



# Certification Boulevard

## *Test Your Knowledge of Conservation and Reuse*

*Submitted By: David Stevens, Certified Operator – City of Plant City*

1. Chlorination of reclaimed water may generate trihalomethanes ... *true or false*
2. What is a typical permit requirement for chlorine residual maintenance of reuse water as it leaves the Reclamation Facility in Florida?
  - a. No greater than 1.0 mg/L Total Chlorine Residual
  - b. No less than 0.5 mg/L Total Chlorine Residual
  - c. No greater than 1.0 mg/L Free Chlorine Residual
  - d. No less than 1.0 mg/L Total Chlorine Residual
3. What is the typical permit requirement for Total Suspended Solids (TSS) of reuse water as it leaves the Reclamation Facility in Florida?
  - a. No greater than 1.0 mg/L
  - b. No greater than 10.0 mg/L
  - c. No greater than 5.0 mg/L
  - d. No greater than 2.0 mg/L
4. What is a typical permit requirement for chlorine residual maintenance of reuse water that is being applied to a Rapid Infiltration Basin in Florida?
  - a. No greater than 1.0 mg/L Total Chlorine Residual
  - b. No less than 0.5 mg/L Total Chlorine Residual
  - c. No greater than 1.0 mg/L Free Chlorine Residual
  - d. No less than 0.1 mg/L Total Chlorine Residual
5. Given the following information, does this reuse water satisfy the FDEP requirements for fecal coliform standards?
  - 80% of the samples are below the detection limits per 100 ml of sample
  - The highest day of the month was 2 per 100 ml of sample
  - a. Yes, this meets typical requirements in Florida for reuse water fecal coliform
  - b. No, this fails to meet typical requirements in Florida for reuse water fecal coliform
6. Which DEP rule governs water reuse in Florida?
  - a. 62-602
  - b. 62-699
  - c. 62-503
  - d. 62-610
7. Given the following data, what is the TSS concentration of this reuse grab sample, and, does it meet the FDEP requirements for reclaimed water TSS standards:

- 100 ml of sample
  - Tare weight of filter is 11.8873 grams
  - Final weight of filter after drying is 11.8877 grams
- a. 10 mg/L - No
  - b. 4 mg/L - No
  - c. 2 mg/L - Yes
  - d. 4 mg/L - Yes

8. Given the following data, what is the detention time of this reuse water storage tank?

- The flow entering is 92.84 cfm
  - The tank dimensions are: 50 feet diameter and 20 feet deep
- a. 3.77 hours
  - b. 67 minutes
  - c. 7.05 hours
  - d. 0.29 hours

9. Given the following data, how much rainwater will enter this open storage pond?

- Rainfall is 3.5 inches
  - The storage pond is 125 feet long, 45 feet wide and has a maximum depth of 8 feet
- a. 12,272 gals
  - b. 42,075 gals
  - c. 336,600 gals
  - d. 3,506 gals

10. What does this formula represent?

$$\frac{\text{Tank Volume, ft}^3}{\text{Flow, mgd} \times 92.84 \text{ cfm/mgd}}$$

- a. Chlorine residual, mg/l
- b. Detention time, mins
- c. Fecal coliform, #/100 ml
- d. Tank volume, gallons

*Thanks to David Stevens for his submittal of Question No.1*

*Please forward your comments and sample questions for publication to:*

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