

ES16 – Pre-Instructional Survey

Name: _____ Date: _____

1. What is the purpose of a Burner Management System (BMS)?
 - a. Prevent Boiler Explosions
 - b. Prevent Boiler Implosions
 - c. Prevent damage to equipment and injury
 - d. All of the above

2. How many NFPA standards are there for a boiler BMS?
 - a. one
 - b. four
 - c. six
 - d. eight

3. What is the standard(s) for the design of a boiler BMS?
 - a. NFPA Series 8500
 - b. NFPA 85
 - c. NFPA 86 Series
 - d. Pressure vessel codes

4. The NFPA 85 boiler code permits multiple fuel firing.
 - a. True
 - b. False

5. The BMS is the final control system to prevent an incident.
 - a. True
 - b. False

6. What is the most common contributor to boiler explosions?
 - a. Fuel rich condition in a boiler system
 - b. Equipment failure
 - c. Human error

7. What is the standard for ovens, furnaces?
 - a. NFPA 85
 - b. NFPA 86
 - c. NFPA 91
8. Three transmitters are required for draft control.
 - a. On all boilers
 - b. On all boilers with ID fans
9. It is satisfactory to use the master fuel trip logic system as the master fuel trip.
 - a. True
 - b. False
10. The purge of a multiple burner boiler is complete after:
 - a. 5 minutes
 - b. 5 air changes
 - c. 5 air changes minimum of 5 minutes
 - d. When the operator is ready to admit fuel
11. A temperature sensor is required to detect high temperature in the piping from the pulverizer to the boiler.
 - a. True
 - b. False
12. Re-purge of a multiple burner boiler is required after a:
 - a. Loss of all flame
 - b. Failure of the first igniter to ignite
 - c. Boiler trip as a result of low water level
 - d. All of the above
13. The purge that is required for a single burner boiler is the same as the purge required for a multiple burner boiler?
 - a. True
 - b. False

14. What is considered to be fail safe:
- a. Energize to trip
 - b. De-energize to trip
15. How many seconds are required for proof of heavy oil flame?
- a. 10
 - b. 15
 - c. 20
16. How many seconds are required for proof of light oil flame?
- a. 10
 - b. 15
 - c. 20

ES16 – Pre-Instructional Survey Answers

1. d
2. a
3. b
4. a
5. a
6. c
7. b
8. b
9. b
10. c
11. a
12. a
13. b
14. b
15. b
16. a