



HARRISON COUNTY HEALTH DEPARTMENT

266 ATWOOD STREET
CORYDON, INDIANA 47112
PHONE (812) 738-3237 FAX (812) 738-4292
WWW.HARRISONCOUNTYHEALTH.COM

To: All Septic Installers, potential and established
From: Harrison County Health Department
Re: Septic Installer Certification

We believe that septic system installers must demonstrate competency in knowledge of county and state codes before installing septic systems. General knowledge of septic system installation will be tested through an exam developed and administered by the health department.

The exam is enclosed with this correspondence. This test emphasizes standard requirements for installing septic systems.

Please complete the exam by using State Rule 410 IAC 6-8.1 as an information source. Most of the answers will be found in that publication. If you can't find the answer, use any source available to get the correct answer. To obtain certification, you must have a score of at least 80% correct. If you are unable to complete this requirement, you/your company must set up an appointment with one of the staff members and review the test. Once you have completed the review to the satisfaction of the health department, we will process your application and issue your certification.

In order to obtain certification, our office must receive:

- 1) A completed application (attached),
- 2) A satisfactory test score of no less than 80%, or proper review of the test questions at this department.

Also, the Health Department keeps a list of septic system installers which is available to the public. If you wish to appear on that list, you must:

- 1) Have scored satisfactorily on the installers exam,
- 2) Have installed at least three (3) septic systems correctly to state and county codes.

If you have any questions on this matter, please call our office. Good luck!

Danny R. Schroeder
EHS

Chris Cunningham
EHS

Tracy Monroe
EHS



HARRISON COUNTY HEALTH DEPARTMENT

266 ATWOOD STREET
CORYDON, INDIANA 47112
PHONE (812) 738-3237 FAX (812) 7384292

Application

Installer Permit - Private Sewage Disposal System

Information you provide on this application will be made available to the public. If requested, the Health Department will furnish a list of current permit holders, their name or company name, address, and phone number.

If you wish to be permitted to install septic systems within Harrison County, please complete this application and return it to the Health Department.

Business Name _____

Owner's Name _____

Address _____

City _____ State _____ Zip _____

Phone _____ Cell Phone _____

Fax _____ E-mail address _____

Name and Title of Applicant _____

Signature of Applicant _____

Do you wish to appear on the Installer's List? Yes No (You must first properly install at least 3 septic systems in Harrison County, to State and County codes)

Only one (1) permit will be required for each person or other separate legal entity engaged in installation, altering, or repairing, with or without charge, of a private sewage disposal system.

If there are significant changes in the State septic system codes, re-examination may be necessary.

.....
For Health Department use only

Date issued _____ Permit # _____ Score _____ %

Harrison County Health Department

SEPTIC INSTALLER'S EXAM

General Knowledge of Subsurface Gravity Flow Septic Systems

MULTIPLE CHOICE. CHOOSE THE ONE BEST ANSWER.

1. When may you install a septic system before obtaining a septic permit from the health department?
 - a) When rain is imminent
 - b) When the owner insists
 - c) When you are pressed for time
 - d) When you hear thunder in the distance
 - e) Never

2. After obtaining a septic permit, circumstances change; i.e. the owner decides to move the house or now wants four bedrooms instead of three. What do you do?
 - a) Change your installation plans to accommodate the owner and go ahead
 - b) Contact the health department
 - c) Tell the owner there can be no changes
 - d) Tell the owner your fee has just increased
 - e) Sub-contract the job to another installer

3. What is the **minimum** distance a septic tank can be from a dwelling, an in-ground pool, or other structure?
 - a) 5 feet
 - b) 7.5 feet
 - c) 10 feet
 - d) 15 feet
 - e) 20 feet

4. What is the **minimum** distance any part of the septic system may be from the property line?
 - a) 3 feet
 - b) 5 feet
 - c) 7.5 feet
 - d) 10 feet
 - e) 20 feet

5. **4" PVC solid piping** must meet what minimum standard?
 - a) ASTM D 3034-89
 - b) ASTM D 2729-89
 - c) ASTM F 810-85
 - d) ASTM D 2661-87a
 - e) ASTM C 4-62

6. **4" PVC perforated piping** must meet what minimum standard?
 - a) ASTM D 3034-89
 - b) ASTM D 2729-89
 - c) ASTM F 667-85
 - d) ASTM D 2661-87a
 - e) ASTM C 4-62

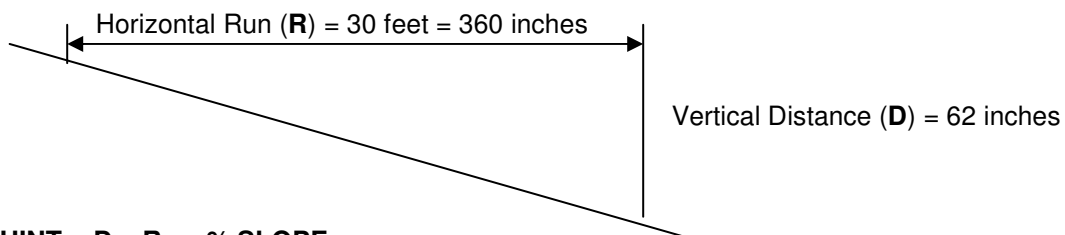
7. What is the **minimum** allowable distance from the center of one absorption trench to the center of the adjacent absorption trench?
- a) 5 feet
 - b) 7.5 feet
 - c) 10 feet
 - d) 12.5 feet
 - e) 15 feet
8. What is the **maximum** allowable length of any one absorption trench?
- a) 100 feet
 - b) 120 feet
 - c) 125 feet
 - d) 150 feet
 - e) 200 feet
9. Harrison County varies from Indiana State Code in only one aspect – the stone requirement for the absorption trenches. What is the **only** type stone approved by the Health Board for use in septic systems in Harrison County?
- a) #9 (3/4" to 1") crushed limestone
 - b) #11 (1/2") crushed limestone
 - c) 5L (3/4" to 2-1/2") river gravel
 - d) pea (<1/2") river gravel
 - e) rip rap
10. What material(s) is/are approved as a covering for the aggregate in the absorption trenches?
- a) Tar paper
 - b) Recycled cardboard
 - c) 6" of straw or geotextile fabric
 - d) Recycled chopped tires
 - e) Hardwood mulch
11. According to Indiana Code, what is the **maximum** allowable drop from the beginning of the absorption trench to the end?
- a) 0"
 - b) 2"
 - c) 4"
 - d) 6"
 - e) 12"
12. A **minimum** of how many inches of gravel are required above and below the perforated pipe in the absorption trench?
- a) 3" below and 3" above
 - b) 4" below and 2" above
 - c) 4" below and 4" above
 - d) 6" below and 2" above
 - e) 6" below and 4" above
13. What is the **minimum** soil cover required over the gravel in the absorption trench?
- a) 6"
 - b) 9"
 - c) 10"
 - d) 12"
 - e) 18"

14. What are the **minimum** and **maximum** allowable depths for an absorption trench for new construction?
- a) Minimum 6", maximum 18"
 - b) Minimum 8", maximum 24"
 - c) Minimum 10", maximum 36"
 - d) Minimum 18", maximum 48"
 - e) Minimum 24", maximum 60"
15. A site is unsuitable for a subsurface septic system if the ground slope is more than ____%.
- a) 5%
 - b) 10%
 - c) 15%
 - d) 20%
 - e) 25%
16. The required fall for 25 feet of 4" solid pipe running from the home to the septic tank is ____.
- a) Minimum 2", maximum 24"
 - b) Minimum 3", maximum 30"
 - c) Minimum 4", maximum 36"
 - d) Minimum 6", maximum 48"
 - e) Minimum 8", maximum 48"
17. From the distribution box to any perforated pipe, the **minimum** separation distance is:
- a) 2 feet
 - b) 3 feet
 - c) 5 feet
 - d) 7.5 feet
 - e) 10 feet
18. The **minimum** distance a perimeter (curtain) drain may be from any part of the septic system is:
- a) 5 feet
 - b) 7.5 feet
 - c) 10 feet
 - d) 15 feet
 - e) 20 feet
19. On a sloping site, absorption trenches of a gravity-fed soil septic system shall be constructed:
- a) However and wherever you choose
 - b) Running down the hill toward the nearest sinkhole
 - c) In a circular pattern
 - d) Along the contour
 - e) Running up the hill toward the home
20. In a flood dosed (pump assisted) septic system, what is the discharge rate in gallons per minute (gpm) for a 3-bedroom home?
- a) 10-12 gpm
 - b) 20-25 gpm
 - c) 30-45 gpm
 - d) 50-60 gpm
 - e) 60-75 gpm

21. Why should the septic tank be pumped out when installing a replacement system?
- a) It is not supposed to be full.
 - b) It should not be pumped – doing so removes all of the beneficial bacteria.
 - c) To check the baffles and remove solids from the tank.
 - d) So the new system starts fresh.
 - e) Hooking a new lateral field to a full tank might make it overflow.
22. A jetted bathtub is treated as a bedroom equivalent for septic system sizing requirements if its capacity is greater than:
- a) 75 gallons
 - b) 100 gallons
 - c) 110 gallons
 - d) 125 gallons
 - e) 150 gallons
23. If a perimeter (curtain) drain is required, how far below the center of the absorption field does it have to lower the seasonal high water table?
- a) 10 inches
 - b) 12 inches
 - c) 18 inches
 - d) 24 inches
 - e) 36 inches
24. Excessive _____ of the trench sidewalls or bottom during construction may result in irreversible damage to the infiltrative surface and may be grounds for rejection of the system.
- a) tearing
 - b) smearing
 - c) loading
 - d) turning
 - e) ripping
25. The best reason for not installing a septic system during periods of wet weather when the ground is muddy is because:
- a) Your equipment will sink in the mud and you may not be able to finish the system.
 - b) The septic tank might float.
 - c) Your wife will kill you when you track mud into the house.
 - d) Severe compaction can occur on the site as heavy equipment is moved about.
 - e) Smearing of the trench sidewalls and bottom can damage those surfaces so water cannot infiltrate the soil.
 - f) Both a) and b)
 - g) Both d) and e)
26. Perimeter drains that outlet to the surface require:
- a) Vents
 - b) Rodent guards
 - c) Cleanouts
 - d) Caps so water discharge is prevented
 - e) Mosquito larvacides

27. Which of these situations requires that a residential sewage disposal system be pump-assisted?
- a) The system is being installed in a floodplain.
 - b) No aggregate is available.
 - c) There is no outlet for a perimeter drain.
 - d) The total lineal footage of the absorption field exceeds 330 feet.
 - e) The total lineal footage of the absorption field exceeds 500 feet.
28. What is the minimum allowable distance from any part of a septic system to:
- a) A private well _____
 - b) Water lines under pressure _____
 - c) A pond, lake or reservoir _____
 - d) A stream or ditch _____
 - e) Dwelling, pool, or structures (upslope side) _____
 - f) Dwelling, pool, or structures (downslope side) _____
29. Corrugated pipe may be used as lateral lines in the absorption field if it is perforated.
- a) True
 - b) False
30. Distribution boxes must be designed to split the effluent equally among the effluent ports, therefore the box outlets must be at the same elevation.
- a) True
 - b) False
31. The bottom of an absorption trench shall not be installed below the elevation of the 100-year flood plain.
- a) True
 - b) False
32. Excessive smearing of the bottom and side walls of the absorption trenches is grounds for rejection of the system and/or the site.
- a) True
 - b) False
33. A septic tank that meets all requirements but is constructed of a plastic material is permitted.
- a) True
 - b) False
34. Cleanout risers (access manholes) attached to the tank or pump chamber must be made of concrete.
- a) True
 - b) False
35. After the septic permit is issued, it may be voided by the Health Department if the site is disturbed or altered by the unauthorized addition of fill material, by cutting, scraping, compaction, or removal of soil.
- a) True
 - b) False

36. Which one of the following is an indicator of a septic system failure?
- The system accepts sewage and all plumbing fixtures work properly.
 - Effluent is ponding on the surface of the ground.
 - The most-used toilet runs constantly.
 - The kitchen drain emits a foul odor.
 - The kitchen sink gurgles when the dishwasher is in operation.
37. State code prohibits water from the washing machine from entering the septic tank.
- True
 - False
38. Before a septic permit can be issued, in addition to a soils evaluation, the location of all property lines, buildings, outbuildings, pools, driveways, tanks and lateral lines must be flagged out:
- to ensure everything will fit on the lot within the required setbacks.
 - to ensure the septic system is oriented correctly.
 - so as to avoid all drainage ways by at least 200 feet.
 - both a) and b)
 - both b) and c)
39. **ESSAY QUESTION** - How can you tell if it is too wet to install a subsurface septic system? "The plastic limit of the soil is considered to be exceeded when ".....
40. Is the slope in this example too steep to install a subsurface gravity feed septic system?



HINT: $D \div R = \% \text{ SLOPE}$

Figure the percent slope here. Please show your work.