



Certification Boulevard

Test Your Knowledge of Stormwater Management & Other Various Wastewater Treatment Topics

1. In today's environmentally conscious business/industrial community, stormwater management is a primary concern. Name four (4) primary components of a facility stormwater management program.
 - 1)
 - 2)
 - 3)
 - 4)

2. Which of the following items can be considered stormwater?
 - A. Storm runoff
 - B. Snow-melt runoff
 - C. Drainage
 - D. All of the above

3. Best Management Practices (BMPs) are those practices oriented toward common industrial activities to reduce and/or eliminate storm water pollutants. *True or False*

4. What is the minimum velocity in a sanitary sewer pipeline necessary to prevent settling of solids and debris?
 - A. 1 fps
 - B. 0.5 fps
 - C. 2 fps
 - D. 2 fpm

5. What is the detention time in a primary clarifier that is 100 feet long, 25 feet wide, 13 feet deep, and the influent flow is 5 mgd?
 - A. 2.3 hours
 - B. 1.8 hours
 - C. 1.2 hours
 - D. 3.1 hours

6. Given the following data, what is the surface settling rate of the secondary clarifiers?
 - Three (3) Secondary Clarifiers
 - Each Clarifier Has a Diameter of 100 Feet
 - The Plant Influent Flow is 15 mgd
 - A. 637 gal/day/ft²
 - B. 3,414 gal/day/ft²
 - C. 736 gal/day/ft²
 - D. 159 gal/day/ft²

7. Given the following data, how many gallons of WAS should be removed if a 10 day SRT is the desired target?
- Two (2) Aerations Tanks
 - Each Aeration Tank is 140 Feet Long, 45 Feet Wide, and 15 Feet Deep
 - The MLSS Concentration is 3,500 ppm
 - The WAS Concentration is 8,500 ppm
- A. 1.12 mgd
B. 158,250 gpd
C. 20,790 gpd
D. 58,217 gpd
8. Which term is most related to vector attraction reduction in an anaerobic digester?
- A. Settleometer
B. Pathogen
C. SOUR
D. 40-day bench test
9. What does the term absorption mean?
- A. Impregnate a liquid with air
B. The taking in of one substance into the body of another
C. To gather onto the surface of a substance
D. Soak like a sponge
10. Which chemical is most commonly used for odor control when dealing with ammonia odors from a solids handling process?
- A. Polymer
B. Acid
C. Alum
D. Water

Please forward your comments and sample questions for publication to:

**Roy Pelletier, Assistant Bureau Chief
City of Orlando Public Works Department
Wastewater Bureau
5100 L.B. McLeod Road
Orlando, Florida 32811**

roy.pelletier@cityoforlando.net (407) 246-2213

Questions 1,2 and 3 were submitted by:

Shane Benner, Plant Manager – Water Conserv II Facility – City of Orlando