

## Tcfp HazMat Operations Possible/129 Questions and Answers/A+ Graded/2023

When responding to hazardous materials/WMD incidents Operations level responders shall be able to perform the following task...      Correct ans -

1. Analyze a HazMat incident to determine the scope of the problem
2. Plan an initial response
3. Implement a planned response
4. Evaluate the progress

Analyzing a hazardous material incident to determine the scope of the problem involves...      Correct ans - 1. Surveying the incident to identify containers and materials involved, determine if whether hazardous material has been released and evaluate the surrounding conditions

2. Collect hazard and response information from SDS, CHEMTREC and shipping/manufacturer contracts
3. Predict the behavior of Hazardous materials and its container
4. Estimate the potential harm through TRACE-MP

What does TRACE-MP stand for?      Correct ans - Types of potential harm at Hazardous Material/WMD incidents.

Thermal  
Radiation  
Asphyxiation  
Chemical  
Etiological  
Mechanical  
Psychological/ Psychogenic

# learnexams

The initial response at a HazMat incident is determined by..      Correct ans - The capabilities and competencies of available personnel and personal protective equipment

The response objectives at a hazardous material/WMD incident include...

Correct ans - 1. Evacuation  
2. Search and Rescue  
3. Exposure protection/ Isolating the Area  
4. Defensive control techniques  
5. Crime scene management and evidence preservation  
6. Recovery and termination

Describe the response options available for Evacuation      Correct ans -

1. Full scale evacuation
2. Shelter-in-place

### 3. Combination

Describe the response options available for Search and Rescue      Correct  
ans - 1. Based on training and equipment  
2. Risk-benefit analysis (risk a lot to save a lot, risk a little to save a little)

Describe the response options available for Exposure protection/Isolating the Area      Correct ans - 1. Establish initial isolation zone  
2. Establish protective action distance  
3. Establish control zones

Describe the response options available for Defensive Control Techniques  
Correct ans - 1. Damming (Overflow or Underflow)

- 2. Diking
- 3. Retention
- 4. Dispersion
- 5. Absorption
- 6. Adsorption
- 7. Dilution
- 8. Dissolution
- 9. Diversion
- 10. Vapor dispersion
- 11. Vapor suppression
- 12. Ventilation
- 13. Remote valve shutoff

What is Damming...      Correct ans - Physical method of confinement by which barriers are constructed to prevent or reduce the quantity of liquid flowing into the environment. Consists of constructing a barrier across a waterway to stop/control the product flow and pick up liquid or solid contaminants

What is Underflow Damming ...      Correct ans - Spill control tactic used to trap floating lighter than water materials behind the dam. Dam is constructed in a manner that allows uncontaminated water to flow unobstructed under the dam while keeping the contaminant behind the dam.

What is Overflow Damming...      Correct ans - Spill control tactic used to trap sinking heavier than water materials behind the dam. With the product trapped, uncontaminated water is allowed to flow unobstructed over the top of the dam.

What is Diking...      Correct ans - Physical method of confinement by which barriers are constructed on ground used to control the movement of liquids, sludges, solids, or other materials. Prevents the passage of hazmat from entering an area where it will produce more harm.

What is retention...      Correct ans - Physical method of confinement by which a liquid is temporarily contained in an area where it can be absorbed, neutralized, or picked up for proper disposal

What is dispersion...      Correct ans - Chemical method of confinement by which certain chemical and biological agents are used to disperse or break up the material involved in liquid spills on water may result in spreading the hazardous material over a large area.

What is absorption...      Correct ans - Absorption occurs when one material enters the cell structure of another and is retained within. Absorbents retain the properties of the materials they absorb and must be treated and disposed of as hazardous material

What is adsorption...      Correct ans - Adsorption is different from absorption in that the molecules of the hazardous materials physically adhere to the adsorbent material Adsorbents do not swell like absorbents

Produces heat and can cause spontaneous combustion must be disposed of properly.

Examples: activated charcoal, silica, aluminum gel, fuller's earth, POROUS clay and other clays

What is dilution...      Correct ans - Dilution involves applying water to a water soluble material in order to reduce the hazard. It is a useful way to perform decontamination but it is not a practical practical spill control method as it typically requires so much water that it creates a runoff problem

What is dissolution...      Correct ans - Dissolution is the process of dissolving a gas in water. This tactic can only be used on water-soluble gases such as chlorine or anhydrous ammonia.

What is Diversion...      Correct ans - Physical method of confinement by which barriers are constructed on ground or placed in a waterway to intentionally control the movement of a hazmat into an area where it will pose less harm to the community and the environment

What is Vapor Dispersion...      Correct ans - Vapor dispersion is that action taken to direct or influence the course of airborne hazardous material. Pressurized streams (hoselines or unattended master streams) create turbulence which increase the rate of mixing with air and reduces the concentration of the hazardous material