



Certification Boulevard

Test Your Knowledge of Disinfection

1. Which form of chlorination will result in a pH increase of the effluent being disinfected?
 - a. Gas chlorine
 - b. Calcium hypochlorite
 - c. Sodium hypochlorite
 - d. HTH

2. What is created when chlorine reacts with ammonia in the effluent stream?
 - a. Chloramines
 - b. Free residual
 - c. Tri-residual
 - d. Breakpoint chlorination

3. Which chemical is typically used for dechlorination of final effluent?
 - a. Sodium hypochlorite
 - b. Bleach
 - c. Sulfur dioxide
 - d. Ferric chloride

4. Which equipment component converts chlorine liquid to chlorine gas?
 - a. Gas injector
 - b. Evaporator
 - c. Pressure regulator
 - d. Vapor sensor

5. What action(s) should never be performed around a UV system?
 - a. Eating
 - b. Looking into the lamps without eye protection
 - c. Plug a UV unit into an un-grounded electrical outlet
 - d. Both "b & c"

6. Which effluent quality condition may cause the most problems with efficiency of the UV disinfection process?
 - a. High NH_3
 - b. High NO_3
 - c. High NO_2
 - d. High TSS

7. What is the chemical formula for ozone?
- a. O₄
 - b. O₂
 - c. CO₂
 - d. O₃
8. Other than air, what flow stream is commonly supplied to an air-feed ozone generator?
- a. Pure nitrogen
 - b. Pure oxygen
 - c. Argon
 - d. Carbon dioxide
9. What is the formula that defines chlorine residual?
- a. Demand - supply = residual
 - b. Supply - demand = residual
 - c. Supply x demand = residual
 - d. None of the above
10. What does this formula best represent?

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

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

Please forward your comments and sample questions for publication to:

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