



Certification Boulevard

Test Your Knowledge of Industrial Wastewater & Stormwater Answer Key

1. The application for approval of an Industrial Waste Pre-treatment program must contain all of the items listed in Rule 63-625.500. **True** or False
2. What year was the Birth of the Clean Water Act?
 - a. 1992
 - b. 1985
 - c. **1973**
 - d. 1899
3. Which agency is responsible for overseeing the implementation of a Pretreatment Program?
 - a. **EPA**
 - b. Congress
 - c. White House
 - d. IRS
4. What is a drainage well?
 - a. Structure that collects wastewater
 - b. **Structure that controls floods**
 - c. Structure used for measuring rain data
 - d. Structure that dispenses reclaimed water
5. Heavy metals are considered a pollutant because of their:
 - a. Color
 - b. Appearance
 - c. Weight
 - d. **Toxicity**
6. What may be the most common factor that a Stormwater Utility is based on?
 - a. Property Value
 - b. **Impervious Area**
 - c. Amount of annual rainfall
 - d. Location of a Water Reclamation Facility
7. It is common to test for ammonia in Industrial Wastewater using the Winkler method? True or **False**

The Winkler method is used to test for Dissolved Oxygen

8. Given the following data, calculate the CBOD₅ in a sample of Industrial Wastewater:

- Sample Volume = 2 ml
 - Initial D.O. = 6.2 mg/L
 - Final D.O. = 3.9 mg/L
- a. 460 mg/L
b. 250 mg/L
c. **345 mg/L**
d. 587 mg/L

$$\begin{aligned} \text{CBOD}_5, \text{ mg/L} &= (\text{Initial D.O., mg/L} - \text{Final D.O., mg/L}) \div (\text{sample volume, ml} \div 300 \text{ ml}) \\ &= (6.2 - 3.9) \div (2 \text{ ml} \div 300 \text{ ml}) \\ &= 2.3 \div 0.00666666 \\ &= 345 \text{ mg/L} \end{aligned}$$

9. An Industrial Waste facility has a TSS value of 815 mg/L entering its pre-treatment process, with a TSS value of 320 mg/L entering the sanitary sewer. Calculate the percent removal of TSS in the pre-treatment process.

- a. 29.3%
b. **60.7%**
c. 25.5%
d. 39.3%

$$\begin{aligned} \text{Percent TSS Removal} &= (\text{Inlet TSS, mg/L} - \text{Outlet TSS, mg/L}) \div \text{Inlet TSS, mg/L} \times 100 \\ &= (815 \text{ mg/L} - 320 \text{ mg/L}) \div 815 \text{ mg/L} \times 100 \\ &= 495 \div 815 = 0.60736 \times 100 \\ &= 60.7\% \end{aligned}$$

10. What is the common preservation method for an Industrial Waste sample to be tested for CBOD₅?

- a. **Cool to 4°C**
b. Dechlorination
c. Acidification
d. Cool to 4°F

Please forward your comments and sample questions for publication to:

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