

Continuing Education from *Plumbing Systems & Design*

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Do you find it difficult to obtain continuing education units (CEUs)? Through this special section in every issue of PS&D, ASPE can help you accumulate the CEUs required for maintaining your Certified in Plumbing Design (CPD) status.

Now Online!

The technical article you must read to complete the exam is located at www.psdmagazine.org. The following exam and application form also may be downloaded from the website. Reading the article and completing the form will allow you to apply to ASPE for CEU credit. For most people, this process will require approximately one hour. If you earn a grade of 90 percent or higher on the test, you will be notified that you have logged 0.1 CEU, which can be applied toward the CPD renewal requirement or numerous regulatory-agency CE programs. (Please note that it is your responsibility to determine the acceptance policy of a particular agency.) CEU information will be kept on file at the ASPE office for three years.

Note: In determining your answers to the CE questions, use only the material presented in the corresponding continuing education article. Using information from other materials may result in a wrong answer.

About This Issue's Article

The May/June 2007 continuing education article is "Private Sewage Disposal Systems," Chapter 13 of *Engineered Plumbing Design II* by A. Cal Laws, PE, CPD.

With the ever-increasing cost of land located in proximity to urban centers, more and more construction is being implemented in outlying areas. Sanitary sewers are not usually available in these remote locations and it becomes necessary for the plumbing engineer to design private sewage systems to handle the wastes from buildings. Where the concentration of population is not sufficient to economically justify the installation of public sewer systems, installation of a septic tank in conjunction with a subsurface soil absorption field has proven to be an exceptionally satisfactory method of sewage disposal. This chapter explains the different types of private sewage disposal systems for residential and commercial applications as well as criteria for their design and construction.

You may locate this article at www.psdmagazine.org. Read the article, complete the following exam, and submit your answer sheet to the ASPE office to potentially receive 0.1 CEU.

CE Questions—"Private Sewage Disposal Systems" (PSD 139)

- The retention period of sewage in a septic tank should be _____.**
 - 12 hours
 - 24 hours
 - 36 hours
 - 48 hours
- The first step in the design of a subsurface soil absorption sewage disposal system is _____.**
 - ascertain the code requirements
 - determine the area required for the disposal field
 - determine whether the soil is suitable for the absorption of the septic effluent
 - calculate the fixture unit load to be served
- The recommended septic tank capacity for a five-bedroom home is _____.**
 - 750
 - 900
 - 1,000
 - 1,250
- The minimum distance between a cesspool and a water supply line, as noted in Table 7, is _____.**
 - 100 feet
 - 20 feet
 - 15 feet
 - not recommended as a substitute for a septic tank
- What approximate percentage of new home construction employs a septic tank/soil absorption sewage disposal system?**
 - 15 percent
 - 20 percent
 - 25 percent
 - 30 percent
- Distribution boxes _____.**
 - are required by many codes
 - should be used only when specifically required by code
 - offer practically no advantages
 - all of the above
- The absorption area to be provided for an individual residence containing three bedrooms with a percolation rate of three minutes is recommended to be _____.**
 - 100 square feet
 - 200 square feet
 - 300 square feet
 - 600 square feet
- A covered pit with an open-jointed or perforated lining into which raw sewage is discharged is called a _____.**
 - septic tank
 - cesspool
 - seepage pit
 - none of the above
- The drain lines for distributing the effluent from the septic tank should be spaced no greater than _____ apart.**
 - 3 feet
 - 6 feet
 - 9 feet
 - a and b
- The quantity of sewage flow from a single-family dwelling per person is _____ gallons per day.**
 - 50
 - 75
 - 100
 - 125
- The primary purpose of a septic tank is to _____.**
 - distribute raw sewage to the leaching field
 - chemically treat raw sewage
 - vent odors to atmosphere
 - act as a settling tank
- Sewage pit connecting piping _____.**
 - should be laid at a minimum grade of 2 percent
 - must be 6 inches in diameter minimum
 - must be a least 5 feet deep
 - none of the above

Plumbing Systems & Design Continuing Education Application Form

This form is valid up to one year from date of publication. The PS&D Continuing Education program is approved by ASPE for up to one contact hour (0.1 CEU) of credit per article. Participants who earn a passing score (90 percent) on the CE questions will receive a letter or certification within 30 days of ASPE's receipt of the application form. (No special certificates will be issued.) Participants who fail and wish to retake the test should resubmit the form along with an additional fee (if required).

1. Photocopy this form or download it from www.psdmagazine.org.
2. Print or type your name and address. Be sure to place your ASPE membership number in the appropriate space.
3. Answer the multiple-choice continuing education (CE) questions based on the corresponding article found on www.psdmagazine.org and the appraisal questions on this form.
4. Submit this form with payment (\$35 for nonmembers of ASPE) if required by check or money order made payable to ASPE or credit card via mail (ASPE Education Credit, 8614 W. Catalpa Avenue, Suite 1007, Chicago, IL 60656) or fax (773-695-9007).

Please print or type; this information will be used to process your credits.

Name _____
 Title _____ ASPE Membership No. _____
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 City _____ State/Province _____ Zip _____
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I am applying for the following continuing education credits:

I certify that I have read the article indicated above.

Signature _____

Expiration date: Continuing education credit will be given for this examination through **May 31, 2008**. Applications received after that date will not be processed.

ASPE Member Each examination: \$25
 Nonmember Each examination: \$35

Limited Time: No Cost to ASPE Member

Payment: Personal Check (payable to ASPE) \$ _____

Business or government check \$ _____

DiscoverCard VISA MasterCard AMEX \$ _____

If rebilling of a credit card charge is necessary, a \$25 processing fee will be charged.

ASPE is hereby authorized to charge my CE examination fee to my credit card.

Account Number _____ Expiration date _____

Signature _____ Cardholder's name (Please print) _____

PS&D Continuing Education Answer Sheet

Private Sewage Disposal Systems (PSD 139)

Questions appear on page 52. Circle the answer to each question.

- | | | | | |
|-------|---|---|---|---|
| Q 1. | A | B | C | D |
| Q 2. | A | B | C | D |
| Q 3. | A | B | C | D |
| Q 4. | A | B | C | D |
| Q 5. | A | B | C | D |
| Q 6. | A | B | C | D |
| Q 7. | A | B | C | D |
| Q 8. | A | B | C | D |
| Q 9. | A | B | C | D |
| Q 10. | A | B | C | D |
| Q 11. | A | B | C | D |
| Q 12. | A | B | C | D |

Appraisal Questions

Private Sewage Disposal Systems (PSD 139)

1. Was the material new information for you? Yes No
2. Was the material presented clearly? Yes No
3. Was the material adequately covered? Yes No
4. Did the content help you achieve the stated objectives? Yes No
5. Did the CE questions help you identify specific ways to use ideas presented in the article? Yes No
6. How much time did you need to complete the CE offering (i.e., to read the article and answer the post-test questions)? _____