

Operator Quiz Fall 2019 – Potluck

The following questions are designed for trainees as they prepare to take the ABC wastewater operator test. It is also designed for existing operators to test their knowledge. Each issue of *Clear Waters* will have more questions from a different section of wastewater treatment. Good luck!

1. What is the typical removal efficiency of settleable solids in a primary clarifier?
 - a. 10 to 15%.
 - b. 20 to 50%.
 - c. 40 to 60%.
 - d. 95 to 99%.
2. Which of the following is associated with thick billows of white sudsy foam in the aeration tank?
 - a. Old sludge.
 - b. Low F/M ratio.
 - c. High F/M ratio.
 - d. High MLSS concentration.
3. What impact does the injection of chlorine gas have on the pH of wastewater?
 - a. Increases pH.
 - b. Decreases pH.
 - c. Does not affect pH.
 - d. Fluctuates the pH.
4. Which gas is the most abundant in a properly operating anaerobic digester?
 - a. Hydrogen sulfide.
 - b. Nitrogen.
 - c. Carbon dioxide.
 - d. Methane.
5. The formula for calculating the volume of a rectangular wet well is:
 - a. $V=L \times W \times C$.
 - b. $V=W \times A \times P$.
 - c. $V=W \times L \times H$.
 - d. $V=W \times H \times D$.
6. Check valves are used on the discharge side of centrifugal pumps to:
 - a. Equalize the pressure on both sides of the impeller.
 - b. Prevent water in the suction line from flowing back into the reservoir.
 - c. Prevent water in the discharge line from flowing back.
 - d. Regulate the rate of water flow through the discharge pipe.
7. A lantern ring is a:
 - a. Metal ring for lowering an explosive-gas detector into manholes and wet wells.
 - b. Shaft coupling that has been completely worn through in spots or that has “daylighted.”
 - c. Spacer ring in a pump packing gland to improve seal water distribution.
 - d. Type of coupling for joining pipes that will not be covered or put in the dark for at least 5 days.
8. Hydrogen sulfide is a toxic gas that smells like _____. At high concentrations of hydrogen sulfide, however, the sense of smell is deadened, and no odor is detected.
 - a. Dead fish
 - b. Fuel gas
 - c. Rotten cabbage
 - d. Rotten eggs
9. A pH of 6.0 is:
 - a. Acid.
 - b. Alkaline.
 - c. Neutral.
 - d. Basic.
10. The flushing water pressure in a water-lubricated wastewater pump should be _____ the pump discharge pressure.
 - a. 10 psi less than.
 - b. Equal to.
 - c. 5 psi more than.
 - d. 5 psi less than.

Answers: 1D, 2C, 3B, 3B, 4D, 5C, 6C, 7C, 8D, 9A, 10C

For those who have questions concerning operator certification requirements and scheduling, please contact Tanya May Jennings at 315-422-7811 ext. 4, tmj@nywea.org, or visit www.nywea.org.