Pre Knowledge Survey – 2 Hour Key

1. Which of the following is not an element needed for a grain dust explosion:
    a. Oxygen
    b. Saturation
    c. Ignition Source
    d. Dispersion
    e. Confinement

2. T/F Dust is considered explosive if flame propagation occurs in combination with a rise in pressure. (True)

3. Good housekeeping includes:
    a. Vacuuming with proper equipment
    b. Paying attention to "hidden areas"
    c. Training all employees
    d. Maintaining dust aspiration systems
    e. All of the above

4. T/F Open facilities are more likely to results in explosions than are closed facilities. (false)

5. Which of the following are ways to reduce grain dust during unloading:
    a. Use cyclones and fabric filters
    b. There is no good way to reduce dust during unloading
    c. A closed receiving area so the wind can't disturb the dust
    d. Unload the grain slowly

6. T/F Chute baffles reduce dust emissions by approximately 70%. (False)

7. To reduce dust while conveying and handling grain:
    a. Locating the bucket elevator inside the main structure
    b. Increase the angle of spouting
    c. Adjust speed of handling equipment
    d. Explosion venting secured tightly to the leg

8. Warning signs that a dust collection system is malfunctioning include:
    a. Dust filters are full
    b. Limited dust emissions
    c. Blast gate locked into position
    d. Duct work with extra flexible hose

9. T/F Dust rarely accumulates in hidden areas. (False)

10. A primary explosion _____:
    a. Settles dust on surfaces
    b. Ignites the dust cloud
    c. Disturbs the settled dust
    d. None of the above

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