

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