., read:

- (1) "Agricultural use" means beekeeping; commercial feedlots; dairying; egg production; floricultural; fish or fur farming; forest and game management; grazing; livestock raising; orchards; plant greenhouses and nurseries; poultry raising; raising of grain, grass, mint and seed crops; raising of fruits, nuts and berries; sod farming; placing land in federal programs in return for payment in kind; owning land, at least 35 acres of which is enrolled in the conservation reserve program under 16 USC 3831 to 3836; participating in the milk production termination program under 7 USC 1446 (d); and vegetable raising. (5) "Devoted primarily to agricultural use" means under agricultural use for at least 12 consecutive months during the preceding 36-month period.

(94) "Faucet" means a valve end of a water pipe by means of which water can be drawn from or held within the pipe.

(95) "Final effluent" means the effluent from the last POWTS treatment component.

(96) "Fixture drain" means the drain from a fixture to a junction with another drain pipe.

(97) "Fixture supply" means that portion of a water distribution system serving one plumbing fixture, appliance or piece of equipment.

(98) "Fixture supply connector" means that portion of water supply piping which connects a plumbing fixture, appliance or a piece of equipment to the water distribution system.

(99) "Fixture unit, drainage" or "dfu" means a measure of the probable discharge into the drain system by various types of plumbing fixtures. The drainage fixture unit value for a particular fixture depends on its volume rate of drainage discharge, on the time duration of a single drainage operation, and on the average time between successive operations.

(100) "Fixture unit, supply" or "sfu" means a measure of the probable hydraulic demand on the water supply by various types of plumbing fixtures.

Note: The supply fixture unit value for a particular fixture depends on its volume rate of supply, on the time duration of a single supply operation, and on the average time between successive operations.

Part 3 Exam Questions:

55. "Failing private sewage system" means a private sewage system which causes or results in the following:
- The discharge of sewage into surface water or groundwater
 - The discharge of sewage to a drain tile or into zones of bedrock
 - The discharge of sewage to the surface of the ground
 - Any of the above
56. Farm means a parcel of _____ or more acres of contiguous land that is devoted primarily to agricultural use.
- 20
 - 25
 - 30
 - 35
57. _____ means the drain from a fixture to a junction with another drain pipe.
- Faucet
 - Fixture drain
 - Fixture supply
 - Final effluent
58. _____ means the effluent from the last POWTS treatment component.
- Faucet
 - Fixture drain
 - Fixture supply
 - Final effluent
59. _____ means that portion of a water distribution system serving one plumbing fixture, appliance or piece of equipment.
- Faucet
 - Fixture drain
 - Fixture supply
 - Final effluent
60. _____ means a valve end of a water pipe by means of which water can be drawn from or held within the pipe.
- Faucet
 - Fixture drain
 - Fixture supply
 - Final effluent