

1997 Consolidate Audit & PHA Training - Test

1. List the three (there are four total) components of process hazard analysis.
2. What standard requires that facilities perform a formal process hazard analysis and communicate the results of this analysis to employees?
 - a. OSHA PSM
 - b. MOC
 - c. Elevated Work
 - d. All of the above
3. Why do you need to have PHA training?
 - a. OSHA Requires It.
 - b. Auditors will ask you about it
 - c. Understanding PHA is part of your job
 - d. All of the above
4. Typical Lines of defense for reactive chemical incidents at Glycol-1 are:
 - a. Automatic trips
 - b. Operating Discipline (procedures)
 - c. Engineering Design (metallurgy, relief systems, etc.)
 - d. All of the above
5. The following items should be kept in the PHA file at Glycol-1:
 - a. F&EI Calculations
 - b. C&EI Calculations
 - c. Emergency call-out list
 - d. A & B
6. What safeguards on the degasser prevent a wet chlorine reaction with titanium?
 - a. High degasser temperature trip at 130 deg C
 - b. Chlorine control valve differential pressure trip
 - c. Nitrogen purge flow 100 scfh trip
 - d. A&C
7. What is the worst case scenario for chemical exposure at Glycol-1?
 - a. A hole in the 12" chlorine header
 - b. A seal leak in the PO check tank pumps
 - c. PSV release on T-300
 - d. All of the above
8. What are the lines of defense for the worst case CEI?
 - a. Procedures
 - b. Emergency Drills
 - c. PPM
 - d. All of the above

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9. What does F&EI stand for?
- a. Fire and Emergency Incidents
 - b. Fire and Explosion Index
 - c. Fire and Electrical Index
10. Which two process units had the highest F&EI rating at Glycol-1?
11. What type of design considerations are utilized to lower the F&EI index of a process unit?
- a. Location
 - b. Computer Control
 - c. Sprinkler Systems
 - d. All of the Above
12. What areas were reviewed in the Hazardous Transportation Audit?
- a. Rail Car Loading
 - b. Cargo Tank Loading
 - c. PO Check Tank Area
 - d. A & B
13. Where are the PHA files located at Glycol-1?
14. What two areas of the plant have had HAZOP reviews?
15. Which employees at Glycol-1 are responsible for PHA compliance?