

Preventing Dust Explosions Quiz

Name: _____ Date: _____

Multiple Choice (circle the correct answer):

- Which of the following are the elements needed for a grain dust explosion?
 - Combustible dust, dispersion, oxygen, ignition source, containment
 - Dispersion, combustible dust, Carbon Dioxide, ignition
 - Oxygen, suppression, dispersion, combustible dust
 - None of these
- According to OSHA's Grain Handling Standard 1910.272, preventive maintenance certification records must include:
 - The date of inspection
 - The name of the person inspecting, repairing, etc.
 - Serial number or other identifier of the equipment
 - All of these
- Grain dust explosion ignition sources may include:
 - Hot work
 - Friction between machine parts
 - Faulty electrical equipment
 - Smoking
 - All of the above

True or False:

- _____ Class I hazardous locations are those that are hazardous because of the presence of combustible dust.
- _____ OSHA's Grain Handling Standard (1910.272) 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.
- _____ OSHA's Grain Handling Standard (1910.272) requires a written housekeeping program that establishes the frequency and methods for removing fugitive grain dust on ledges, floors, equipment and exposed surfaces.
- _____ OSHA's 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.
- _____ According to OSHA's Grain Handling Standard (1910.272), grain and product spills are not considered fugitive grain dust accumulations. However, the housekeeping program must address the procedures for removing such spills from the work area.
- _____ According to OSHA's Grain Handling Standard (1910.272), an inside bucket elevator has the boot and more than 40% of the total leg height (above grade or ground level) inside the grain elevator structure.
- _____ According to OSHA's Grain Handling Standard (1910.272), 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. A
2. D
3. E
4. False (Class II)
5. True
6. True
7. True
8. True
9. False (20%)
10. False