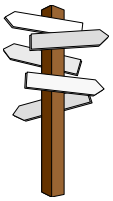

Certification Boulevard

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. O_4
    b. O_2
    c. CO_2
    d. $\underline{O_3}$

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?

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

    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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