

PSM / ClO₂ Plant
Maintenance Training Test

Complete the following questions based on the information provided during the training session. Only one answer best describes the situation.

PART A

1. True or False: It is necessary to use Standard Maintenance Procedures when working in the ClO₂ Plant.
2. True or False: When breaking open a line that contains Chlorine Dioxide, each person in the immediate area must wear a full-face respirator.
3. True or False: The Chlorine Dioxide Plant and Methanol Storage Areas are covered under the Restricted Access Policy.
4. True or False: When replacing any component (i.e. valves, piping, or gaskets) in a PSM covered process such as ClO₂, any similar material is suitable.
5. True or False: An incident involving a spill in the ClO₂ Process Area must be investigated within 48 hours by a team including at least one knowledgeable operator or mechanic.
6. True or False: A Management of Change (MOC) is required if a component in the ClO₂ process is to be replaced during an outage and a "Replacement – in kind" is not available.

PART B

7. Chlorine Dioxide is made in the Woodland Pulp Mill using the following chemicals:
 - a. Chlorine, Sulfur Dioxide, and Methanol
 - b. Chlorine, Hydrogen Peroxide, and Sulfuric Acid
 - c. Methanol, Sulfuric Acid, and Sodium Chlorate
 - d. Sodium Chlorate, Sulfuric Acid, Hydrogen Peroxide
8. True or False: Chlorine Dioxide can be formed between sulfuric acid and sodium chlorate without methanol.
9. True or False: Salt cake is a by-product of ClO₂ generation and is non-hazardous because it cannot cause any physical harm to people.
10. The NFPA and HMIS Hazard Rating for Chlorine Dioxide are:
 - a. H-4 F-4 R-4
 - b. H-3 F-0 R-3
 - c. H-1 F-1 R-3
 - d. H-3 F-2 R-1

11. The best and most effective way to extinguish a Sodium Chlorate fire is with:
 - a. Smother with blanket
 - b. CO₂ fire extinguisher
 - c. Lots of water
 - d. All of the above are acceptable

12. True or False: Exposure to Chlorine Dioxide may not result in immediate symptoms.

13. True or False: It is possible to not see a Methanol fire

14. True or False: Methanol is heavier than water.

15. True or False: When breaking open 100% Methanol System pipe, one should use non-sparking tools.

16. If a methanol spill occurs, apply:
 - a. Oil
 - b. Lots of water
 - c. Cold water or an Anti-Chlor agent
 - d. Non-combustible absorbent materials

17. The NFPA Hazard Rating for Methanol are:
 - a. H-4 F-4 R-4
 - b. H-0 F-4 R-0
 - c. H-1 F-3 R-0
 - d. H-1 F-1 R-1

18. True or False: Exposure to Methanol through ingestion may be fatal.