

Preventing Dust Explosions Quiz

Name: _____ Date: _____

Multiple Choice (circle the correct answer):

1. The following must be present for a grain dust explosion to occur:
 - a. Ignition source
 - b. Suspension of grain dust particles
 - c. Oxygen
 - d. Confinement
 - e. All of the above.

2. Preventive maintenance certification records must include:
 - a. The date of inspection
 - b. The name of the person inspecting, repairing, etc.
 - c. Serial number or other identifier of the equipment
 - d. All of the above.

3. Grain dust explosion ignition sources may include:
 - a. Hot work
 - b. Ferrous (tramp) metal
 - c. Faulty electrical equipment
 - d. Smoking
 - e. All of the above

True or False:

4. _____ Class I hazardous locations are those that are hazardous because of the presence of combustible dust.

5. _____ OSHA requires that fabric dust filter collectors, which are a part of a pneumatic dust collection system, be equipped with a monitoring device that will indicate a pressure drop across the surface of the filter.

6. _____ OSHA requires a written housekeeping program that establishes the frequency and methods for removing fugitive grain dust on ledges, floors, equipment and exposed surfaces.

7. _____ The OSHA Grain Handling Standard (1910.272) requires that fugitive grain dust accumulations exceeding 1/8 inch within 35 feet of inside bucket elevators be removed immediately.

8. _____ Grain and product spills are not considered fugitive grain dust accumulations. However, the housekeeping program shall address the procedures for removing such spills from the work area.

9. _____ An inside bucket elevator has the boot and more than 20% of the total leg height (above grade or ground level) inside the grain elevator structure.

10. _____ The employer is not responsible for informing contractors performing work at the grain handling facility of known potential fire and explosion hazards related to the contractor's work and work area..

Quiz Key

1. E
2. D
3. E
4. False (Class II)
5. True
6. True
7. True
8. True
9. True
10. False