Health and Safety Meeting Quiz

Subject: Excavation Safety

Date: June 21, 2010

1. At what distance must materials, equipment, and excavation spoils remain from the edge of the excavation if a retaining system is not implemented?
   
   A. 5'
   B. 6'
   C. 2'
   D. None of the above; it is irrelevant.

2. Walkways will be provided where employees or equipment are required or permitted to cross over excavations. Guardrails will be provided where walkways are 4 feet or more above lower levels.
   
   A. True
   B. False

3. At what depth will protection be provided for employees if it is anticipated for them to enter the excavation?
   
   A. 5'
   B. 6'
   C. 3'
   D. 4'

4. Besides shielding and support systems, what other means offers protection for employees who enter the excavation?
   
   A. Rescue equipment
   B. Dinah Shoring
   C. Johnny Benching
   D. Sloping and Benching

5. For sloping and benching, Class C soil will have the _____ angle from horizontal.
   
   A. Greatest
   B. Smallest

6. What is the most common and severe hazard during excavations?
A. Electrocution
B. Hazardous atmospheres

C. **Cave-ins**
D. Hazardous stratospheres

7. Inspections of excavations, the adjacent areas, and protective systems will be conducted:

A. Daily
B. By a competent person
C. After rainfall or other hazardous occurrence increase
D. Only if employees exposure to hazards is anticipated (entry)
E. A, B, and C
F. **All of the above**

8. The top edge of a shielding protection system must extend how far above the trench?

A. 16 inches
B. **1.5 feet**
C. 18 feet
D. 8 inches

9. A means of egress will be located in trench excavations that are __ feet or more in depth and limit the length of travel to __ feet.

A. 25’, 4’
B. 6’, 50’
C. **4’, 25’**
D. 4’, 50’

10. For excavations greater than 4’ in depth where hazardous atmospheres exist, or are expected to exist, atmospheric monitoring must be conducted prior to excavation entry. What defines a hazardous atmosphere?

A. Less than 23.5% oxygen, exceeding the permissible exposure limit (PEL), and/or flammable gas concentration greater than 20% of the lower explosion limit.

B. **Less than 19.5% oxygen, exceeding the permissible exposure limit (PEL), and/or flammable gas concentration greater than 20% of the lower explosion limit.**
C. Greater than 19.5% oxygen, exceeding the permissible exposure limit (PEL), and/or flammable gas concentration greater than 20% of the lower explosion limit.

D. Less than 19.5% oxygen, exceeding the permissible exposure limit (PEL), and/or flammable gas concentration greater than 10% of the lower explosion limit.