

## SPM Version 3 Orientation Learning Exercise - Locate Standards (New SPM Layout) Answer Key

*These exercises are intended to support your self-directed learning. The goal of this exercise is to help you identify the new layout and learn how to locate specific standards, guidelines and other content of the Standard Practice Manual Version 3 September 2014 (SPM).*

*Start by reading Section I- 4 of Volume 1 for an overview of the new layout.*

*You may wish to work with the digital version, available at the following link:  
<http://owrp.asttbc.org/p/documents.php>*

*The 'paper' versions have a separate table of contents at the beginning of each of the four volumes. The digital version has those, plus a single table of contents covering all four volumes. The digital version table of contents have a 'click and go' feature, and it's helpful to use the 'Find' or 'Search' features.*

*To complete the exercise, first answer the questions, and then check the answer key - which is also available at the SPM Learning Resources page: (<http://owrp.asttbc.org/p/resources.php> )*

*The correct answers are indicated in bold font.*

1. Which volume of the SPM contains the glossary?
  - a) I
  - b) II
  - c) III
  - d) IV
  
2. Which volume of the SPM contains the guidelines?
  - a) I
  - b) II
  - c) **III**
  - d) IV
  
3. Which volume of the SPM contains the standards?
  - a) I
  - b) **II**
  - c) III
  - d) IV
  
4. Which volume of the SPM contains the rationale, references and a listing of design manuals?
  - a) I
  - b) II
  - c) III
  - d) **IV**
  
5. What is the section identifier for vertical separation standards?
  - a) I- 4.4.1
  - b) IV- 5.8
  - c) 2 - 5
  - d) 3.4.1.1
  - e) **II- 5.3**

6. What is the section identifier for vertical separation guidelines?
- a) I- 4.4.1
  - b) IV- 5.8
  - c) 2 - 5
  - d) II- 5.3
  - e) **III- 5.3**
7. Which pair of section identifiers refer to standards and guidelines for site and soil evaluation?
- a) I- 6.2 and III- 3.4
  - b) **II- 3.3 and III- 3.3**
  - c) IV- 5.8 and II- 5.8
  - d) II- 3.3 and II- 5.8
8. Which section contains standards for watertight testing of tanks?
- a) **II- 6.4**
  - b) Table II- 19
  - c) III- 6.4.3.2
  - d) IV- 5.9 page IV- 21
9. Which section contains guidelines for watertight testing of tanks, including additional detail about procedures, alternative approaches and supporting information?
- a) II- 6.4
  - b) Table II- 19
  - c) **III- 6.4.3.2**
  - d) IV- 5.9 page IV- 21
10. Which section contains standards for the specification of trench infiltration systems?
- a) III- 6.4
  - b) **II- 6.6**
  - c) Table II- 36
  - d) III- 6.4.3.2
11. What is the trench width specification standard for a dispersal system on slopes greater than 15%?
- a) 1.83 m (183 cm)
  - b) less than 90 cm
  - c) **30 to 60 cm**
  - d) 30 to 90 cm
12. Which table contains specification and installation standards for bed dispersal systems?
- a) Table II- 22
  - b) Table II- 32
  - c) Table II- 35
  - d) **Table II- 38**
13. What is the sand media specification standard for mound sand effective particle size ( $D_{10}$ )?
- a) < 4% passing the No. 100 sieve
  - b) 1/16 mm to 2 mm
  - c) **>0.25 mm**
  - d) <0.3 mm

14. What is the maximum allowable type 2 hydraulic loading rate, for sand media that is tested and confirmed to meet the SPM specification for *clean course sand*?
- a) 30 L/day/m<sup>2</sup>
  - b) 40 L/day/m<sup>2</sup>
  - c) 50 L/day/m<sup>2</sup>**
  - d) 65 L/day/m<sup>2</sup>
15. What is the minimum required horizontal separation distance from a septic tank to a below ground water supply cistern?
- a) 3 m**
  - b) 7.5 m
  - c) 15 m
  - d) 30 m
16. What is the minimum required horizontal separation distance from a BC zero discharge lagoon to an irrigation well?
- a) 3 m
  - b) 7.5 m
  - c) 15 m**
  - d) 30 m
17. For repair of an existing system, which of the following procedures requires a Filing submission to the Health Authority?
- a) replacement of transducer
  - b) installation of new tank risers and lids
  - c) extending trenches for additional area of infiltrative surface**
  - d) replacement of short sections of pipe when not functioning as intended
18. What is the minimum initial frequency for flow monitoring of a type 2 system?
- a) 1 month
  - b) 6 months**
  - c) 12 months
  - d) 24 months
19. What is the minimum vertical separation in native soil for gravity distribution when the percolation rate is 0.5 minutes per inch?
- a) 60 cm
  - b) 90 cm
  - c) 150 cm**
  - d) 183 cm
20. To achieve proper flushing of subsurface drip systems, what is the target velocity guideline for dose mains?
- a) 0.45 m/sec
  - b) 0.61 m/sec**
  - c) 1.83 m/sec
  - d) 4.54 m/sec