

**Course: 8299 POWTS INGROUND 150 QUIZ**

**This course is valid for these credentials:**

<b>Credential Description</b>	<b>Cred Code</b>	<b>Credit Hours</b>
Journeyman Plumber	PJ	12.0
Journeyman Plumber-Restricted Service	PJRS	12.0
Master Plumber	PM	12.0
Master Plumber-Restricted Service	PMRS	12.0
POWTS Inspector	PI	12.0
POWTS MAINTAINER	PO	12.0
Soil Tester	ST	12.0

Instructions:

[www.garyklinka.com](http://www.garyklinka.com)

1. Print these pages.
2. Circle the correct answers.
3. Page down to the last page for the verification forms and mailing instructions.
4. Print the manual for this course [Click here](#)

I. INTRODUCTION AND SPECIFICATIONS

1. This Private Onsite Wastewater Treatment System (POWTS) component manual provides design, construction, inspection, operation, and maintenance specifications for an in-ground soil absorption component. However, these items must accompany a properly prepared and reviewed plan acceptable to the governing unit to help provide a system that can be installed and function properly.  
  
A. True  
B. False
2. Violations of this manual constitute a violation of SPS 382.  
  
A. True  
B. False
3. The in-ground soil absorption component must receive influent flows and loads less than or equal to those specified in Table 1.  
  
A. True  
B. False
4. Final effluent characteristics will comply with SPS 383.41, Wis. Adm. Code when inputs are within the range specified in Tables 1 to 3.  
  
A. True  
B. False

Use Table 1 for questions 5-11

5. The abbreviation “DWF” stands for? \_\_\_\_\_
6. The abbreviation “FOG” stands for? \_\_\_\_\_
7. The abbreviation “BOD” stands for? \_\_\_\_\_
8. The abbreviation “TSS” stands for? \_\_\_\_\_
9. Monthly average value of five day BOD is  $\leq 220$  mg/L
  - A. True
  - B. False
10. Volume of a single dose to soil absorption component when effluent is delivered to a nonpressure distribution system is  $> 20\%$  of the design wastewater flow?
  - A. True
  - B. False
11. Distribution cell area per orifice when pressure distribution system is used is  $\leq 12$  sq ft.
  - A. True
  - B. False

Use Table 2 for questions 12-16

12. The minimum area of distribution cell is  $\geq$  Design wastewater flow  $\div$  soil application rate for the in situ soil at the infiltrative surface or a lower horizon if the lower horizon adversely affects the dispersal of wastewater in accordance with SPS 383.44 (4) (a) and (c)
  - A. True
  - B. False
13. Distribution cell width  $\geq 2$  foot and  $\leq 6$  feet
  - A. True
  - B. False
14. Distribution cell depth  $\geq 12$  inches + nominal size of distribution pipe
  - A. True
  - B. False
15. Depth of cover over top of distribution cell  $\geq 24$  inches
  - A. True
  - B. False

16. Depth of cover over top of distribution cell measured from in situ soil surface  $\geq 0$  inches

- A. True
- B. False

Use Table 3 for questions 17-48

17. Vertical separation between distribution cell and seasonal saturation defined by redoximorphic features, groundwater, or bedrock shall be  $\geq$  Equal to depth required by SPS 383 Table 383.44-3, Wis. Adm. Code

- A. True
- B. False

18. Bottom of distribution cell shall be Level

- A. True
- B. False

19. Horizontal separation between distribution cells shall be  $\geq 3$  inches.

- A. True
- B. False

20. The distance between bottom of distribution lateral and in situ soil when stone aggregate is used shall be  $\geq 6$  inches.

- A. True
- B. False

21. The distance between top of distribution lateral and geotextile fabric when stone aggregate is used shall be  $\geq 2$  ft.

- A. True
- B. False

22. The distribution cell stone aggregate material must meet the requirements of SPS 384.30 (6) (i), Wis. Adm. Code for stone aggregate.

- A. True
- B. False

23. Piping material in the distribution system must meet the requirements of SPS 384.30 (2), Wis. Adm. Code for its intended use.

- A. True
- B. False

24. Piping material for observation, vent, and observation/vent pipes must meet the requirements of SPS 384.30 Table 384.30-1, Wis. Adm. Code.

- A. True
- B. False

25. Leaching chamber must meet the requirements of SPS 384.30 (6) (h), Wis. Adm. Code.

- A. True
- B. False

26. Geotextile fabric cover over distribution cell when stone aggregate is used Geotextile fabric must meet the requirement of SPS 384.30 (6) (g), Wis. Adm. Code.

- A. True
- B. False

27. The location of gravity flow perforated distribution pipe in distribution cell must be centered in the length of the cell or equally spaced in the length of the cell.

- A. True
- B. False

28. Location of leaching chambers in distribution cell Located as follows:

- A. Single row of chambers that are in contact with the soil of the distribution cell walls, or
- B. Multiple rows of chambers that are in contact with each other and have the outside sides in contact with the soil of the distribution cell walls.
- C. None of the above
- D. Both A and B

29. The length of distribution pipe for components using stone aggregate and gravity flow distribution must be < Equal to length of distribution cell minus 6 feet.

- A. True
- B. False

30. The distance between distribution pipe end orifice and end of distribution cell for components using stone aggregate and gravity flow distribution must be  $\geq 3$  feet.

- A. True
- B. False

31. Length of leaching chamber row the chamber must extend to end walls of distribution cell.

- A. True
- B. False

32. Location of observation pipes must be at opposite ends of the distribution cell, and 1/5 to 1/10 the length of the distribution cell measured from the end of the cell.
- A. True
  - B. False
33. The design and installation of observation pipes installed in stone aggregate must have?
- A. an open bottom
  - B. a nominal pipe size of 4 inches
  - C. The lower 6 inches slotted
  - D. Slots are  $\geq 1/4''$  and  $\leq 1/2''$  in width and located on opposite sides
  - E. All of the above
34. The design and installation of observation pipes installed in stone aggregate must be?
- A. Anchored in a manner that will prevent the pipe from being pulled out
  - B. Extend from the infiltrative surface up to or above finish grade
  - C. Terminate with a removable watertight cap
  - D. Terminate with a vent cap if  $> 2$  ft. above finish grade
  - E. Only A, B, & C
35. The design and installation of observation pipes installed on leaching chambers must have?
- A. an open bottom
  - B. a nominal pipe size of 4 inches
  - C. only B
  - D. both A & B
36. The design and installation of observation pipes installed on leaching chambers
- A. Anchored to the leaching chamber in a manner that will prevent the pipe from being pulled out.
  - B. 5. Terminate with a removable watertight cap
  - C. 6. Terminate with a vent cap if  $\geq 12$  inches above finish grade
  - D. All of the above
37. The effluent application to distribution cell
- A. If DWF  $< 1500$  gpd, effluent may be applied by gravity flow, dosed to distribution cell or distribution box, then applied by gravity flow to the distribution cell, or by use of pressure distribution, unless pressure distribution is required in accordance with SPS 383.44 (5) (b)
  - B. 2. If DWF  $\geq 1500$  gpd, effluent must be dosed to distribution cell or distribution box, then applied by gravity flow to the distribution cell, or by use of pressure distribution, unless pressure distribution is required in accordance with SPS 383.44 (5) (b)
  - C. Only A
  - D. Both A & B
38. The septic tank effluent pump system must meets requirements of SPS 384.10, Wis. Adm. Code and the Component manual.

- A. True
- B. False

39. Dosing effluent to leaching chambers must be protection of the infiltrative surface must be provided to prevent erosion at the area where the effluent enters the chamber.

- A. True
- B. False

40. The dose tank or compartment volume employing one pump must have.

- A. Reserve capacity  $\geq$  the estimated daily flow.
- B. Drain back volume  $\geq$  volume of wastewater that will drain into the dose tank from the distribution cell.
- C. Four inches of this dimension  $\geq$  vertical distance from pump intake to bottom of tank. Two inches of this dimension  $\geq$  vertical distance between pump on elevation and high water alarm activation elevation.
- D. All of the above

41. Dose tank or compartment volume employing duplex pumps.

- A. Drain back volume  $<$  volume of wastewater that will drain into the dose tank from the force main.
- B. Four inches of this dimension  $<$  vertical distance from pump intake to bottom of tank. Two inches of this dimension  $\geq$  vertical distance between pump on elevation and high water alarm activation elevation.
- C. Neither A or B
- D. Both A & B

42. Siphon tank or compartment volume must be  $<$  what is required to accommodate volumes necessary to provide dosing as specified in this manual.

- A. True
- B. False

43. Vent pipes installed in stone aggregate system must.

- A. Connect to a gravity flow distribution lateral by the use of a fitting
- B. Have a nominal pipe size of 4 inches
- C. Extend from the distribution lateral  $\geq$  12 inches above finish grade
- D. Terminate in a manner that will allow a free flow of air between the distribution lateral and the atmosphere
- E. All of the above

44. Vent pipes installed on leaching chambers must have

- A. Anchored to the leaching chamber in a manner that will prevent the pipe from being pulled down
- B. an closed bottom
- C. a nominal pipe size of 4 inches
- D. All of the above

45. Vent pipes installed on leaching chambers must have

- A. Extend from inside of the leaching chamber  $>$  6 inches above finish grade
- B. Terminate in a manner that will allow a free flow of air between the leaching chamber and the ground
- C. The vent opening port is downward

- D. None of the above
46. Combination observation/vent pipes installed in a stone aggregate system must Meets all of the requirements of observation pipes with the following exceptions:
- A. Have a minimum 4 inch pipe connection to a distribution lateral
  - B. Connect to the vent pipe at a point above the stone aggregate
  - C. Extend from the infiltrative surface  $\geq$  12 inches above finish grade
  - D. All of the above
47. Combination observation/vent pipes installed in a stone aggregate system must Meets all of the requirements of observation pipes with the following exceptions:
- A. Terminate in a manner that will allow a free flow of air between the distribution lateral and the atmosphere
  - B. The vent opening port is downward
  - C. Neither A or B
  - D. Both A & B
48. Combination observation/vent pipes installed on a leaching chamber Meets all of the requirements of observation pipes with the following exceptions:
- A. Extend from the infiltrative surface  $\leq$  12 inches above finish grade
  - B. Terminate in a manner that will allow a free flow of air between the leaching chamber and the ground
  - C. The vent opening port is downward
  - D. All of the above

DEFINITIONS 49-52

49. Cobbles
- A. Rock fragments greater than 3 inches, but less than 10 inches in diameter.
  - B. A septic tank which has a pump installed in the tank that will pump effluent from the clear zone.
  - C. A scaled or completely dimensioned drawing, drafted by hand or computer aided technology, presented in a permanent form that shows the relative locations of setback encumbrances to a regulated object. The site plan also includes a reference to north and the permanent vertical and horizontal reference point or benchmark.
  - D. Rock fragments found in soil material that are greater than 10 inches in diameter, but less than 24 inches.
50. Septic tank effluent pump system
- A. Rock fragments greater than 3 inches, but less than 10 inches in diameter.
  - B. A septic tank which has a pump installed in the tank that will pump effluent from the clear zone.
  - C. A scaled or completely dimensioned drawing, drafted by hand or computer aided technology, presented in a permanent form that shows the relative locations of setback encumbrances to a regulated object. The site plan also includes a reference to north and the permanent vertical and horizontal reference point or benchmark.
  - D. Rock fragments found in soil material that are greater than 10 inches in diameter, but less than 24 inches.

51. Site plan

- A. Rock fragments greater than 3 inches, but less than 10 inches in diameter.
- B. A septic tank which has a pump installed in the tank that will pump effluent from the clear zone.
- C. A scaled or completely dimensioned drawing, drafted by hand or computer aided technology, presented in a permanent form that shows the relative locations of setback encumbrances to a regulated object. The site plan also includes a reference to north and the permanent vertical and horizontal reference point or benchmark.
- D. Rock fragments found in soil material that are greater than 10 inches in diameter, but less than 24 inches.

52. Stones

- A. Rock fragments greater than 3 inches, but less than 10 inches in diameter.
- B. A septic tank which has a pump installed in the tank that will pump effluent from the clear zone.
- C. A scaled or completely dimensioned drawing, drafted by hand or computer aided technology, presented in a permanent form that shows the relative locations of setback encumbrances to a regulated object. The site plan also includes a reference to north and the permanent vertical and horizontal reference point or benchmark.
- D. Rock fragments found in soil material that are greater than 10 inches in diameter, but less than 24 inches.

III. DESCRIPTION AND PRINCIPLE OF OPERATION

53. In-ground soil absorption component operation is a two-stage process involving both wastewater treatment and dispersal. Treatment is accomplished predominately by physical and biochemical processes within the treatment/dispersal zone. The physical characteristics of the \_\_\_\_\_ affect these processes.

- A. influent wastewater
- B. influent application rate
- C. temperature
- D. the nature of the receiving soil
- E. All of the above

54. \_\_\_\_\_ in the wastewater are important treatment objectives accomplished under unsaturated soil conditions. Pathogens contained in the wastewater are eventually deactivated through filtering, retention, and adsorption by in situ soil.

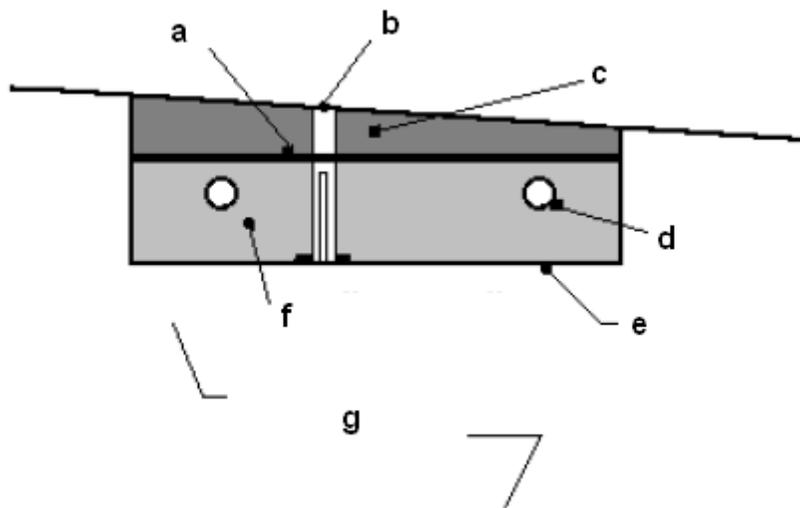
- A. Physical entrapment
- B. increased retention time
- C. conversion of pollutants
- D. All of the above

55. Dispersal is primarily affected by the depth of the unsaturated receiving soil, \_\_\_\_\_, and the area available for dispersal.

- A. the soil's hydraulic conductivity
- B. influent application rate

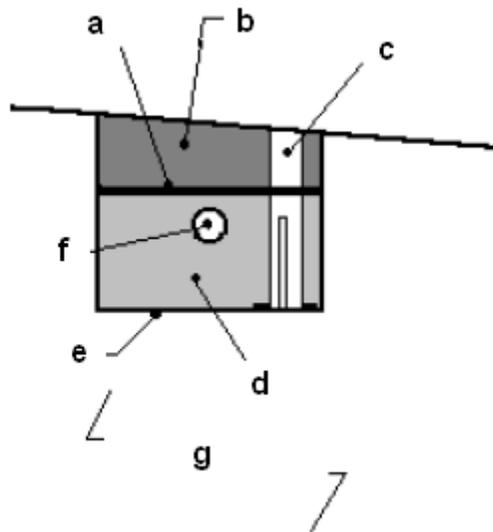
- C. land slope
- D. All of the above

Use Figure 1 - Cross-section of an in-ground soil absorption component with multiple laterals to answer questions 56-62



- 56. The letter 'a' in the above diagram represents \_\_\_\_\_
- 57. The letter 'b' in the above diagram represents \_\_\_\_\_
- 58. The letter 'c' in the above diagram represents \_\_\_\_\_
- 59. The letter 'd' in the above diagram represents \_\_\_\_\_
- 60. The letter 'e' in the above diagram represents \_\_\_\_\_
- 61. The letter 'f' in the above diagram represents \_\_\_\_\_
- 62. The letter 'g' in the above diagram represents \_\_\_\_\_

Use Figure 2 - Cross-section of an in-ground soil absorption component with a single lateral to answer questions 63- 69



63. The letter 'a' in the above diagram represents \_\_\_\_\_

64. The letter 'b' in the above diagram represents \_\_\_\_\_

65. The letter 'c' in the above diagram represents \_\_\_\_\_

66. The letter 'd' in the above diagram represents \_\_\_\_\_

67. The letter 'e' in the above diagram represents \_\_\_\_\_

68. The letter 'f' in the above diagram represents \_\_\_\_\_

69. The letter 'g' in the above diagram represents \_\_\_\_\_

70. In open areas, exposure to sun and wind increases the assistance of evaporation and transpiration in the dispersal of the wastewater. This describes which statement below?

- A. In-ground soil absorption component location
- B. Sites with trees and large boulders
- C. Setback distances
- D. None of the above

71. Generally, sites with large trees, numerous smaller trees or large boulders are less desirable for installing an in-ground soil absorption component because of difficulty in preparing the distribution cell area. As with rock fragments, tree roots, stumps and boulders occupy area, thus reducing the amount of soil available for proper treatment. If no other site is available, trees in the distribution cell area must be removed. This describes which statement below?
- A. In-ground soil absorption component location
  - B. Sites with trees and large boulders
  - C. Setback distances
  - D. None of the above
72. The setbacks specified in SPS 383, Wis. Adm. Code for soil subsurface treatment/dispersal component, apply to in-ground soil absorption components. The distances are measured from the edge of the distribution cell area. This describes which phrase statement below?
- A. In-ground soil absorption component location
  - B. Sites with trees and large boulders
  - C. Setback distances
  - D. None of the above

Design Wastewater Flow Calculations- One- and two-family dwellings.

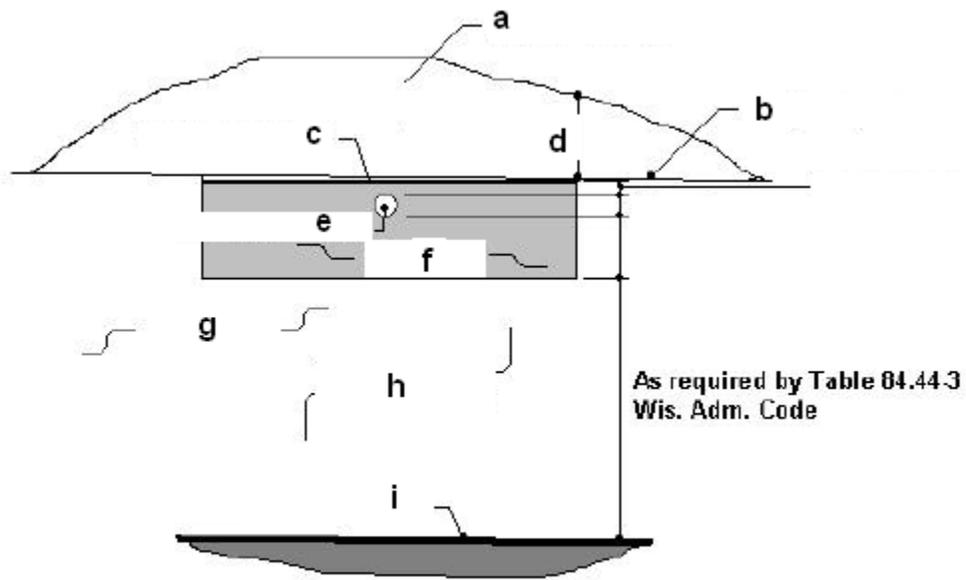
Questions 73-75

73. Distribution cell size for one- and two-family dwelling application is determined by calculating the design wastewater flow (DWF). Formula 1 is for?
- A. combined wastewater flows , which consist of blackwater, clearwater and graywater.
  - B. is for clearwater and graywater only
  - C. blackwater only.
74. Distribution cell size for one- and two-family dwelling application is determined by calculating the design wastewater flow (DWF). Formula 2 is for?
- A. combined wastewater flows , which consist of blackwater, clearwater and graywater.
  - B. is for clearwater and graywater only
  - C. blackwater only.
75. Distribution cell size for one- and two-family dwelling application is determined by calculating the design wastewater flow (DWF). Formula 3 is for?
- A. combined wastewater flows , which consist of blackwater, clearwater and graywater.
  - B. is for clearwater and graywater only
  - C. blackwater only.

Use Table 4-Public Facility Wastewater Flows for questions 76-79

76. What is the wastewater flows for a beauty salon per station (gpd)?
- A. 90
  - B. 80
  - C. 100
  - D. 65
77. What is the wastewater flows for a bowling alley per bowling lane (gpd)?
- A. 90
  - B. 80
  - C. 100
  - D. 65
78. What is the wastewater flows for an apartment per bedroom (gpd)?
- A. 90
  - B. 80
  - C. 100
  - D. 65
79. What is the wastewater flows for a motel room (gpd)?
- A. 90
  - B. 80
  - C. 100
  - D. 65
80. The distribution cell height provides effluent storage and support of the piping within the distribution cell. The minimum height of the distribution cell, when stone aggregate is used in gravity distribution components is \_\_\_\_\_ inches or \_\_\_\_ inches when pressure distribution is used.
- A. 14 inches or 9 inches
  - B. 12 inches or 9 inches
  - C. 10 inches or 9 inches
  - D. 12 inches or 7 inches
81. This provides a minimum space of \_\_\_\_\_ inches beneath the distribution pipe and \_\_\_\_ inches above the distribution piping, as specified in the specification section of this manual.
- A. 6, 3
  - B. 6, 2
  - C. 10, 9
  - D. 12, 9

Use Figure 3 - Height of system when using stone aggregate for questions 82-90



82. The letter 'a' in the above diagram represents \_\_\_\_\_.

83. The letter 'b' in the above diagram represents \_\_\_\_\_.

84. The letter 'c' in the above diagram represents \_\_\_\_\_.

85. The letter 'd' in the above diagram represents \_\_\_\_\_.

86. The letter 'e' in the above diagram represents \_\_\_\_\_.

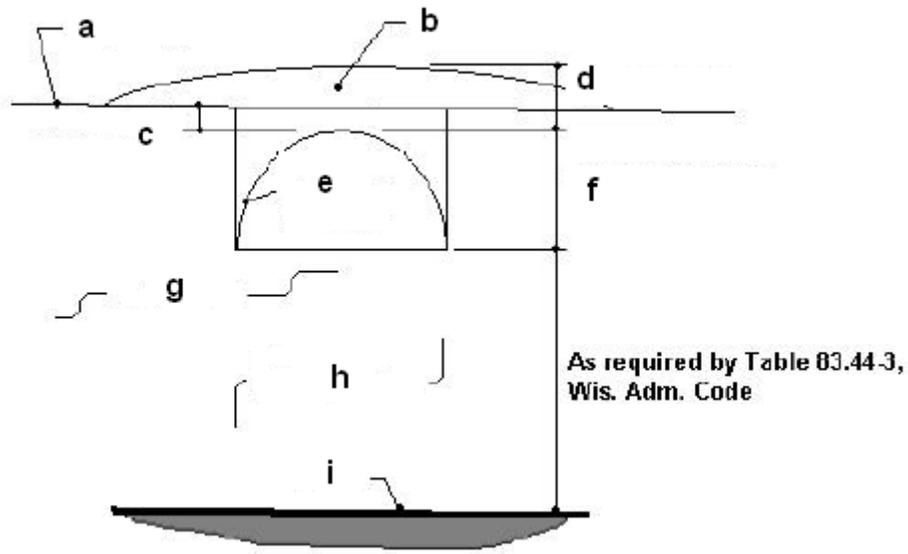
87. The letter 'f' in the above diagram represents \_\_\_\_\_.

88. The letter 'g' in the above diagram represents \_\_\_\_\_.

89. The letter 'h' in the above diagram represents \_\_\_\_\_.

90. The letter 'i' in the above diagram represents \_\_\_\_\_.

Use Figure 4 - Height of system using leaching chambers to answer questions 91-99



- 91. The letter 'a' in the above diagram represents \_\_\_\_\_.
- 92. The letter 'b' in the above diagram represents \_\_\_\_\_.
- 93. The letter 'c' in the above diagram represents \_\_\_\_\_.
- 94. The letter 'd' in the above diagram represents \_\_\_\_\_.
- 95. The letter 'e' in the above diagram represents \_\_\_\_\_.
- 96. The letter 'f' in the above diagram represents \_\_\_\_\_.
- 97. The letter 'g' in the above diagram represents \_\_\_\_\_.
- 98. The letter 'h' in the above diagram represents \_\_\_\_\_.
- 99. The letter 'i' in the above diagram represents \_\_\_\_\_.

Cover Material

- 100. A minimum of 12 inches of cover material must be placed over the top of the geotextile fabric or leaching chamber.
  - A. True
  - B. False
- 101. Finished grade of the cover material must be at or above the surrounding land surface elevation.
  - A. True
  - B. False
- 102. Depressional areas over the distribution cell that collect and retain surface water runoff must be avoided.

- A. True
- B. False

Distribution Network and Dosing Component

103. The effluent application to the distribution cell may be by \_\_\_\_\_.
- A. Gravity
  - B. Pressure
  - C. May consist of piping or leaching chambers
  - D. All of the above
104. Distribution piping for a gravity component has a nominal inside diameter of 3 inches.
- A. True
  - B. False
105. The distribution header is non perforated pipe.
- A. True
  - B. False
106. The slope of gravity flow perforated distribution piping is less than or equal to 4 inches per 100 feet away from \_\_\_\_\_.
- A. distribution boxes
  - B. drop boxes
  - C. header
  - D. all of the above
107. When a drop box design is used, the invert of the drop box overflow pipe must be at least \_\_\_\_ inches lower than the invert of the treatment tank outlet or force main connection.
- A. 2
  - B. 3
  - C. 4
  - D. 5
108. The pump alarm activation point must be at least 2 inches above the pump activation point.
- A. True
  - B. False
109. Allow “dead” space below the pump intake to permit settling of solids in the dose chamber. This can be accomplished by placing the pump on concrete blocks or other material that can form a pedestal.
- A. True
  - B. False
110. The pump manufacturer’s requirements shall be followed. This shall include the “pump off” switch being located high enough to allow for complete immersion of the pump in the dose chamber.
- A. True
  - B. False

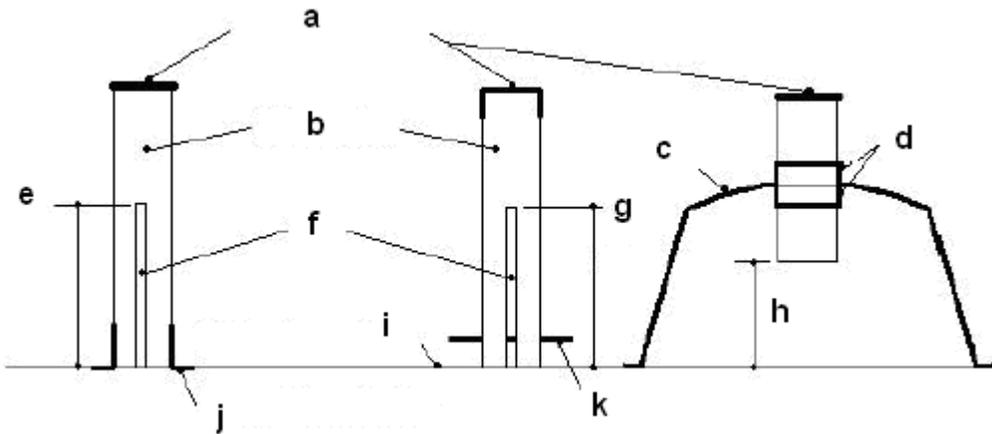
111. Leaching chamber tops are at or above the original grade. Leaching chambers are placed directly on the bottom of the distribution cell. The locations of leaching chambers are in accordance with Table 3 of this manual.

- A. True
- B. False

112. The portion of the observation pipe below the distribution pipe for stone aggregate systems is slotted while the portion above the distribution pipe is solid wall.

- A. True
- B. False

Use Figure 5 - Observation pipes for questions 113-123



113. The letter 'a' in the above diagram represents \_\_\_\_\_.

114. The letter 'b' in the above diagram represents \_\_\_\_\_.

115. The letter 'c' in the above diagram represents \_\_\_\_\_.

116. The letter 'd' in the above diagram represents \_\_\_\_\_.

117. The letter 'e' in the above diagram represents \_\_\_\_\_.

118. The letter 'f' in the above diagram represents \_\_\_\_\_.

119. The letter 'g' in the above diagram represents \_\_\_\_\_.

120. The letter 'h' in the above diagram represents \_\_\_\_\_.

121. The letter 'i' in the above diagram represents \_\_\_\_\_.

122. The letter 'j' in the above diagram represents \_\_\_\_\_.

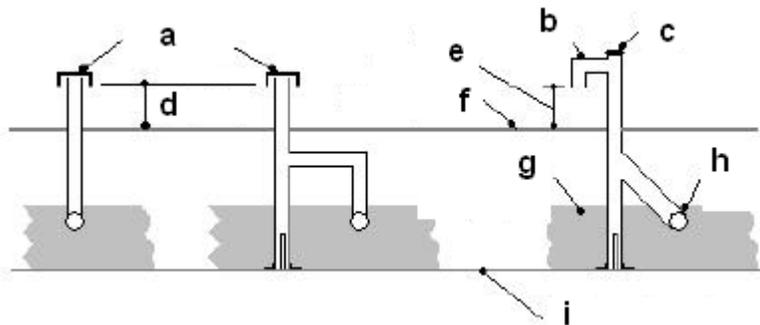
123. The letter 'k' in the above diagram represents \_\_\_\_\_.

124. Vent pipes, if installed, connect to the upper half of the gravity flow distribution laterals and extend up to at least 12 inches above finish grade.

- A. True
- B. False

- 125. Vent pipes terminate with the vent opening facing upward by the means of a vent cap or fittings.
  - A. True
  - B. False
- 126. Vent caps must allow a free flow of air between the distribution lateral and the atmosphere.
  - A. True
  - B. False
- 127. All vent pipes have a nominal pipe size of \_\_\_ inches.
  - A. 2
  - B. 3
  - C. 4
  - D. all of the above.
- 128. When a vent pipe is connected to an observation pipe, the point of connection shall be made at a point below the stone aggregate for stone aggregate systems and terminate as required for vent pipes.
  - A. True
  - B. False
- 129. An observation pipe may serve as a combination observation/vent pipe providing it terminates in the same manner as required for vent pipes.
  - A. True
  - B. False

Use Figure 6– Vent and combination observation/vent pipes for questions 130-138



- 130. The letter 'a' in the above diagram represents \_\_\_\_\_.
- 131. The letter 'b' in the above diagram represents \_\_\_\_\_.
- 132. The letter 'c' in the above diagram represents \_\_\_\_\_.
- 133. The letter 'd' in the above diagram represents \_\_\_\_\_.
- 134. The letter 'e' in the above diagram represents \_\_\_\_\_.
- 135. The letter 'f' in the above diagram represents \_\_\_\_\_.

- 136. The letter 'g' in the above diagram represents \_\_\_\_\_.
- 137. The letter 'h' in the above diagram represents \_\_\_\_\_.
- 138. The letter 'i' in the above diagram represents \_\_\_\_\_.

#### VII. SITE PREPARATION AND CONSTRUCTION

- 139. Prior to the construction of the component, a sanitary permit, obtained for the installation must be posted in a clearly visible location on the site. Arrangements for inspection(s) must also be made with the department or governmental unit issuing the sanitary permit.
  - A. True
  - B. False
- 140. Check the moisture content and condition of the soil. If the soil at the infiltrative surface can be rolled into a 1/4-inch wire, the site is too wet.
  - A. True
  - B. False
- 141. Excavate the distribution cell(s) to the correct bottom elevation(s) taking care not to smear the infiltrative surface. If the infiltrative surface or sidewalls are smeared, loosen it with the use of a rake or similar device. The infiltration surface can be left rough and should not be raked smooth.
  - A. True
  - B. False
- 142. Place the distribution pipes, as determined from the design, below the stone aggregate. Connect the distribution box, drop box or manifold to the pipe from the treatment or dosing chamber.
  - A. True
  - B. False
- 143. If stone aggregate is used, place stone aggregate over the distribution pipe and the entire distribution cell until the elevation of the stone aggregate is at least 6 inches above the top of the distribution pipe.
  - A. True
  - B. False
- 144. Place the cover material on top of the geotextile fabric and/or leaching chamber. Avoid backfilling the first 24 inches with cobbles, stones, or frozen material that could damage pipe, chamber or fabric.
  - A. True
  - B. False

#### VIII. OPERATION, MAINTENANCE AND PERFORMANCE MONITORING

- 145. The component owner is responsible for the operation and maintenance of the component.
  - A. True
  - B. False
- 146. The county, department or POWTS service contractor may make periodic inspections of the components, checking for surface discharge, wastewater levels, etc.

- A. True
- B. False

147. Design approval and site inspections before, during, and after the construction are accomplished by the county or other appropriate jurisdictions in accordance to SPS 383, Wis. Adm. Code.
- A. True
  - B. False
148. Routine and preventative maintenance aspects include:
- A. Treatment and distribution tanks are to be inspected routinely and maintained when necessary in accordance with the applicable plan or product approval.
  - B. Inspections of the in-ground soil absorption component performance are required at least once every three years. These inspections include checking the liquid levels in the observation pipes and examination for any seepage around the in-ground soil absorption component.
  - C. none of the above
  - D. Both A & B
149. Routine and preventative maintenance aspects include:
- A. Winter traffic on the in-ground soil absorption component is not permitted to minimize frost penetration and to minimize compaction.
  - B. A good water conservation plan within the house or establishment will help assure that the inground soil absorption component will not be overloaded.
  - C. none of the above
  - D. Both A & B
150. User's Manual: A user's manual is to accompany the component. The manual is to contain the following as a minimum:
- A. Diagrams of all components and their location. This should include the location of the reserve area, if one is provided.
  - B. Names and phone numbers of local health authority, component manufacturer or POWTS service contractor to be contacted in the event of component failure or malfunction.
  - C. Information on the periodic maintenance of the component, including electrical/mechanical components.
  - D. All of the above.

To obtain your Continuing Education Credits follow the below instructions.

1. Click on course, print out, circle answers, mail in the course only & keep the manual.
2. Fill in all fields applicable.
3. Include your certification or license number.
4. We'll take care of crediting with the state and mailing back to you the quiz results.

Send by mail

[www.garyklinka.com](http://www.garyklinka.com)

1. Course sheets. **Fee \$99.00**
2. Fill out this form below completely.
3. Applicable fees by check payable to Gary Klinka.
4. Mail to: Gary Klinka at 228 Mandella Ct Neenah WI 54956.
5. Questions: office 920-727-9200 fax 888-727-5704 including Saturday and Sundays.
6. Cell 920-740-4119 or 920-740-6723 & by email <mailto:aklinka@hotmail.com>

-----Educational Course Attendance Verification Form -----

Attendee's Name \_\_\_\_\_ Date \_\_\_\_\_

Address \_\_\_\_\_

Credential Number \_\_\_\_\_ Phone# \_\_\_\_\_

Course Title and Name Powtsingroundquiz Fax# \_\_\_\_\_

List the name of each credential held by attendee \_\_\_\_\_

\_\_\_\_\_ Credited Hours 12 hours **Fee \$99.00**

Email \_\_\_\_\_

To be completed by Gary Klinka

My credential link [#70172](#)

Course Password \_\_\_\_\_ Course ID# 8299

Attendee passed the course with a greater than 70% score on Date \_\_\_\_\_

Instructor Signature \_\_\_\_\_