**Haz Mat Awareness and Ops NFPA 470 2022**

**Study Guide**

1. Explain the differences between:
	1. National Institute for Occupational Safety and Health (NIOSH).
	2. Occupational Safety and Health (OSHA).
	3. National Fire Protection Association (NFPA).
	4. Environmental Protection Agency (EPA).
2. Describe the recovery phase.
3. Describe how a Haz Mat scene should be approached.
4. Define:
	1. Pyrolysis.
	2. Doffing
	3. Donning.
	4. Weapons of Mass Destruction (WMD).
	5. Penetration.
	6. Permeation.
	7. Degradation.
	8. Flash point.
	9. Fire point.
	10. Vaporization.
	11. Polymerization.
5. Explain the difference between the following types of responder levels.
	1. Awareness.
	2. Operations.
	3. Technician.
6. Identify and describe the ten product control options.
7. Describe the difference between a closed head drum and an open head drum.
8. Identify and describe the four levels of chemical PPE.
9. Describe the procedure to pressure test a Level A suit.
10. Identify and describe the differences between the following vests:
	1. Fluid chilled systems.
	2. Ice cooled or gel packed systems.
	3. Forced air cooling systems.
11. Explain the difference between contagious and infectious.
12. Identify the EPA’s four Haz Mat classification levels.
13. Describe the risk-based response process.
14. Identify and describe the three types of heat related illnesses.
15. Describe the procedure for refilling SCBA cylinders.
16. Know how to use the DOT’s ERG.
17. Explain the differences between CHEMTREC and the NRC.
18. Describe how weather conditions can affect a Haz Mat incident.
19. Explain the role of the LEPC.
20. Explain the difference between technical and emergency decontamination.
21. Explain the difference between defensive and offensive tactics.
22. Explain the difference between atm and mmHg.
23. Identify the differences between propane and natural gas.
24. Explain the risk-based method to decide when to evacuate people.
25. Describe the action plan within the IAP.
26. Explain the history of ICS.
27. Identify the sections of a safety data sheet.
28. Explain the differences between the cold, warm, and hot zones.
29. Identify the differences between an IMO 1 and an IMO 7 container.
30. Identify the characteristics of a ton container.
31. Describe an anion.
32. Describe the differences between a hazardous material and hazardous waste.
33. Explain the difference in the procedures for decontaminating reusable PPE and single-use PPE.